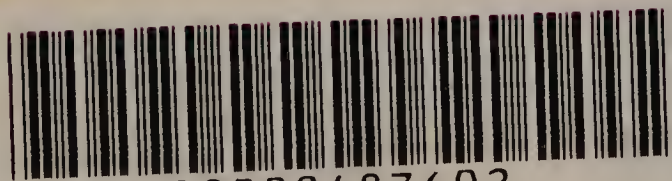




C. A. NEALE.



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REPORT  
OF THE  
COMMISSIONER OF PATENTS  
FOR THE YEAR 1859.

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ARTS AND MANUFACTURES.  
IN TWO VOLUMES.

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VOLUME I.

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IN THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES,

June 12, 1860.

*Resolved*, That there be printed, in addition to the usual number of the Mechanical part of the Patent Office Report for 1859, ten thousand copies for the use of the Patent Office, and forty thousand for the use of the members of the House of Representatives.

Attest:

J. W. FORNEY, *Clerk*.





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Brake, Car.....	W. E. Cooper.....	23,663	331	208
Brake, Car.....	A. P. Tutton.....	23,727	341	220
Brake, Car.....	L. Kirk.....	23,923	369	259
Brake, Car.....	O. F. Fuller.....	24,696	481	382
Brake, Car.....	W. Perkins.....	24,818	498	402
Brake, Car.....	H. A. Lincoln and H. T. Douglass.....	24,943	515	422
Brake, Car.....	F. Armstrong.....	24,981	521	428
Brake, Car.....	T. J. Mead.....	25,345	573	489
Brake, Car.....	H. Davis.....	25,392	580	497
Brake, Car.....	W. F. Stuart.....	25,708	625	554
Brake, Car.....	J. Harris.....	25,825	642	577
Brake, Car.....	G. F. Ontten.....	25,911	655	595
Brake, Car.....	A. F. Toulmir.....	26,307	712	673



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Brake, Hemp.....	R. Mansley.....	22,661	174	32
Brake, Hemp.....	J. Hindman.....	22,725	184	43
Brake, Hemp.....	J. W. Rinehart.....	23,946	372	263
Brake, Hemp.....	H. F. Mann.....	24,264	419	316
Brake, Hemp.....	A. Wilson and G. C. Fletcher....	24,966	518	425
Brake, Hemp.....	Z. Feagan.....	24,989	524	431
Brake, Hemp.....	W. A. Vertrees.....	25,292	565	479
Brake, Hemp.....	S. Stafford.....	26,449	734	699
Brake for horse cars.....	J. Stephenson.....	26,626	757	729
Brake for power looms.....	R. and G. B. Reynolds.....	24,488	452	350
Brake, Sled.....	A. Larrowe.....	24,469	449	346
Brake, Wagon.....	D. Robinson.....	22,749	188	46
Brake, Wagon.....	R. D. Brown.....	26,472	737	704
Brake, Wagon, self-acting.....	J. Rosenkrans.....	24,239	416	312
Brake, Wagon, self-acting.....	B. S. Healey.....	25,115	441	449
Brakes, Car, operating.....	D. Mumma, jr.....	26,117	685	636
Brakes, Car, operating.....	G. W. Mitchell.....	26,365	721	684
Brakes, Carriage, operating.....	W. Gourley and I. Krebs.....	22,498	148	4
Brakes, Carriage, operating.....	I. Krebs.....	22,504	149	6
Brakes, Railroad, working.....	E. Guérin.....	23,768	347	228
Brake and Cleaner, Hemp.....	J. K. Booton.....	25,417	627	556
Brakeheads for railroad cars.....	N. P. Stevens.....	23,722	340	219
Brake Rubbers, hanging.....	T. C. Ball.....	24,918	511	418
Braking Locomotive Engines on railroads.....	W. W. Virdin.....	24,680	479	379
Brán Duster.....	W. Hall.....	25,965	663	605
Bread Slicer.....	H. F. Bond.....	24,851	502	408
Breakwater.....	D. H. Armour.....	24,271	420	317
Breast Pads and Perspiration Shields.....	H. S. Lesher.....	24,033	385	278
Breast Pin, &c., fastening for.....	B. F. Grinnell.....	22,645	171	29
Brick Machine.....	G. Baucker.....	22,694	179	37
Brick Machine.....	J. Van Riswick.....	23,204	259	117
Brick Machine.....	J. F. Schuffenecker.....	23,315	275	137
Brick Machine.....	W. Wood.....	23,331	278	140
Brick Machine.....	R. Wildman.....	23,634	326	202
Brick Machine.....	D. Locke.....	23,691	336	213
Brick Machine.....	H. T. Beggs and J. Allen.....	23,892	365	254
Brick Machine.....	W. S. Watson.....	24,343	430	328
Brick Machine.....	H. W. Stillman.....	24,962	517	425
Brick Machine.....	J. A. Hamer.....	25,467	590	511
Bricks, Enamel Composition for.....	D. W. Clark.....	24,282	421	.....
Bricks, finishing.....	W. S. Mayo.....	24,320	426	324
Bricks, hoisting.....	T. F. Christman.....	24,540	459	357
Bricks, manufacture of.....	N. Parmenter.....	24,050	388	.....
Bricks, turning or edging.....	C. O. Farrington.....	22,790	196	54
Bridge.....	D. H. Van Duzer.....	25,537	600	524
Bridge, Automatic Canal.....	D. Berry.....	26,156	692	646
Bridge, Iron.....	L. Eickenberry.....	22,715	182	41
Bridge, Iron, corrugated.....	R. Montgomery.....	25,210	555	466
Bridges, tubular connections of.....	J. W. Sprague.....	25,852	646	583
Bridle.....	R. B. Norvell.....	23,939	371	262
Bridle Bit.....	A. Niel.....	22,571	160	18
Bridle Bit.....	J. B. Baker.....	24,275	420	318
Bristles, cleansing.....	H. W. Mosher and J. A. Conboie.....	23,385	285	152
Broiling Apparatus.....	O. F. Morrill.....	26,368	721	685
Bronzing Machine.....	G. H. Babcock.....	25,874	649	587
Brooches, Ear Rings, &c.....	H. Oliver.....	23,042	235	91
Broom.....	D. J. Owen.....	24,231	414	311
Broom, Splint.....	J. W. Wheeler.....	24,181	407	303
Brush, Fountain.....	L. B. Hoyt.....	23,028	233	90
Brush for Finger Nails.....	W. Thomson.....	26,629	758	729
Brush for Washing Windows.....	P. C. Rowe.....	24,491	452	350
Brush, Stencil.....	V. R. Allen.....	23,997	380	272
Brush and Scraper, Boot and Shoe.....	W. A. Morrison.....	25,755	632	563
Buckets, Well, hanging.....	S. F. Dexter.....	23,233	263	122
Buckles.....	A. Roesler.....	24,145	401	298
Buckles.....	T. P. Marshall.....	24,649	475	374
Buckles, Girth.....	L. C. Chase.....	26,013	670	614
Buckwhcat, scouring and hulling.....	J. N. Treadwell.....	25,593	608	534
Buggy, Joint-bodied.....	E. J. Green.....	23,567	315	189
Bullets, &c., making.....	E. Nugent.....	22,974	225	82
Bung, Metallic.....	T. B. Smith.....	24,827	499	404
Bungs of Casks.....	J. Keane.....	25,606	610	536
Bung Cutter.....	J. Kirby.....	24,310	425	323
Bung-hole Borer and Reamer.....	J. Kirby.....	25,512	597	520
Buoy, Life-preserving.....	E. Woods.....	25,781	636	569
Burglar Alarm, Electro-magnetic.....	G. F. Milliken.....	25,753	632	563
Burglar Alarm, Electro-magnetic.....	E. C. Clay.....	25,950	661	602
Burglar's Alarm.....	J. P. Wilson and J. F. Thomas....	22,911	215	72
Burglar's Alarm.....	C. A. Lilliendahl.....	22,959	222	79
Burglar's Alarm.....	R. M. Campbell.....	23,215	261	118
Burglar's Alarm.....	J. G. Clark.....	24,177	406	302



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Burglar's Alarm.....	S. Stewart.....	25,057	532	440
Burglar's Alarm.....	A. Q. Ross.....	25,586	607	533
Burglar's Alarm.....	S. B. Holden.....	25,788	637	570
Burial Cases.....	A. C. Barstow.....	23,652	330	205
Burner, Gas. (Sec <i>Gas Burner</i> .)				
Burner, Vapor.....	W. W. Batchelder.....	25,621	613	539
Burner, Vapor.....	W. H. Hunt.....	25,830	643	579
Burner, Vapor Lamp.....	C. M. Alexander.....	24,529	457	355
Burner, Vapor Lamp.....	W. H. Racey.....	25,525	599	522
Burner, Vapor Lamp.....	W. W. Batchelder.....	25,799	639	573
Burner for vapor lamps.....	E. D. Rozenerantz & W. H. Smith.	22,536	155	12
Burner for vapor lamps.....	C. F. Allen.....	22,774	193	52
Burner for vapor lamps.....	H. Johnson.....	23,583	318	191
Burner for vapor lamps.....	R. Ramsay.....	24,147	402	298
Burner for vapor lamps.....	R. Steel.....	25,986	666	609
Burnishing Machine.....	L. S. White.....	23,520	308	180
Burnishing Machine.....	L. S. White.....	25,783	636	569
Burring Wool and Ginning Cotton.....	F. A. Calvert and C. G. Sargent..	24,280	421	318
Bustles.....	I. W. Hakes, jr., and A. H. Hakes.	23,681	334	211
Bustles.....	B. F. Moore.....	25,211	555	466
Bustles.....	T. A. Earl.....	25,786	637	570
Bustles.....	A. J. Thompson.....	25,854	646	583
Bustles.....	G. W. Yerby.....	25,861	647	584
Bustles.....	B. Davis.....	25,865	648	585
Bustles.....	J. W. Bradley.....	26,159	692	646
Butter, raneid, restoring.....	J. W. Prentiss.....	25,672	620	548
Butter, working.....	G. Hotchkiss.....	24,305	425	322
Butter, working.....	J. Seymour.....	26,527	744	713
Butter Worker.....	J. Jones.....	24,698	481	382
Butter Worker.....	H. Soggs.....	25,145	545	454
Buttons.....	P. Davey.....	26,258	706	665
C.				
Cabins, Floating Safety.....	M. I. Butler.....	25,981	650	588
Cable, Chain, Stopper.....	C. Perley.....	26,292	710	671
Cable, Submarine Telegraph.....	F. J. Bridges.....	23,290	272	133
Cable, Submarine Telegraph, laying.....	A. Turney, jr.....	25,151	546	455
Cable, Telegraph, manufacturing.....	W. H. Horstman.....	25,414	583	501
Cable, Telegraphic.....	J. S. Davison.....	25,562	604	529
Cable, Telegraphic.....	W. H. Johnson.....	25,739	630	560
Cakes, cutting and panning.....	J. H. Shrote.....	25,767	634	566
Calipers.....	F. Gould.....	23,564	315	192
Camera.....	H. J. Lewis.....	23,428	293	161
Camera, Photographie.....	J. Stoek.....	24,671	478	378
Can, Milk.....	E. R. Denniston.....	24,381	436	334
Can, Milk.....	W. Frost.....	26,098	683	633
Can, Oil.....	G. P. Hunt.....	25,831	643	579
Can, Oil, for lubricating.....	T. Fildes.....	23,560	314	188
Can, Paint.....	J. W. Masury.....	24,748	488	390
Can, Paint.....	P. Brown.....	26,248	704	663
Can, Preserve.....	J. F. Martin and H. C. Nicholson..	22,962	222	80
Can, Preserve.....	S. Morrett.....	23,384	286	152
Can, Preserve.....	W. D. Ludlow.....	24,566	462	361
Can, Preserve.....	F. O. More.....	24,751	489	391
Can, Preserve.....	O. N. Weaver.....	24,770	491	393
Can, Preserve.....	B. L. Agnew.....	25,863	648	584
Can, Preserve.....	W. Fridley and F. Cornman.....	25,894	652	591
Can, Preserve.....	C. Newman.....	26,515	743	710
Cans, Stopper for preserve.....	V. P. Corbett.....	25,490	594	516
Cans and Bottles, sealing.....	J. D. Willoughby.....	22,535	154	12
Can Bottom for roving.....	G. Bradley.....	26,320	714	676
Canteen.....	B. Beers.....	22,541	155	12
Canteen Gun-Stock.....	S. Colt.....	22,627	169	26
Caoutchouc, curing and treating.....	E. E. Marcy.....	25,271	563	.....
Caoutchouc, curing and treating.....	E. E. Marcy.....	25,272	563	.....
Caoutchouc, curing and treating.....	E. E. Marcy.....	25,273	563	.....
Caoutchouc, treatment of.....	M. Mattson.....	23,103	244	.....
Caoutchouc, vulcanizing.....	D. D. Parmelee.....	24,401	439	.....
Caoutchouc, vulcanizing.....	D. D. Parmelee.....	23,855	360	.....
Caoutchouc, vulcanizing, Apparatus for.....	C. S. Putnam.....	22,976	225	82
Caoutchouc and Allied Gums, Compounds of .. (See, also, <i>India Rubber</i> .)	G. A. Englehard and R. F. H. Havemann.	26,175	695	.....
Candles, manufacture of.....	A. B. Vant and A. B. Cook.....	22,592	163	21
Candles, manufacture of.....	A. Mencci.....	22,739	186	45
Candles, moulding.....	G. A. Stanley.....	24,960	517	424
Candles, moulding.....	H. Leonard and H. Ryder.....	26,440	732	698
Candles, Paraffine.....	E. C. Leonard.....	25,193	697	.....
Candles, Paraffine, moulding.....	H. Leonard.....	22,924	216	.....
Candle Wicks.....	S. R. Weeden.....	25,227	557	469
Cane Juice, clarifying.....	F. Domenech.....	26,573	751	721
Cane Juice, defeathering and clarifying.....	R. A. Stewart.....	22,590	163	20



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Cane Juices, Sulph. Acid Gas in defecation of. (See, also, <i>Saccharine Juices</i> and <i>Sugar Juices</i> .)	N. P. Brashear . . . . .	26,401	727	.....		
Canes, Walking . . . . .	A. Cain . . . . .	24,718	484		385	
Cannon . . . . .	J. Adams . . . . .	25,929	658		598	
Cannon, Breech-Loading . . . . .	J. H. Merrill . . . . .	23,306	274		136	
Cannon, Double, for chain and shot . . . . .	W. M. Jeffers . . . . .	24,518	456		354	
Cannon, elevating . . . . .	G. M. Ransom . . . . .	26,124	686		638	
Canopy for railroad cars . . . . .	I. E. Jones . . . . .	24,030	385		277	
Capstan . . . . .	J. Reed . . . . .	23,499	305		176	
Capstan, Ship's . . . . .	D. Knowlton . . . . .	24,467	449		346	
Capstan, Ship's . . . . .	I. F. Holloway . . . . .	24,558	461		360	
Capstan and Crab, Portable . . . . .	A. Elmer . . . . .	25,079	536		444	
Car, Dumping . . . . .	D. Glover . . . . .	24,732	486		387	
Car, Dumping, Rotating . . . . .	W. A. Hawkes . . . . .	24,301	424		322	
Car, Freight . . . . .	J. D. Billings . . . . .	24,109	408		304	
Car, Gravel . . . . .	T. C. Hendry . . . . .	26,460	735		702	
Car, Hand . . . . .	H. Fisher . . . . .	26,263	706		666	
Car, Hand . . . . .	A. Welch . . . . .	26,453	734		700	
Car, Iron . . . . .	J. Davenport . . . . .	23,333	278		141	
Car, Railroad . . . . .	E. Crane . . . . .	26,166	693		648	
Car, Railroad . . . . .	J. Miller and S. Merriek . . . . .	26,282	709		669	
Car, Sleeping . . . . .	T. Luce and J. H. Morrison . . . . .	22,506	150		6	
Car, Sleeping . . . . .	T. E. McNeill . . . . .	22,815	200		58	
Car, Sleeping . . . . .	J. Danner . . . . .	25,814	641		575	
Car, Sleeping . . . . .	J. Danner . . . . .	26,069	678		626	
Cars, City, Safety Apparatus for . . . . .	S. Green . . . . .	24,776	492		394	
Cars, City, starting . . . . .	G. P. Friek . . . . .	24,293	423		320	
Cars, City Railroad Horse, starting . . . . .	G. Hamel . . . . .	26,101	683		633	
Cars, Devices for starting . . . . .	D. Cumming . . . . .	23,757	345		226	
Cars, moving, on railway . . . . .	A. Foster and H. Brown . . . . .	22,638	170		28	
Cars, Platforms between railroad . . . . .	J. Newmair . . . . .	24,885	507		413	
Cars, ventilating . . . . .	R. R. Taylor . . . . .	23,049	236		92	
Cars, ventilating . . . . .	J. G. Treadwell . . . . .	25,776	635		568	
Cars, switching off . . . . .	M. Semple . . . . .	24,336	429		327	
Car-Truck . . . . .	T. F. Allen . . . . .	23,336	279		141	
Car-Truck . . . . .	G. F. Decker . . . . .	24,201	410		306	
Car-Truck . . . . .	F. I. Palmer . . . . .	26,284	709		670	
Car-Truck . . . . .	H. Kipple and J. D. Bullock . . . . .	26,502	741		503	
Carboys, finishing . . . . .	L. Hyde . . . . .	23,063	238		94	
Cards, Machine and Animal . . . . .	W. Wheeler . . . . .	24,684	479		380	
Carpenter's Rule . . . . .	H. Whitmore and D. M. Smith . . . . .	25,460	589		510	
Carpet Bag Fastener . . . . .	W. P. Maxson . . . . .	24,133	400		296	
Carpet Fastener . . . . .	C. F. Spence . . . . .	23,319	276		138	
Carpet Fastener . . . . .	M. Granniss . . . . .	23,566	315		188	
Carpet Fastener . . . . .	J. A. Taylor . . . . .	23,797	351		234	
Carpet Fastener . . . . .	A. M. Smith . . . . .	24,242	416		312	
Carpet Fastener . . . . .	M. D. & S. A. Snyder . . . . .	24,586	465		364	
Carpet Fastener . . . . .	G. G. Noyes . . . . .	25,519	598		521	
Carpet Fastener, Stair . . . . .	C. Rice . . . . .	26,617	756		727	
Carpet Stretcher . . . . .	J. W. Bragg . . . . .	22,930	218		75	
Carpet Stretcher . . . . .	W. Wheeler . . . . .	25,858	647		584	
Carpet Sweeper . . . . .	S. F. Pratt . . . . .	22,671	175		33	
Carpet Sweeper . . . . .	N. B. Pratt . . . . .	22,890	212		69	
Carpet Sweeper . . . . .	N. B. Pratt . . . . .	22,975	225		82	
Carpet Sweeper . . . . .	J. Edson . . . . .	23,526	309		181	
Carpet Sweeper . . . . .	H. Davis . . . . .	24,103	395		290	
Carpet Sweeper . . . . .	W. G. Budlong . . . . .	24,176	406		302	
Carpet Sweeper . . . . .	J. H. Crane . . . . .	25,099	539		446	
Carpet Sweeper . . . . .	J. Edson . . . . .	25,104	539		147	
Carpet Sweeper . . . . .	H. H. Herrick . . . . .	25,332	571		487	
Carriage . . . . .	A. C. & W. R. Griswold . . . . .	24,299	424		231	
Carriage . . . . .	I. M. Singer . . . . .	25,920	656		596	
Carriage, Gun . . . . .	A. L. Caswell . . . . .	25,806	640		574	
Carriages, Movable Top for . . . . .	J. C. Kimball . . . . .	25,420	584		502	
Carriages, Running Gear of . . . . .	J. Calef . . . . .	25,091	538		445	
Carriages, Top Prop for . . . . .	G. Cook and H. I. Klmball . . . . .	26,564	749		720	
Carriage Bodies, hanging . . . . .	L. C. Miner . . . . .	24,398	438		336	
Carriage Bodies, hanging . . . . .	W. Doulin . . . . .	25,958	662		604	
Carriage Shafts, convertible . . . . .	R. I. Colvin . . . . .	23,901	367		255	
Carriage Top . . . . .	P. Boyden . . . . .	23,347	280		143	
Carriage Top . . . . .	F. C. Schaffer . . . . .	25,445	587		508	
Carriage Top . . . . .	A. J. Hall and R. Patten . . . . .	26,183	696		651	
Cart, Dumping . . . . .	J. S. Lash . . . . .	25,424	585		583	
Cartridges . . . . .	J. H. Ferguson . . . . .	24,548	460	.....		
Cartridges, packing . . . . .	E. K. Root . . . . .	22,675	176		34	
Cartridges, packing . . . . .	S. Colt . . . . .	23,230	263		722	
Cartridge Boxes, Fastening for . . . . .	R. H. Wilson . . . . .	26,402	727		691	
Cartridge Case . . . . .	E. Maynard . . . . .	22,565	159		17	
Cask, Water, Life-boat . . . . .	W. N. Clark . . . . .	23,824	355		239	
Casters, attaching, to trunks . . . . .	I. H. Giffing . . . . .	23,672	333		210	
Casters, Ball Furniture . . . . .	B. A. Russell . . . . .	22,751	188		47	
Casters, Ball Furniture . . . . .	J. C. Pedrick . . . . .	25,138	544		452	



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Casters, Furniture .....	D. S. Barnes .....	24,607	468	368
Casters, Table .....	R. Gleason, jr. ....	23,218	261	119
Casting Chilled Plates .....	R. Poole .....	24,976	520	427
Castings, cleaning .....	A. Ralston .....	23,193	258	115
Catamenial Bandages .....	C. E. Clark .....	23,059	238	94
Catch for hanging drapery .....	A. W. and C. A. Warner .....	22,521	152	9
Cattle Guard, Railroad .....	J. L. Rowley .....	23,398	288	155
Cement .....	N. Parmeter .....	23,856	360	.....
Cement for roofing .....	O. S. Oaks .....	23,108	245	.....
Cement for roofing .....	N. A. Dyar .....	23,882	364	252
Cement for roofing .....	J. C. Worth .....	24,072	390	.....
Cement for roofing .....	P. Pomeroy and I. G. Allen .....	24,954	516	424
Cement for roofing .....	J. Ditto and H. Van Bergen .....	25,182	551	.....
Cement for roofing .....	M. D. Dubois .....	25,324	570	.....
Cement, Composition, or Mortar .....	W. Bleser .....	26,158	692	.....
Cementing Iron .....	J. Johnson .....	24,429	443	.....
Cementing Roofs .....	J. L. G. Ward .....	23,051	237	93
Centre Board for vessels .....	N. Pratt .....	23,114	246	102
Chain, Endless, for horse-power .....	I. R. Lawrence and G. E. Gould ..	25,743	630	561
Chain, making .....	J. C. Brown .....	26,247	704	663
Chain, Ornamental .....	J. Lancelott .....	23,303	274	135
Chain, Ornamental .....	J. Lancelott .....	25,837	644	580
Chain, Watch .....	H. Epstein .....	23,239	264	123
Chair, Cabinet .....	S. Pearson .....	25,849	646	582
Chair, Dentist's .....	N. C. Lewis .....	25,702	624	553
Chair, Easy .....	E. Foster .....	25,188	552	462
Chair, Folding .....	J. H. Swan .....	25,452	588	509
Chair, Railroad .....	W. M. C. Cushman .....	22,631	169	27
Chair, Railroad .....	H. A. Landry .....	22,656	173	31
Chair, Railroad .....	J. Young .....	22,685	178	36
Chair, Railroad .....	D. W. Crocker .....	22,708	181	40
Chair, Railroad .....	J. W. Gould .....	22,797	197	55
Chair, Railroad .....	A. L. Holley .....	23,683	335	211
Chair, Railroad .....	I. W. Wetmore .....	23,731	341	221
Chair, Railroad .....	J. F. Peabody .....	24,234	415	311
Chair, Railroad .....	W. B. Dunning .....	24,289	422	320
Chair, Railroad .....	M. Carpenter .....	24,443	445	343
Chair, Railroad .....	I. B. Howe .....	24,639	474	373
Chair, Railroad .....	D. E. Bishop .....	24,713	484	384
Chair, Railroad .....	J. W. Wetmore .....	25,228	557	469
Chair, Railroad .....	W. A. Nugent .....	25,520	598	521
Chair, Railroad .....	H. W. Gray .....	25,545	602	526
Chair, Railroad .....	H. A. Harvey .....	26,492	739	707
Chair, Railroad .....	L. Shearer .....	26,624	757	728
Chair, Railroad .....	J. W. Wetmore .....	26,634	759	730
Chair for railroad Bars .....	H. H. Graham .....	23,565	315	188
Chair, Railroad Coupling .....	R. S. Potter .....	23,390	287	153
Chair, Rail-splicing .....	R. S. Potter .....	23,493	304	175
Chair, Reclining .....	J. M. Baird and L. F. Smith .....	26,077	679	628
Chair, Recumbent .....	P. J. Hardy .....	24,935	513	421
Chair, Rocking .....	D. Buzzell .....	22,486	146	2
Chair, Rocking .....	T. H. Tatlow, jr. ....	24,166	405	300
Chair, Rocking .....	J. H. Wells .....	26,312	713	674
Chair, Sleeping, for railroad cars .....	J. Danner .....	26,571	750	721
Chair and Lounge, Combined .....	F. J. Gardiner .....	22,722	184	42
Chair Bottom .....	Z. B. Bellows .....	23,225	262	121
Chamber Utensil .....	J. C. Stoddard .....	25,592	608	534
Chamfering Tool .....	Wm. Johnson, 2d .....	24,465	448	346
Cheese, manufacture of .....	F. A. Redington and G. McCluer ..	22,891	212	69
Cheese Cover .....	E. L. Pratt .....	24,521	456	354
Cheese Vats .....	O. Sage .....	25,676	621	549
Cheese Vats .....	C. M. Wilkins .....	26,222	701	659
Cherries, stoning .....	E. C. Custer .....	24,856	503	408
Chimney .....	J. Leeds .....	23,179	256	112
Chimney, Lamp .....	E. J. Hale .....	25,406	582	500
Chimneys, increasing draft of .....	A. Niel .....	22,570	160	17
Chimney Cap .....	C. Douglas .....	24,107	396	291
Chimney Cowl .....	H. Bedlow .....	24,276	421	318
Chisel, Mortising .....	J. B. Fisher .....	22,863	208	65
Chuck for screw cutting .....	R. Nuttall and J. Kirkpatrick .....	24,152	402	298
Chuck for watchmakers' lathes .....	G. H. Waldin .....	23,050	236	93
Chuck, Lathe .....	E. A. L. Roberts .....	25,674	620	548
Churn .....	R. Lapham and R. P. Wilson .....	22,879	210	67
Churn .....	J. U. Fiester .....	22,945	220	77
Churn .....	O. Stoddard .....	22,989	227	84
Churn .....	A. Patterson .....	23,111	246	101
Churn .....	J. Mitchell .....	23,186	257	115
Churn .....	L. J. Wicks .....	23,208	260	117
Churn .....	G. P. Hopkins .....	23,374	284	150
Churn .....	E. L. Dorsey .....	23,556	314	187
Churn .....	L. Westbrook .....	23,968	375	267



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Churn.....	J. O. Merrill.....	23,986	378	270
Churn.....	W. Kelly.....	24,127	399	295
Churn.....	J. Closs.....	24,197	409	305
Churn.....	W. H. McClintock.....	24,223	413	309
Churn.....	J. R. Parker.....	24,233	415	311
Churn.....	P. S. Devlan.....	24,382	436	334
Churn.....	J. Stubbs.....	24,673	478	378
Churn.....	L. J. Wicks.....	24,686	480	380
Churn.....	L. Lake.....	24,845	502	407
Churn.....	A. Guthrie.....	24,907	509	416
Churn.....	W. S. Hall.....	24,934	513	421
Churn.....	S. S. Langdon.....	25,126	543	450
Churn.....	J. I. Lahaye.....	25,162	548	457
Churn.....	A. L. Sperry.....	25,285	565	478
Churn.....	E. L. Pratt.....	25,306	568	483
Churn.....	W. Campbell.....	25,383	579	496
Churn.....	C. L. Gilpatrick.....	25,405	582	500
Churn.....	M. B. Hassler.....	25,410	582	500
Churn.....	J. Taylor.....	25,453	588	509
Churn.....	S. Gissingner.....	25,502	596	518
Churn.....	A. Austin.....	25,553	603	528
Churn.....	S. N. Campbell.....	25,804	639	573
Churn.....	E. N. Sprinkle.....	25,985	666	609
Churn.....	P. L. Clow.....	26,092	682	631
Churn.....	T. A. Jebb.....	26,109	684	635
Churn.....	H. Rohrer.....	26,377	723	686
Churn.....	M. S. Harsha.....	26,459	735	702
Churn, Rotary.....	A. L. Cornell.....	26,093	682	632
Churn Dasher.....	P. Wineman.....	24,898	508	415
Churn Dasher.....	D. K. France.....	25,404	582	500
Churn Dasher.....	A. Rose.....	25,914	655	595
Churn Dasher.....	N. B. Cooper.....	26,020	671	616
Churn Dasher.....	G. Bunting.....	26,226	701	660
Cigars, making.....	T. Thorp.....	26,382	724	687
Cigar Wrappers.....	F. Dixon.....	25,604	610	.....
Cisterns, conducting water to.....	J. Lewis.....	23,925	370	260
Clamp, Clothes.....	C. Warner.....	25,695	623	552
Clamp, Joiners'.....	J. Clackson.....	24,194	409	305
Clamp, Joiners'.....	W. S. Todd.....	25,353	574	491
Clamp for metal straps.....	A. H. Hook.....	26,434	732	697
Clamp for sewing machines.....	S. G. Tyler.....	24,183	407	303
Clasp, Belt.....	G. Churchill.....	22,624	168	26
Clasp, Broom.....	P. B. Sheldon.....	24,582	465	363
Clasp for bands on cotton bales.....	H. Knowles.....	25,125	542	450
Clasp for hitching straps.....	M. R. Margerum & T. D. Marshall.....	26,508	742	710
Clasp for hoop skirts.....	J. H. Doolittle.....	26,144	689	642
Clasp for skeleton skirts.....	J. Grunwald.....	25,112	540	448
Clasp for skeleton skirts.....	W. D. Sloan.....	25,870	649	586
Clasp for the ends of bands of iron.....	C. Warner.....	23,281	270	131
Clasp for shirt hooks.....	S. B. Guernsey.....	24,777	492	394
Clasps, making.....	J. Cutter.....	26,419	729	694
Clay, tempering.....	J. D. Custer.....	24,350	431	329
Clevis, securing, to ploughs.....	R. B. Prindle.....	24,403	439	337
Clips for carriage thills.....	D. J. Riker.....	24,405	439	337
Clock, Alarm.....	J. F. Mascher.....	22,883	211	68
Clock, Calendar.....	S. P. La Due.....	25,468	590	511
Clock indicating comparative time in all longitudes.....	G. M. Stone.....	24,501	454	352
Clocks, Alarm, Attachment for.....	E. T. Quimby.....	24,433	444	341
Clocks, winding up.....	J. B. Powell.....	24,977	520	427
Clock Dial.....	S. E. Root.....	23,950	373	264
Clod Crusher.....	E. B. Way.....	23,415	291	159
Clover Bolt.....	E. K. Collins.....	25,097	538	446
Clover Seed, cleaning.....	J. C. Birdsell.....	26,409	728	692
Clutch for pulley coupling.....	J. Knickerbacker.....	26,369	721	685
Cloth, drying.....	C. F. Bennett.....	26,141	689	644
Cloth, Elastic.....	H. H. Day.....	25,249	560	473
Cloth, measuring.....	J. W. Drummond.....	24,260	418	315
Cloth, Porous Rubber.....	C. Goodyear.....	25,110	540	.....
Cloth, Ribbed Elastic.....	H. H. Day.....	25,180	550	461
Cloth, Wire.....	R. Nutting.....	25,578	606	532
Cloth Holder for washing crockery.....	C. F. Greckley.....	24,933	513	421
Cloth Holder in needlework.....	N. Daniels.....	26,570	750	721
Clothes, Machine for Wringing.....	S. A. Bailey.....	23,436	295	163
Clothes, Machine for Wringing.....	T. H. Peavey.....	23,646	329	204
Clothes Dryer.....	C. R. Hurlbut.....	24,123	398	294
Clothes Dryer.....	G. Race.....	24,575	464	362
Clothes Dryer.....	D. Johnson.....	24,974	520	427
Clothes Dryer.....	O. H. Waters.....	25,474	592	512
Clothes Dryer.....	C. A. Gale.....	26,004	669	613
Clothes Dryer.....	M. C. Cronk.....	26,023	672	616



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Clothes Dryer.....	D. K. Hiekok.....	26,496	740		708	
Clothes Fastener.....	L. Leavenworth.....	23,178	256		112	
Clothes Frame.....	D. C. Colby.....	22,767	191		50	
Clothes Frame.....	D. Henshaw.....	22,804	198		56	
Clothes Frame.....	L. B. Waterman.....	22,993	227		85	
Clothes Frame.....	D. Read.....	23,392	287		154	
Clothes Frame.....	H. M. Fletcher.....	23,460	299		169	
Clothes Frame.....	R. Ramsey.....	23,607	322		196	
Clothes Frame.....	H. A. Nutting.....	23,941	372		262	
Clothes Frame.....	J. Gasser.....	24,731	486		387	
Clothes Frame.....	H. J. Holmes.....	24,739	487		388	
Clothes Frame.....	J. Burr.....	24,904	509		416	
Clothes Frame.....	H. Parkhurst.....	25,039	529		437	
Clothes Frame.....	D. E. Holmes.....	25,737	630		560	
Clothes Frame.....	S. W. and J. F. Palmer.....	25,868	648		585	
Clothes Rack.....	W. S. Foster.....	23,020	232		88	
Clothes Rack.....	T. D. Berry.....	25,086	537		445	
Clothes Rack.....	O. C. Green.....	25,820	642		576	
Clothes Sprinkler.....	T. Payne.....	22,669	175		33	
Coal, breaking.....	C. W. Kennedy and R. T. Brown.....	23,922	369		259	
Coal, hoisting and dumping.....	W. B. Calver.....	22,492	147		3	
Coal Hod.....	R. W. Huston.....	26,188	696		652	
Coal Screen.....	J. Snell and J. R. Deihm.....	24,155	403		299	
Cock.....	D. H. Stickney.....	25,853	646		583	
Cock, Basin.....	G. W. Randall.....	23,989	379		271	
Cock, Gauge.....	J. E. Wootten.....	23,136	249		105	
Cock, Gauge, for steam boilers.....	F. W. Bacon.....	24,692	481		381	
Cock, Steam.....	W. Johnson and M. Silmsen.....	24,808	497		400	
Cock, Stop.....	E. Stebbins.....	23,721	340		219	
Cock, Stop.....	T. Stubblefield.....	23,796	351		234	
Cock, Stop.....	I. C. Tate.....	24,416	441		339	
Cock, Try, for steam boilers.....	J. F. Cook.....	25,544	602		526	
Cock, Try, for steam boilers.....	J. Cumming.....	25,810	640		574	
Cock for water basins.....	H. W. Smith.....	23,198	258		115	
Cock for water basins.....	H. W. Smith.....	23,619	324		199	
Cock for water basins.....	G. W. Randall.....	23,989	379		271	
Cock for water closets.....	D. Wellington.....	26,145	690		642	
Coffee, scouring and polishing.....	W. Newell.....	24,817	498		402	
Coffee Pot.....	J. W. Hedenberg.....	22,501	149		5	
Coffee Pot.....	W. H. Elliot.....	22,716	182		41	
Coffee Pot.....	C. A. Merchant and G. L. Patterson.....	22,816	200		58	
Coffee Pot.....	E. H. Covell.....	22,856	207		64	
Coffee Pot.....	J. H. Freeto.....	23,021	232		89	
Coffee Pot.....	J. B. Parish.....	23,603	321		196	
Coffee Pot.....	D. G. Fletcher.....	24,261	418		315	
Coffee Pot.....	W. Chesterman.....	24,795	495		398	
Coffee Pot.....	S. Crowell, jr.....	25,391	580		497	
Coffee Pot.....	O. T. Eddy.....	25,495	594		517	
Coffee Pot.....	H. B. Fay.....	25,890	652		590	
Coffee Pot.....	C. Neilson.....	25,909	654		594	
Coffee Pot.....	H. P. Gatchell.....	26,229	702		660	
Coffee Roaster.....	T. Heermans.....	22,649	172		30	
Coffee Roaster.....	W. L. Gilroy.....	23,563	315		188	
Coffee Roaster.....	J. P. Simmons.....	23,867	362		248	
Coffee Roaster.....	J. D. Harrington.....	24,024	384		276	
Coffee Roaster.....	R. L. Bate and J. Caulkins.....	25,941	659		601	
Coffin.....	C. E. H. Richardson.....	22,537	155		12	
Coffin.....	I. C. Shuler.....	23,401	288		156	
Coffin.....	H. Marshall.....	25,659	618		545	
Coffin, Glass.....	J. R. Cannon.....	25,883	651		589	
Coffin, Metallic.....	I. C. Shuler.....	23,616	323		198	
Coffin, Sheet Metal.....	I. C. Shuler.....	24,409	440		338	
Coffin, Sheet Metal.....	I. C. Shuler.....	24,635	473		372	
Coffin, Sheet Metal.....	I. C. Shuler.....	25,350	574		490	
Coffin, Sheet Metal.....	I. C. Shuler.....	26,379	723		686	
Coffins, covering.....	L. Snider.....	25,682	621			
Collar, Horse.....	O. Lafremiere.....	22,562	158		16	
Collar, Horse.....	T. Harvey.....	23,575	317		190	
Collar, Horse.....	T. Harvey.....	23,576	317		190	
Collar, Shirt.....	G. W. Heard.....	22,800	197		55	
Collar and Cuff, Ladies'.....	W. E. Lockwood.....	23,771	347		229	
Columns, Cast Metal.....	A. J. Bowers.....	22,542	155		12	
Composition for detergent purposes.....	A. Lovis.....	26,072	678			
Composition for soles and heels of boots and shoes, veneers, &c.....	H. G. Tyer.....	26,309	712			
Composition of matter for ornamental purposes.....	A. H. Wright.....	25,074	535			
Composts.....	E. Blanchard.....	24,988	522			
Condenser, Steam.....	J. N. Dennison.....	22,916	216		73	
Condenser, Surface.....	D. Barnum.....	24,087	393		288	
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Connecting Rods applied to eranks.....	R. Boeklen.....	25,716	627	556
Cooking Apparatus.....	R. W. Hill.....	25,196	553	463
Cooking by Steam.....	R. W. Horton.....	24,178	407	302
Cooking Range.....	G. Chilson.....	22,489	147	2
Cooking Range.....	W. H. Stimpson.....	23,509	306	178
Cooking Range.....	B. W. Dunklee.....	23,665	332	208
Cooking Range.....	W. G. Ruggles.....	24,492	452	350
Cooking Range.....	W. Resor.....	24,577	464	363
Cooking Range.....	W. Pettet.....	26,051	675	623
Cooking Range.....	E. Baekus.....	26,241	703	662
Cooking Range.....	G. Cooper.....	26,257	706	665
Cooking Stove. (See <i>Stove, Cooking.</i> )				
Cooler for Beer.....	C. Jones.....	24,124	398	294
Cooler, Butter.....	G. W. Smith.....	24,636	473	372
Cooler, Milk.....	J. Mansfield.....	22,660	174	32
Cooler, Water.....	A. H. Phelps.....	23,605	321	196
Cooler, Water, for steam engines.....	R. G. Eunson.....	23,668	332	209
Coolers, Water, metallic lining for.....	T. Lavender.....	23,177	256	112
Cooling Beer.....	J. Boyle.....	24,004	381	273
Copper, Sulphates and Oxides of.....	H. Holland.....	26,589	753	.....
Cordage Machinery.....	G. Stephenson.....	24,244	416	313
Corks, polishing.....	H. F. Cox and A. Millar.....	24,841	501	406
Corks, Tool for cutting.....	A. Brass.....	26,083	680	629
Cork Cutting Machine.....	G. Hammer.....	22,949	220	78
Cork Machine.....	A. Albertson.....	23,880	364	251
Cork Machine.....	H. Locke.....	24,471	449	347
Corn Crib.....	B. A. Furbee.....	26,348	718	681
Corn Crusher.....	T. B. Coursey.....	24,198	409	305
Corn Houses, ventilating.....	N. Seitz.....	24,407	439	337
Corn Husker.....	A. R. Davis.....	22,710	182	40
Corn Husker.....	W. N. Rowe.....	22,894	212	70
Corn Husker.....	H. A. Doster.....	23,295	272	134
Corn Husker.....	J. Naehner.....	24,047	387	280
Corn Husker.....	J. C. Clap.....	24,281	421	319
Corn Husker.....	A. Siddall.....	24,583	465	364
Corn Husker.....	S. N. Gragg.....	24,628	471	371
Corn Husker.....	G. F. Shaw.....	24,765	491	393
Corn Husker.....	M. H. Gregg.....	24,843	501	406
Corn Husker.....	D. C. Smith.....	24,958	517	424
Corn Sheller.....	M. Bomberger.....	22,481	145	1
Corn Sheller.....	W. Wells.....	22,523	153	9
Corn Sheller.....	A. B. Vant and A. M. Cook.....	22,595	164	21
Corn Sheller.....	J. P. Smith.....	22,898	213	70
Corn Sheller.....	C. W. Carter.....	23,424	293	161
Corn Sheller.....	W. H. Hovey.....	23,686	335	212
Corn Sheller.....	J. J. Johnston.....	23,687	335	212
Corn Sheller.....	G. W. Tolhurst.....	25,688	622	550
Corn Sheller.....	N. Burr.....	26,010	670	614
Corn Sheller.....	B. Bridendolph.....	26,471	737	704
Corn Sheller and Grain Fan.....	H. E. Smith.....	22,689	178	36
Corn Shellers, operating, with a fan, &c.....	W. L. Potter.....	23,488	303	175
Corn Stalks, cutting.....	H. Johnston.....	23,644	328	204
Corsets, Abdominal.....	J. M. McLean.....	26,039	674	620
Corsets and Bustles.....	D. Lamoreux.....	22,532	154	11
Cotton, cleaning.....	D. Hess.....	25,897	653	592
Cotton, drying wet seed.....	G. G. Henry.....	26,353	719	682
Cotton and Corn Stalks, pulling and cutting.....	H. F. Hiels.....	26,034	673	619
Cotton Bagging, rolling and measuring.....	T. H. Murphy.....	24,046	387	280
Cotton Gin.....	E. Gottheil.....	23,679	334	211
Cotton Gin.....	W. F. Pratt.....	25,307	568	483
Cotton Gin.....	J. Wilson.....	25,600	609	535
Cotton Gin.....	P. E. Collins.....	25,630	614	540
Cotton Gin.....	E. Osgood.....	25,848	646	582
Cotton Gin.....	B. G. Beadle.....	25,943	660	601
Cotton Gin.....	F. Wutrich and J. Kocerber.....	26,065	678	626
Cotton Gin.....	D. G. Olmsted.....	26,516	743	711
Cotton Gin.....	W. MeLendon.....	26,604	755	725
Cotton Gin Sharpener.....	A. H. Burdine.....	24,790	494	397
Cotton Packer.....	L. S. Chichester.....	26,546	747	711
Couch, Car.....	E. C. Knight.....	25,570	605	531
Couch, Invalid.....	C. L. Taillant.....	26,534	745	715
Couches, arranging Car.....	E. C. Knight.....	24,563	462	361
Coupler, Car.....	S. B. Atwater.....	23,145	251	106
Coupler, Car.....	C. E. Stevens.....	23,321	276	139
Coupling, Car.....	W. Layland.....	22,657	173	31
Coupling, Car.....	J. B. Atwater.....	22,776	193	52
Coupling, Car.....	N. H. Wentworth and M. L. Ames.....	23,282	271	131
Coupling, Car.....	J. W. Carrier.....	23,423	293	160
Coupling, Car.....	J. C. Ransier.....	23,498	304	176
Coupling, Car.....	G. W. Parshall.....	23,698	337	215



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Coupling, Car .....	H. Purler, J. Harlan, and E. C. Cheek.	23,705	338	216
Coupling, Car .....	C. H. Eisenbrandt.....	24,109	396	291
Coupling, Car .....	R. Rickkon.....	24,146	402	298
Coupling, Car .....	D. Warren .....	24,420	442	339
Coupling, Car .....	G. Yates .....	24,422	442	340
Coupling, Car .....	R. L. Mills and P. Carpenter.....	24,651	475	375
Coupling, Car .....	E. L. Keeler .....	24,938	514	421
Coupling, Car .....	J. H. Mears and G. Cameron.....	25,844	645	581
Coupling, Car .....	H. A. Barnes .....	25,938	659	600
Coupling, Car .....	J. R. Swift.....	26,303	712	673
Coupling, Car .....	L. Adams .....	26,403	727	691
Coupling, Car .....	I. G. Goshon .....	26,568	750	721
Coupling, Car .....	C. Norpel .....	26,608	755	726
Coupling, Double Friction.....	J. Hendy.....	25,733	629	559
Coupling, Hose .....	R. B. Lawton and W. H. Bliss....	23,033	234	90
Coupling, Hose .....	S. Groom.....	23,368	283	148
Coupling, Hose .....	N. N. MeLeod .....	24,179	407	302
Coupling, Hose .....	A. H. Lowell.....	24,811	497	401
Coupling, Hose .....	G. H. Van Vleek and H. Tupper..	25,065	533	441
Coupling, Hose .....	R. Henega.....	25,117	541	449
Coupling, Hose .....	W. H. Smith .....	25,283	564	478
Coupling, Pipe.....	C. G. Page and R. J. Faleoner....	26,517	743	711
Coupling, Spring Car.....	F. Steinhart .....	23,793	351	234
Crackers, cylindrical strips of dough in man- ufacturing.	F. C. Treadwell, jr., and H. Mc- Cullom.	25,775	635	567
Cracker Machine .....	J. Fox.....	22,793	196	54
Cracker Machine .....	J. McCollum .....	22,966	223	80
Cradle, Folding.....	L. K. Selden .....	24,142	401	297
Cradle, Rocking .....	W. D. Tewksbury.....	24,340	429	327
Cradle, Wagon.....	G. Smith .....	23,197	258	115
Crane, Hoisting.....	J. Y. Patee .....	24,912	510	417
Crayons, Nitrate of Silver .....	S. P. Wheeler .....	26,223	701	659
Cresset for heating barrels .....	J. S. Thompson & M. J. Seymour.	23,410	290	158
Crieket Bat .....	M. Doherty .....	23,017	231	88
Cruet or Bottle, Vinegar .....	G. W. and G. H. Simmons.....	24,083	392	287
Cruets or Bottles for easters. ....	J. O. Mead .....	22,970	224	81
Curb and Gutter, combined, metallic street ..	W. E. Nortlen .....	23,973	376	268
Cultivator .....	J. B. Duane.....	22,494	148	3
Cultivator .....	G. W. Tollhurst.....	22,520	152	9
Cultivator .....	J. Cunningham .....	22,630	169	27
Cultivator .....	J. Dundas .....	22,859	207	65
Cultivator .....	G. Essington .....	22,860	207	65
Cultivator .....	J. M. Whitney .....	23,135	249	105
Cultivator .....	C. H. Dawson .....	23,159	253	108
Cultivator .....	T. Heerman .....	23,170	254	110
Cultivator .....	D. and A. S. Markam & D. Eldred.	23,182	256	113
Cultivator .....	T. A. Robertson .....	23,395	288	154
Cultivator .....	J. Smalley.....	23,402	289	156
Cultivator .....	J. C. Stoddard .....	23,407	290	157
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Fabrics, India Rubber.....	E. E. Marcy .....	26,360	720		.....	
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Felloes, Tool for finishing.....	C. H. Dennison .....	26,392	725		689	
Fence, Farm.....	T. G. Beecher .....	25,944	660		601	
Fence, Field.....	S. Cheney.....	22,702	181		39	
Fence, Field.....	D. S. Curtis .....	22,709	182		40	
Fence, Field.....	J. Haines.....	25,821	642		577	
Fence, Field.....	J. L. Wentworth.....	25,925	657		597	
Fence, Field, Portable.....	T. B. Garside.....	24,930	513		420	
Fence, Iron.....	J. B. Wickersham and H. Jenkins..	25,166	548		458	
Fence, Portable.....	P. M. Brown .....	26,413	728		693	
Fence, Wire.....	P. S. Clinger .....	25,387	580		497	
Fences, Field, locking and supporting panels of.	E. West.....	22,994	228		85	
Fences, Field, Posts for .....	J. Drown.....	22,712	182		40	
Fences, Field, Portable, connecting panels of..	J. Haines.....	25,641	616		542	
Fences, Metallic, expansion and contraction of.	L. Eikenberry .....	23,908	367		256	
Fences, Portable, holding panels of .....	O. P. Moran.....	25,030	528		436	
Fence Post.....	H. T. Dewey .....	23,905	367		256	
Fence Post, Cast-Iron.....	P. Stewart.....	23,140	250		106	
Fence Posts, attaching capping to.....	R. S. Cadwell .....	24,373	435		392	
Fence Posts, bracing and ventilating.....	C. R. Smith .....	25,768	634		566	
Fencing, Picket.....	W. W. Johnson .....	24,029	385		277	
Fertilizer.....	L. Harper .....	26,184	696		.....	
Fertilizer.....	J. J. Mapes.....	26,196	697		.....	
Fertilizer.....	J. J. Mapes.....	26,507	742		.....	
Fertilizer.....	W. D. Hall .....	26,548	747		.....	
Fertilizers, distributing.....	Z. N. Morrel .....	25,574	606		531	
Fertilizers, sowing .....	E. J. Burrall.....	23,899	366		255	
Fertilizers, sowing.....	J. Peeler .....	24,485	451		349	
Fertilizers, sowing.....	L. Tyler .....	25,064	533		441	
Fertilizers, sowing, in drills .....	C. B. Davis.....	24,542	459		357	
Fibrous Materials, combing .....	C. Whipple.....	23,732	342		221	
Fibrous Substances, drying .....	J. Essex.....	24,205	411		306	
Fibrous Substances, twisting .....	G. W. Pittman .....	22,745	187		46	
Files, cutting .....	M. D. Whipple .....	22,842	204		62	



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Files, cutting .....	C. Miller and T. W. Decker.....	23,645	328	204
Filter .....	J. Fitch .....	23,297	273	134
Filter .....	A. Jaminet .....	23,302	274	135
Filter .....	L. Tilliers.....	23,325	277	139
Filter .....	W. Rice.....	24,489	452	350
Filter .....	E. Duchamp.....	25,398	581	499
Filter .....	W. Linton.....	26,274	708	668
Filter and Purifier .....	R. A. Maingay.....	24,036	386	278
Filtering Apparatus .....	N. F. Rice.....	22,826	202	59
Finger, Automatic, for closing the vents of cannon.	A. Le Mat.....	24,313	426	323
Fingers, Guard, for harvesters.....	A. Hotchkiss and J. P. Adriance..	24,461	448	345
Fingers of Printing Presses, operating .....	S. D. Tucker .....	25,356	575	491
Fire, Composition for kindling.....	E. Bellinger .....	26,408	728	.....
Fire Alarm, Electro-magnetic.....	M. G. Farmer .....	22,553	157	15
Fire Alarm, Electro-magnetic.....	M. G. Farmer .....	23,060	238	94
Fire Alarm, Electro-magnetic.....	M. G. Farmer and W. F. Channing.	23,217	261	119
Fire-arms .....	S. C. Lewis and F. P. Pfleger.....	24,942	514	422
Fire-arms .....	J. Rider .....	25,470	591	512
Fire-arms .....	E. Maynard .....	25,664	619	547
Fire-arms .....	F. Wesson and N. S. Harrington..	25,926	657	597
Fire-arms, actuating movable parts of.....	T. Bailey.....	24,437	444	342
Fire-arms, Breech-loading .....	C. Sharps .....	22,752	188	47
Fire-arms, Breech-loading.....	F. Curtiss .....	22,940	219	77
Fire-arms, Breech-loading.....	J. Barber and P. C. Reinfried.....	23,224	262	121
Fire-arms, Breech-loading.....	E. Lindner .....	23,378	285	151
Fire-arms, Breech-loading.....	T. E. Shull.....	23,505	306	178
Fire-arms, Breech-loading.....	W. C. Ellis.....	23,762	346	227
Fire-arms, Breech-loading.....	D. Leavitt.....	24,394	438	336
Fire-arms, Breech-loading.....	W. M. Storm.....	24,414	441	338
Fire-arms, Breech-loading.....	M. J. Gallagher and W. H. Gladding.	24,730	486	387
Fire-arms, Breech-loading.....	P. Altmair.....	24,774	492	394
Fire-arms, Breech-loading.....	A. V. Hill .....	24,936	513	421
Fire-arms, Breech-loading.....	H. Gross .....	25,259	561	474
Fire-arms, Breech-loading.....	J. Rider.....	25,470	591	512
Fire-arms, Breech-loading.....	J. P. Marshall .....	25,661	618	546
Fire-arms, Breech-loading.....	F. Wesson and N. S. Harrington..	25,926	597	657
Fire-arms, Breech-loading.....	W. H. Arnold.....	26,076	679	628
Fire-arms, Breech-loading.....	S. W. Marsh .....	26,362	720	683
Fire-arms, Breech-loading.....	E. Maynard .....	26,364	720	684
Fire-arms, Breech-loading.....	B. Burton .....	26,475	737	705
Fire-arms, Breech-loading.....	R. S. Lawrence.....	26,504	741	709
Fire-arms, Breech-loading.....	J. H. Sears.....	26,526	744	713
Fire-arms, Breech-loading, and others.....	J. W. Cochran .....	26,256	705	664
Fire-arms, Breech-loading Repeating.....	C. Sharps .....	22,753	189	47
Fire-arms, Magazine.....	P. Boynton.....	23,226	262	121
Fire-arms, Percussion Pellets for .....	J. Rupertus.....	25,142	545	453
Fire-arms, Repeating.....	H. H. McKenny and F. Goth.....	22,969	224	81
Fire-arms, Revolving.....	C. S. Pettengill .....	22,511	151	7
Fire-arms, Revolving.....	H. S. North and E. Savage.....	22,666	175	33
Fire-arms, Revolving.....	J. Walsh.....	22,905	214	71
Fire-arms, Revolving.....	W. C. Haynes.....	23,087	242	98
Fire-arms, Revolving.....	J. Rupertus.....	23,711	339	217
Fire-arms, Revolving.....	J. Rider .....	23,861	361	247
Fire-arms, Revolving.....	T. Bailey.....	24,274	420	318
Fire-arms, Revolving.....	H. Smith and D. B. Wesson.....	24,666	477	377
Fire-arms, Revolving.....	W. C. Ellis and J. N. White.....	24,726	485	386
Fire-arms, Revolving.....	S. C. Lewis and F. P. Pfleger....	24,942	514	422
Fire-arms, Revolving.....	J. Gruler and A. Rebety.....	25,641	760	731
Fire-arms, Self-priming .....	G. W. B. Gedney.....	23,241	265	124
Fire-arms, Tools for manufacture of.....	A. Rebety .....	23,944	372	263
Fire Back for stoves and fireplaces .....	A. O'Neill.....	24,483	451	349
Fire Box, Locomotive .....	W. R. Thomas.....	23,278	270	131
Fire Box for locomotive engines .....	R. Greenwood.....	25,009	525	433
Fireplaces.....	G. A. Clark.....	25,629	614	540
Fire Plug.....	J. L. Lowry.....	23,034	234	90
Fire-escape .....	J. M. Hancock.....	23,462	299	170
Fire and Ventilating Apparatus for ships .....	J. W. Richards .....	22,827	202	59
Fires, extinguishing, in steam vessels.....	W. Arthur.....	23,435	294	163
Fireman's Protector.....	C. D. Woodruff.....	23,212	260	118
Fishing Reel.....	W. Billingshurst.....	24,987	522	429
Fishing Rods, Guide Rings for.....	H. Pritchard.....	25,693	623	551
Flail Cap.....	T. J. Hubbard .....	22,557	158	16
Flax, scutching.....	W. C. McBride.....	22,738	186	45
Flock, cleaning and opening.....	W. C. Geer.....	25,895	652	591
Floor, Fire-proof.....	J. B. Cornell.....	22,939	219	76
Flour, packing.....	J. Bartholomew .....	25,940	659	600
Flour, &c., bolting.....	W. H. Collins .....	25,884	651	589
Flour Bolt.....	E. and A. H. Nordyke.....	24,656	476	376
Flour Bolt.....	J. M. Clark.....	24,857	503	409
Flour Bolt.....	E. Graham and I. N. Patton.....	25,256	561	474



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Flour Mills, Friction Bolt for .....	L. S. Reynolds.....	23,394	287		154	
Flour Packers .....	S. Waggart.....	24,963	517		425	
Fluid, Burning .....	J. Griffin .....	23,167	254			
Fluid, Burning .....	W. Wilber .....	23,210	260			
Fluid, Compound Illuminating .....	N. A. Dyer and J. F. Augustus...	25,362	576			
Fluid, Writing .....	S. W. Eells.....	25,184	551			
Fluids, compressing Elastic .....	J. Jameson .....	22,956	221		79	
Fluids, raising and forcing.....	M. Alden.....	22,773	192		51	
Fluid Measurer.....	J. L. Perry and M. Burt.....	23,701	337		215	
Fluxes for puddling Iron .....	J. Burnish, J. Talbot, and T. W. Yardley.	22,779	194			
Fogs, Direction of Sounds in .....	B. R. Smith .....	23,718	340		218	
Fore Iron for the use of shoemakers .....	S. A. Shurtleff.....	26,129	687		639	
Forging Machine .....	E. Schlanker .....	23,400	288		155	
Fork, Carving .....	H. Garbanati .....	26,579	751		722	
Fork, Flesh, and Skimmer .....	C. B. Bristol.....	24,716	484		385	
Fork, Pitch.....	J. Herald and C. B. Tompkins....	26,354	719		682	
Framing Square .....	W. Ripley.....	22,585	162		20	
Freezing Cream .....	S. W. Smith.....	23,271	269		129	
Frog, Railroad.....	D. D. Lewis .....	24,034	385		278	
Frog, Railroad, Elastic.....	G. P. Sandborn and W. Mansfield.	24,664	477		377	
Fruit, Packing.....	R. Law.....	24,779	493		395	
Fruits, Extracts of.....	R. Carpenter.....	25,384	579			
Fuel, Artificial .....	H. A. Achereau.....	23,005	230		86	
Fuel, Artificial .....	M. L. Keen.....	25,124	542		450	
Fuel, Artificial .....	H. Wilverth .....	26,541	746			
Furnace.....	S. Pierce.....	22,670	175		33	
Furnace.....	J. H. Duhme .....	24,547	460		358	
Furnace.....	E. B. Cherevy .....	24,599	467		367	
Furnace.....	L. Solomon .....	24,828	499		404	
Furnace.....	J. I. Vinton and E. John .....	25,694	623		552	
Furnace.....	B. W. Dunklee.....	25,729	628		558	
Furnace, Bagasse.....	L. Tregre.....	24,675	478		379	
Furnace, Bagasse.....	C. A. Desobry .....	25,322	570		485	
Furnace, Bagasse.....	A. J. Chapman .....	26,162	692		647	
Furnace for dental purposes .....	E. A. L. Roberts.....	24,823	499		403	
Furnace, Distilling Zinc .....	S. Wetherill.....	22,758	189		48	
Furnace for heating buildings.....	B. W. Dunklee.....	23,907	367		256	
Furnace for heating tire.....	M. Batel .....	23,653	330		206	
Furnace, Hot Air .....	I. H. Hobbs, A. W. Rand, and G. W. Sellers.	25,735	629		559	
Furnace, Hot Air .....	J. Whitehill.....	26,064	677		625	
Furnace for making iron direct from ore.....	J. M. Quimby, A. H. Brown, G. N. Benton, and J. Criswell.	25,044	530		438	
Furnace for locomotive engines.....	R. Gill and G. W. Grier.....	24,867	505		410	
Furnace for smelting iron.....	S. M. Fales.....	22,861	207		65	
Furnace for smelting iron.....	R. W. Seivier.....	24,525	457		355	
Furnace for smelting zinc ores.....	J. and I. Halbash .....	25,267	562		476	
Furnace for steam boilers .....	W. D. Ballard .....	25,713	626		555	
Furnace for steam boilers .....	E. H. Jones and R. Stevenson....	25,901	653		592	
Furnace for treating pyritous ores .....	J. Fretz .....	25,500	595		518	
Furnace and Stove.....	C. B. Sawyer.....	24,332	428		326	
Furnace and Ventilator .....	C. B. Sawyer.....	25,279	564		477	
Furnaces, Bridge Walls of Boiler.....	W. G. Hamilton .....	22,530	154		11	
Furnaces, Door Frame for.....	P. A. Sabbaton .....	24,493	453		350	
Furnaces, increasing the draft of .....	J. B. Martin .....	22,814	200		57	
Furnaces, supplying sawdust to .....	H. Doty .....	26,169	694		648	
Furnaces, supplying, with hot air.....	C. Fletcher .....	25,159	547		457	
Furniture, Cabinet.....	J. D. Browne.....	25,089	537		445	
Furniture, Triangular Stand for.....	T. W. Currier.....	23,013	231		87	
G.						
Garments, securing, to hooks.....	G. Woodward and F. S. Hathaway	22,996	228		85	
Gas, Apparatus for Generating .....	M. P. Coons.....	23,828	536		240	
Gas, Apparatus for Generating Illuminating .....	S. Nolan .....	25,275	563		477	
Gas, Apparatus for Generating Illuminating .....	M. P. Coons.....	26,163	693		647	
Gas, lighting, by electricity.....	A. Wilson.....	25,167	549		458	
Gas, lighting, by galvanic battery .....	W. W. Hopkins.....	22,952	221		78	
Gas, manufacture of .....	C. N. Tyler.....	24,506	454		352	
Gas, manufacture of .....	L. D. Gale.....	26,028	672		618	
Gas, manufacture of .....	L. D. Gale.....	26,030	672		618	
Gas from Peat .....	J. B. Hyde .....	25,866	648		585	
Gas, Purifying .....	A. Dickinson .....	24,543	459		357	
Gas, Purifying .....	H. Guild.....	25,566	605		530	
Gas from Rosin .....	A. Schmidt.....	25,610	611		537	
Gas from Wood.....	L. R. Breisach.....	25,316	569		484	
Gas from Wood.....	A. Schmidt.....	25,609	611		536	
Gas Apparatus, Portable.....	J. H. Miller and S. Albright.....	26,042	674		620	
Gas Burner .....	A. Ostrander.....	22,574	160		18	
Gas Burner.....	W. Wright .....	22,609	166		23	



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Gas Burner.....	W. Blake.....	23,441	295	164
Gas Burner.....	J. Gilfillan.....	24,932	513	421
Gas Burner.....	D. H. Solliday.....	25,372	577	494
Gas Burner.....	J. Stevens and J. Johnson.....	25,591	608	534
Gas Burner.....	H. K. Symmes.....	25,686	622	550
Gas Burner.....	S. L. Cole.....	26,255	705	664
Gas Burner, Argand.....	H. Monier.....	25,209	555	465
Gas Burner, Spirit.....	C. Miller.....	24,355	431	326
Gas Burners, lighting.....	W. B. Johns.....	25,122	542	449
Gas Holder, Portable.....	J. McFarlan.....	25,607	611	536
Gas Purifier.....	P. Fountain.....	24,551	460	358
Gas Regulator.....	S. D. Baldwin.....	23,540	311	184
Gas Regulator.....	E. H. Covel.....	24,199	410	306
Gas Regulator.....	D. Wheeler and I. Little.....	24,253	417	314
Gas Regulator.....	G. H. Kitchen.....	25,834	644	580
Gasket for Steam and other Joints.....	J. S. Colvin.....	25,724	628	558
Gate.....	N. Waterbury.....	26,063	677	625
Gate.....	S. W. Chamberlain.....	26,477	737	705
Gate, Approach-opening.....	A. Iske and J. B. Erb.....	25,018	527	434
Gate, Approach-opening.....	J. S. Lloyd.....	25,515	597	521
Gate, Canal Lock.....	C. W. Williams.....	23,635	327	202
Gate, Cattle, for railroads.....	I. Robbins.....	24,887	507	413
Gate, Farm.....	G. W. Baker.....	23,339	279	142
Gate, Flood.....	E. H. Hancock.....	25,330	571	486
Gate, Railroad.....	S. Liggett.....	23,256	267	127
Gate, Railroad.....	M. Hall, jr.....	24,778	492	394
Gate, Railroad.....	D. W. Comstock.....	26,018	671	615
Gates, opening.....	J. A. Ayres.....	22,845	205	62
Gates, opening and closing.....	F. B. Betts.....	23,345	280	143
Gates, opening and closing.....	R. R. Cole.....	25,808	640	574
Gates, Farm, opening and closing.....	G. Yates.....	23,738	343	223
Gates, Farm, opening and closing.....	D. Warren.....	24,513	455	353
Gates, Farm, opening and closing.....	B. M. Dorr.....	24,619	470	370
Gates, Farm, operating.....	A. J. Hamilton.....	23,169	254	110
Gates, Farm, operating.....	J. H. Butler and P. G. Van Houten.....	24,717	484	385
Gates, Field, operating.....	A. J. Curtis.....	25,812	641	575
Gates, Saw, preventing vibration of.....	D. Reynolds.....	22,892	212	69
Gauge, Alarm Water.....	W. R. Andrews and J. Oswald.....	23,816	354	238
Gauge, Clapboard.....	H. Van Deusen.....	26,386	724	688
Gauge, Electro-magnetic, for boilers.....	M. G. Farmer.....	25,496	594	517
Gauge for Iron Axles.....	W. C. Bamberger.....	26,079	680	628
Gauge for measuring the pressure of fluids.....	V. Beaumont.....	24,365	433	331
Gauge, Steam.....	W. Y. Gill.....	23,166	254	110
Gauge, Steam.....	A. J. Allen.....	25,615	612	538
Gauge, Steam Combination.....	E. G. Allen.....	26,152	691	645
Gauge, Steam pressure.....	T. W. Lane.....	23,032	234	90
Gauge, Steam pressure.....	J. H. Mosher.....	23,530	310	182
Gauge, Steam and Water.....	C. H. Williams.....	23,994	379	271
Gauge, Stop, for weather boarding.....	W. E. Stoddard.....	24,066	390	284
Gauge, Taper, for carpenters.....	J. Marvin.....	22,564	159	16
Gauge, Water and Alarm, for boilers.....	F. A. Hoyt.....	24,874	505	411
Gauge, Water, for steam boilers.....	A. Miller.....	23,037	235	91
Gauge, Water, for steam boilers.....	R. H. Mathies.....	24,519	456	354
Gauge, Water, for steam boilers.....	H. K. Moore.....	24,520	456	354
Gauge, Water, for steam boilers.....	R. S. Harris.....	25,012	526	433
Gauge, Water, for steam boilers.....	F. A. Hoyt.....	25,828	643	578
Gauge and Box for casting journals.....	C. W. Griffith.....	25,504	596	519
Gauging Casks, Instrument for.....	J. K. Barney.....	24,438	444	342
Gauging Device to Hand Saws.....	W. H. McNiece.....	23,531	310	182
Gauging Threads.....	J. E. Atwood.....	23,539	311	184
Girders, Iron, connecting.....	J. T. Ham.....	24,460	448	345
Glass, Composition for ornamenting.....	J. J. H. Brianchon.....	22,620	168	.....
Glass, grinding.....	A. H. Hook.....	26,103	684	634
Glass, polishing.....	A. H. Hook.....	24,908	510	416
Gluc, drying.....	M. Newbauer and P. Adelman.....	24,325	427	325
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Gold, washing and amalgamating.....	G. C. Wheeler.....	24,706	482	383
Gold Amalgamator. (See <i>Amalgamator, Gold.</i> )				
Gold Washer.....	H. Roberts.....	24,889	507	413
Gold Washer.....	M. Nelson.....	25,667	620	547
Gold Washer.....	C. Ringel.....	26,524	744	712
Gong or Bell for signals.....	I. F. Woodward.....	24,173	406	302
Gongs, Striking Apparatus for.....	J. W. Bliss.....	26,411	728	692
Governor for steam engines.....	G. T. Parry and H. W. Evans.....	23,110	246	101
Governor for steam engines.....	J. Broughton.....	23,660	331	207
Governor for steam engines.....	T. Silver.....	23,790	351	233
Governor for steam and other engines.....	H. D. Snow.....	25,769	634	566
Governor, Fan, for steam engines.....	I. Y. Chubbuck.....	26,414	728	693
Governor, Marine, for steam engines.....	J. L. Cathcart.....	23,755	345	226
Governor for sugar mills.....	R. Stott.....	23,724	341	220
Grain, binding.....	J. D. Osborn.....	24,400	439	337



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Grain, binding.....	A. Sherwood.....	25,308	568		483	
Grain, cleaning.....	H. Wallace and W. Mellon.....	23,205	259		117	
Grain, cleaning.....	H. Fitts.....	23,641	328		203	
Grain, cleaning.....	T. C. Gleason.....	23,838	357		242	
Grain, cutting and binding.....	F. Meyer.....	24,945	515		423	
Grain, drying.....	J. Souter.....	24,589	466		365	
Grain, gathering, into Gavels.....	W. M. Waggoner.....	22,682	177		35	
Grain, hulling.....	W. Zimmerman.....	24,423	442		340	
Grain, measuring.....	D. Murray.....	25,212	555		466	
Grain, preserving.....	L. M. F. Doyère.....	26,481	738		706	
Grain, scouring and hulling.....	J. N. Treadwell.....	23,127	248		104	
Grain, scouring and hulling.....	T. F. Wagoner.....	24,595	467		366	
Grain, stirring and delivering.....	S. Marsh.....	25,745	631		562	
Grain, weighing.....	C. H. Hunter.....	25,200	553		464	
Grain, weighing.....	J. Van Horne.....	25,458	589		510	
Grain, Malt, &c., drying.....	R. & S. Andres and McD. Bucklin.....	22,614	167		24	
Grain Binder.....	C. H. Durkee.....	26,171	694		684	
Grain Bins.....	D. D. Badger and W. S. Sampson.....	24,424	442		340	
Grain Cleaner.....	I. Wait.....	25,777	635		568	
Grain Cradle.....	M. R. Flanders.....	24,550	460		358	
Grain Separator.....	H. Montgomery and S. Howes.....	23,039	235		91	
Grain Separator.....	J. L. Booth.....	23,153	252		107	
Grain Separator.....	J. Benner.....	23,546	312		185	
Grain Separator.....	J. B. Crist.....	23,903	367		255	
Grain Separator.....	J. Vaughn.....	23,965	375		266	
Grain Separator.....	A. Potter.....	24,605	468		367	
Grain Separator.....	J. L. Booth.....	24,714	484		384	
Grain Separator.....	F. I. May.....	24,812	497		401	
Grain Separator.....	P. I. Ankney and D. McGreevy.....	25,478	592		513	
Grain Separator.....	J. L. Booth.....	25,484	593		515	
Grain Separator.....	J. Nash.....	25,608	611		536	
Grain Separator.....	J. Secbold.....	25,677	621		549	
Grain Separator.....	F. Swift.....	25,922	657		597	
Grain Separator.....	P. Griswold and H. H. Seeley.....	26,181	695		650	
Grain Separator.....	D. Spencer.....	26,208	699		656	
Grain Separator.....	J. R. Moffit.....	26,283	709		669	
Grain Separator.....	D. S. Wagener.....	26,311	713		674	
Grain Separator.....	W. Wilmington.....	26,316	713		675	
Grain Weigher.....	J. B. Stoner.....	22,900	213		71	
Grate.....	P. Smith.....	23,621	324		199	
Grate.....	J. Tiberi.....	25,352	574		491	
Grate.....	J. S. Williams.....	25,462	590		510	
Grate for furnaces.....	R. Van Velthoven.....	23,729	341		221	
Grate, Furnace.....	E. J. McCarthy.....	24,815	498		401	
Grate, Parlor.....	D. Lamoureux.....	25,338	572		483	
Grate Bar.....	J. Easterly.....	23,456	298		168	
Grate Bar.....	J. Buzby.....	25,720	627		557	
Grate Bar for furnaces.....	W. S. Law.....	24,316	426		324	
Grate Bar, hollow, for steam boilers.....	B. L. Griffith.....	25,258	561		474	
Gridiron.....	W. A. Greene & J. G. Treadwell.....	23,367	283		148	
Gridiron.....	J. G. Treadwell.....	26,539	746		715	
Grinding Surfaces for mills.....	O. W. Stanford.....	22,588	162		20	
Gum, vulcanized, detaching paper from.....	A. C. Richard.....	22,584	162		20	
Gums, vulcanized.....	A. G. De Wolf.....	24,996	523		431	
Gun, centrifugal.....	W. Joslin.....	24,031	385		277	
Gun, centrifugal.....	C. S. Dickinson.....	24,997	523		431	
Gun, Toy.....	J. Johnson.....	26,269	707		667	
Gun Lock.....	J. A. Lowe.....	22,881	211		68	
Gun Lock.....	W. Briggs.....	25,244	559		472	
Gun Lock, Self-priming.....	F. H. Bell.....	23,545	312		185	
Gun Lock, Self-priming.....	R. S. Lawrence.....	23,590	319		193	
Gun Lock, Self-priming.....	J. S. Butterfield and S. Marshall.....	24,372	435		332	
Gunpowder, manufacture of.....	V. L. Maxwell.....	26,602	754		.....	
Gun-stocks, coupling, with pistols.....	S. Colt.....	22,626	169		26	
H.						
Hair Crimper.....	E. Ivens.....	23,842	358		243	
Hair, restoring the.....	B. Harris.....	23,086	242		.....	
Hames.....	H. Cogswell.....	22,937	219		76	
Hammer for pianos.....	J. Percival.....	24,659	476		376	
Hammer for revolving fire-arms.....	A. Le Mat.....	24,312	425		323	
Hand, Artificial.....	W. Selpho and J. Walter.....	26,378	723		678	
Handle for Cutlery.....	J. W. Gardner.....	22,795	197		55	
Handle for Cutlery.....	J. W. Gardner.....	23,837	357		242	
Handle, File.....	W. H. Draper.....	22,635	170		28	
Handle, Mop.....	H. and J. S. B. Norton.....	24,049	387		281	
Handle for Picks.....	J. E. Emerson.....	23,358	282		145	
Handle, Pocket, for billiard tables.....	J. M. Brunswick.....	24,279	421		318	
Handle for smoothing irons.....	H. C. Brown.....	26,067	678		626	
Handles, attaching, to cutlery.....	M. Chapman.....	22,527	153		10	



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Handles, Plough, bending .....	J. G. Ernst .....	24,971	519	426
Handles for ploughs, forming .....	G. W. Matthews .....	24,131	399	295
Handles, Knife, holding, for soldering .....	A. Cooley .....	26,322	714	676
Handles, Knife, holding, for soldering .....	A. Cooley .....	26,323	714	676
Handles for tin pails, Attachment of .....	T. Evans .....	24,451	446	344
Hare's Hydro-Oxygen Light, producing .....	G. H. Smith .....	25,611	611	537
Harness .....	J. Fassmach .....	25,401	581	499
Harness .....	J. Rouse .....	25,587	608	533
Harness Attachment .....	S. D. Brown .....	23,073	240	96
Harrow .....	J. H. French .....	23,914	368	258
Harrow .....	R. W. Buekles .....	24,095	394	289
Harrow .....	J. Herald and C. B. Tompkins .....	24,333	424	322
Harrow .....	S. W. Hamsher .....	25,824	642	578
Harrow .....	O. C. Green .....	26,179	695	650
Harrow, Revolving .....	M. W. House .....	22,651	172	30
Harrow, Rotary .....	C. Howell .....	22,502	149	5
Harrow, Rotary .....	W. T. Hildrup .....	22,805	198	56
Harrow, Rotary .....	W. T. Hildrup .....	23,578	317	190
Harrow, Rotary .....	S. M. Wade .....	23,627	325	201
Harrow, Rotary .....	G. W. Tolcman .....	23,962	374	266
Harrow, Rotary .....	J. W. McLean .....	24,322	427	325
Harrow, Rotary .....	C. and J. K. Gingrich .....	24,554	460	359
Harrow, Rotary .....	W. P. Goolman .....	25,301	567	482
Harrow, Rotary .....	G. Cook .....	25,390	580	497
Harrow, Rotary .....	O. D. Barrett .....	25,620	612	539
Harrow, Rotary .....	M. C. Kilgore .....	25,651	617	544
Harrow, Rotary .....	H. S. Hogle .....	25,736	629	560
Harrow, Seeding .....	A. E. Jerome .....	26,110	685	635
Harvester .....	A. C. Brownlieh .....	22,483	146	1
Harvester .....	W. F. Ketchum .....	22,655	173	31
Harvester .....	W. N. and A. Whitely .....	22,684	178	35
Harvester .....	G. W. Richardson and R. Glover .....	22,772	192	51
Harvester .....	C. G. Dickinson .....	22,786	195	53
Harvester .....	S. Pearsons and A. M. Cone .....	22,824	201	59
Harvester .....	G. E. Chenoweth .....	22,855	207	64
Harvester .....	W. K. Miller .....	22,885	211	68
Harvester .....	D. Clow .....	22,936	219	76
Harvester .....	M. G. Hubbard .....	22,953	221	78
Harvester .....	B. F. Ray .....	22,977	225	82
Harvester .....	M. G. Hubbard .....	23,029	233	90
Harvester .....	W. A. Wood .....	23,056	237	93
Harvester .....	C. Brownlieh .....	23,075	240	96
Harvester .....	G. E. Chenoweth .....	23,077	240	97
Harvester .....	D. P. Kinyon .....	23,090	242	98
Harvester .....	D. Ranek .....	23,115	246	102
Harvester .....	R. Warner .....	23,132	249	104
Harvester .....	I. W. Patterson and L. H. Colborn .....	23,190	257	114
Harvester .....	A. Ralston .....	23,194	258	115
Harvester .....	H. R. Keese .....	23,376	284	150
Harvester .....	J. A. Moore and A. H. Patch .....	23,383	286	152
Harvester .....	I. S. and H. R. Russell .....	23,399	288	155
Harvester .....	S. W. Tyler .....	23,413	291	158
Harvester .....	W. Webber, jr., and J. Webber .....	23,417	291	159
Harvester .....	W. S. Stetson .....	23,508	306	178
Harvester .....	L. H. Colborn .....	23,552	313	186
Harvester .....	G. Lord .....	23,592	320	193
Harvester .....	H. H. Scoville .....	23,613	323	198
Harvester .....	J. Smalley .....	23,618	324	199
Harvester .....	G. Esterly .....	23,666	332	208
Harvester .....	S. Ray and M. R. Shalters .....	23,707	338	217
Harvester .....	J. V. A. Wemple .....	23,730	341	221
Harvester .....	G. and W. Chamberlin .....	23,756	345	226
Harvester .....	H. Marcellus .....	23,851	359	245
Harvester .....	J. D. Smith .....	23,869	362	249
Harvester .....	W. A. Wood .....	23,878	363	251
Harvester .....	M. G. Hubbard .....	23,921	369	259
Harvester .....	S. Thomas .....	23,961	374	266
Harvester .....	H. Willard and R. Ross .....	23,971	375	267
Harvester .....	W. E. Wilson .....	23,972	376	268
Harvester .....	W. S. Stetson .....	24,062	389	283
Harvester .....	W. S. Stetson and R. F. Maynard .....	24,063	389	283
Harvester .....	C. R. Brinekenhoff .....	24,093	394	289
Harvester .....	J. Little .....	24,128	399	295
Harvester .....	J. Whitehead .....	24,170	405	301
Harvester .....	J. McPherson .....	24,226	414	310
Harvester .....	H. H. Luther .....	24,318	426	324
Harvester .....	W. and T. Sehnebly .....	24,495	453	350
Harvester .....	W. and T. Sehnebly .....	24,496	453	351
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Harvester .....	McC. Young, jr.....	24,598	467	366
Harvester .....	T. B. Butler.....	24,613	469	368
Harvester .....	L. and J. Miller.....	24,700	482	383
Harvester .....	H. Carter.....	24,793	495	397
Harvester .....	C. B. and G. B. Garlinghouse.....	24,803	496	399
Harvester .....	W. A. Wood and I. W. Rosebrook.....	24,836	500	405
Harvester .....	G. W. Richardson.....	24,848	502	407
Harvester .....	H. Fisher.....	24,860	504	409
Harvester .....	O. H. King.....	24,941	514	422
Harvester .....	S. A. Lindsay.....	24,944	515	422
Harvester .....	J. S. and R. Hawkins.....	25,194	552	463
Harvester .....	O. Hussey.....	25,201	553	464
Harvester .....	J. A. Falk, A. Johnson, and G. A. Erickson.....	25,251	560	473
Harvester .....	A. Whiteley.....	25,297	566	481
Harvester .....	G. W. Richardson and R. Glover.....	25,370	577	494
Harvester .....	A. H. Inskeep.....	25,415	583	501
Harvester .....	T. Crumbling.....	25,559	604	529
Harvester .....	J. D. Custer.....	25,561	604	529
Harvester .....	D. Zug.....	25,697	623	552
Harvester .....	J. McAleer.....	25,748	631	562
Harvester .....	H. R. Ramsey.....	25,761	633	565
Harvester .....	E. Ball.....	25,797	638	572
Harvester .....	J. Ebner and F. Leuthy.....	25,815	641	575
Harvester .....	H. L. Emery.....	25,888	651	590
Harvester .....	I. A. Dufield.....	25,960	662	604
Harvester .....	G. E. Chenoweth.....	26,091	681	631
Harvester .....	M. G. Hubbard.....	26,105	684	634
Harvester .....	W. A. Kirby.....	26,114	685	636
Harvester .....	J. Butler.....	26,142	689	642
Harvester .....	W. Morrison.....	26,198	698	653
Harvester .....	J. P. Burnham.....	26,251	705	664
Harvester .....	W. and I. Cogswell, jr.....	26,338	716	679
Harvester .....	D. Sanford.....	26,376	722	686
Harvester .....	L. G. Kniffen.....	26,437	732	697
Harvester .....	J. Gore.....	26,582	752	722
Harvester .....	S. N. Purse.....	26,616	756	727
Harvester, Corn.....	R. C. Mauek.....	22,508	150	6
Harvester, Corn.....	I. Reamer.....	22,583	162	19
Harvester, Corn.....	J. L. Chapman.....	23,076	240	96
Harvester, Corn.....	J. H. Kite.....	23,174	255	111
Harvester, Corn.....	I. Reamer and H. Miller.....	23,783	349	231
Harvester, Corn.....	G. W. Richardson and J. W. White.....	24,434	444	341
Harvester, Corn.....	W. Cogswell and C. A. Mathewson.....	24,992	523	430
Harvester, Corn.....	B. T. Carrier.....	24,994	523	430
Harvester, Corn.....	W. Beach.....	25,699	624	553
Harvester, Corn and Cane.....	H. D. McGeorge and D. S. Greer.....	24,477	450	348
Harvester, Cotton.....	J. Griffin.....	23,168	254	110
Harvester, Cotton.....	L. Bishop.....	24,609	469	368
Harvester, Cotton.....	J. Griffin.....	26,180	695	650
Harvester, Potato.....	J. E. Hardenbergh.....	26,102	683	633
Harvester, Potato.....	J. D. Otstöt.....	26,118	686	637
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Harvester, Sugar Cane.....	R. R. Taylor.....	24,164	404	300
Hat, Ventilating.....	A. Maginnis.....	24,035	385	278
Hats, manufacture of.....	W. T. Warburton.....	24,968	519	426
Hats, Felt, manufacture of.....	J. Monach.....	23,934	371	261
Hats, Woolen, coloring.....	G. D. Foote.....	25,564	605	.....
Hat Bodies, forming.....	S. Boyden.....	22,698	180	38
Hat Bodies, forming.....	P. Arneson.....	25,168	549	459
Hat Bodies, forming.....	J. S. Taylor.....	25,454	589	509
Hat Bodies, forming.....	R. Fitzgerald.....	26,395	726	690
Hat Bodies, hardening.....	G. E. Cowperthwait.....	24,007	382	273
Hat Bodies, hardening.....	S. Boyden.....	25,300	567	481
Hat Bodies, perforating.....	W. F. Warburton and W. B. Atkin.....	25,551	603	527
Hat Bodies, pouncing.....	W. H. Tupper.....	26,132	688	640
Hat Measurer.....	J. Weble.....	25,154	546	456
Hawse Pipes for Ships.....	A. S. Phillips.....	24,762	482	383
Hay, loading.....	S. V. Essiek.....	23,911	368	257
Hay, making.....	T. I. Goff.....	24,386	436	335
Hay, making.....	J. C. Stoddard.....	24,588	466	265
Hay, making.....	J. C. Stoddard.....	26,380	723	687
Hay, raking and loading.....	G. Howard.....	24,806	496	400
Hay, raking and loading.....	T. J. Wallace.....	25,459	589	510
Hay, raking and loading.....	J. A. Althouse.....	26,225	701	659
Heads of Metallic Powder Kegs.....	J. Wilson, C. Green, and W. Wilson, jr.....	24,772	491	393
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Heating Apparatus.....	G. R. Osbrey.....	26,048	675	622
Heating Apparatus.....	C. Pepper.....	26,521	743	712
Heating Apparatus, Electrical.....	G. B. Simpson.....	25,532	600	523
Heating Apparatus, Steam.....	B. W. Dunklee and W. B. Moore..	24,858	503	409
Heating Buildings.....	L. W. Leeds.....	23,096	243	99
Heating Buildings.....	S. F. Gold.....	24,456	447	345
Heating Buildings.....	G. S. G. Spence.....	24,590	466	365
Heating, Cooking, and Ventilating.....	C. B. Sawyer.....	24,581	464	364
Heel, Boot.....	S. and W. Thorp.....	22,755	189	47
Heels for boots and shoes.....	J. Reed.....	23,312	275	136
Heel for boots and shoes.....	A. B. Wilton.....	24,269	420	316
Heel for boots and shoes.....	W. Hunt.....	24,517	456	354
Heel for boots and shoes.....	S. Dodge, jr., and B. Potter, jr....	25,395	581	498
Heels, Shoe, cutting and finishing.....	W. F. Edson.....	25,326	571	486
Heels of boots and shoes, dressing.....	H. Guild and L. Hall.....	23,245	265	125
Heels for boots and shoes, shaping.....	L. Hall.....	25,605	610	536
Heels and Soles of boots and shoes, cutting....	A. Warren.....	24,835	500	405
Heel and Spoke Shaves.....	J. A. Perley.....	22,889	212	69
Helix, Galvano-electric.....	O. D. Vosmus.....	23,648	329	205
Hem Folder.....	L. Clark.....	25,807	640	574
Hemp, breaking and cleaning.....	J. K. Booton.....	25,717	627	556
Hemp, laying, around wire and making rope.....	J. Rinek.....	23,785	349	232
Hides, handling.....	C. Weston.....	23,053	237	93
Hides and Skins, treatment of.....	J. Armstrong.....	22,925	217	.....
Hinge.....	S. S. Squire and T. Scharfenberg.	22,830	202	60
Hinge.....	L. T. Howell.....	23,808	353	236
Hinge.....	S. M. Richardson.....	26,375	722	686
Hinge for Reflectors of Stereoscopes.....	A. Beekers.....	23,342	279	143
Hinge, Latch.....	J. Plant.....	23,859	361	246
Hinge, Shutter.....	H. F. Drott.....	25,728	628	558
Hinge, Spring.....	N. Birdsall.....	24,535	458	356
Hinge, Spring.....	C. Rooney and D. Renshaw.....	25,585	607	533
Hinge, Strap, Cutting out.....	S. M. Richardson.....	24,330	428	326
Hoe, Weeding.....	H. H. Baker.....	25,619	612	538
Hoe, Weeding.....	J. M. Adams.....	25,862	647	584
Hoes, making.....	H. Sauerbier.....	23,502	305	177
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Hoes, manufacture of.....	S. Boyd.....	24,926	512	420
Hoes, manufacture of.....	A. Patterson.....	25,580	607	532
Hoes, manufacture of.....	E. C. Tuttle.....	25,856	647	584
Hoes, manufacture of.....	S. Boyd.....	26,560	749	719
Hogs, Slaughtering.....	G. W. B. Stroy.....	23,124	248	103
Hoisting Apparatus.....	J. L. Pott.....	25,215	555	467
Hoisting Apparatus, Ship's.....	D. J. Wilcoxson.....	24,967	518	426
Hoisting Machine.....	A. Betteley.....	26,469	736	703
Hoisting Marl, &c.....	T. A. Granger.....	26,029	672	618
Hold Back.....	R. W. Carrier.....	26,476	737	705
Hollow Ware, turning.....	L. P. Road.....	24,956	516	424
Hominy Machine.....	W. Davis.....	24,104	395	291
Hominy Mill.....	G. Strause.....	25,536	600	524
Hook, (Belt,) Pliers, and Punch.....	N. E. Hale.....	25,567	605	530
Hook, disengaging.....	A. W. Roberts.....	25,915	655	595
Hook, Double Clasp, for watch chains.....	M. Pollak.....	25,082	536	444
Hook for liberating ships' boats.....	T. W. Wilson & L. Raymond....	26,220	701	658
Hook for Vest Chains.....	A. Wallaeh.....	24,362	433	330
Hook for Whiffletrees.....	S. Botterill.....	24,610	469	368
Hook, Whiffletree.....	L. C. Terry.....	24,417	441	339
Hook, Whiffletree.....	S. M. Perkins.....	26,291	710	671
Hoop, Cheese.....	J. Beach.....	25,800	639	573
Hoop for Skeleton Skirts.....	S. C. Moore.....	25,029	528	436
Hoop for Skeleton Skirts.....	J. F. Pond.....	25,583	607	532
Hoop, Skirt.....	J. C. Gilbert.....	22,868	209	66
Hoops, Bale, Tools for fastening.....	E. A. Jeffery.....	24,464	448	346
Hoops, dressing.....	A. Prenatt.....	22,581	161	19
Hoops, driving, on pails, &c.....	W. Raymond.....	24,576	464	363
Hoops, Metal, fastening, on cotton bales.....	J. F. Butler.....	26,087	681	630
Hoops, Tool for Riving.....	W. Baker.....	24,917	511	418
Hoop Fastening for Cotton Bales.....	G. J. Widrig.....	23,632	326	202
Hoop Fastening for Cotton Bales.....	E. Davidson.....	24,995	523	431
Hoop Lock.....	D. Hughes.....	26,435	732	697
Hoop Lock for Metallie Bands.....	P. C. Ingersoll.....	23,249	266	125
Hoop Machine.....	H. C. Peirson.....	23,389	286	153
Hop Frame.....	T. D. Aylsworth.....	23,338	279	142
Hop Liquor for Distillers and Brewers.....	A. S. Rollins.....	23,266	268	128
Horses, preventing, from running.....	W. Hall.....	25,822	642	577
Horses, taming.....	J. M. Lannier.....	26,272	708	667
Horse Braeket.....	H. B. Davis.....	24,380	436	334
Horse Power.....	F. M. Sofge.....	22,680	177	35
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Horse Power .....	C. Lane .....	23,809	353	236
Horse Power Equalizer .....	G. Hely .....	22,950	221	78
Horse Power Machine.....	W. Zeller .....	23,638	327	203
Horse Power Machine.....	A. R. Colton .....	24,101	395	290
Horse Power Machine.....	W. Field.....	24,291	423	320
Horse Power Machine.....	F. B. Williams .....	25,155	547	456
Horse Power Machine.....	L. R. Faught .....	25,497	595	518
Horse Power Machine.....	G. Sanford .....	25,528	599	523
Horse Power Machine.....	W. Phelps and W. H. Hanford ..	26,203	698	655
Horse Powers, Portable .....	G. W. Swift.....	23,871	362	249
Horse Shoe Machine.....	S. Shetter .....	22,677	176	34
Horse Shoe Machine.....	W. W. Lewis .....	22,812	200	57
Horse Shoe Machine.....	J. B. Collen .....	23,976	376	268
Horse Shoe Machine.....	H. L. Watts.....	24,596	467	366
Horse Shoes.....	J. Jorey .....	24,643	474	373
Horse Shoes.....	N. E. Hinds .....	26,036	673	619
Horse Shoes, Calks of.....	A. W. Payne .....	23,780	349	231
Horse and Ox Shoes .....	N. E. Hinds .....	23,027	233	89
Hose, Suction .....	C. McBurney.....	24,222	413	309
Hose, Water Proof, manufacture of.....	T. J. Mayall.....	23,276	708	.....
Hose, Water Proof Leather .....	J. Runderford.....	23,781	349	231
Hose Tubing, Elastic .....	J. C. Boyd.....	25,239	559	471
Hub, Carriage.....	J. Pruette .....	24,955	516	424
Hub for Carriage Wheels.....	L. T. Hazen.....	24,120	398	293
Hubs, boring .....	D. Quimby .....	24,756	489	391
Hubs, casting boxes for .....	T. Ellis.....	26,394	726	689
Hubs, forming .....	W. Patterson.....	23,520	743	712
Hubs, hewing out.....	G. W. Miles and P. P. Lane.....	23,220	261	120
Hubs, turning .....	A. Rickurt.....	24,579	464	363
Hubs and Axles, connecting .....	D. Beard .....	23,148	251	107
Hub Band for Wagon Wheels.....	G. W. Beers.....	26,242	704	662
Hub Band for Wagon Wheels .....	J. A. Boughton .....	26,246	704	663
Hub Borer.....	C. B. Wiley.....	23,535	310	183
Hub Boring Machine.....	S. L. Bond .....	26,245	704	663
Hub Boring and Mortising Machine.....	G. M. Atherton .....	26,330	715	677
Hub Reamer.....	S. A. Garrison .....	25,190	552	452
Huller, Clover .....	C. Reif.....	24,237	415	312
Huller, Clover .....	N. Eames.....	24,447	446	343
Huller, Clover .....	A. Overocker .....	24,657	476	376
Huller, Cotton Seed.....	C. A. Lowber.....	26,372	722	685
Hydrant .....	F. H. Bartholomew.....	22,927	217	74
Hydrant .....	J. Bryant.....	23,444	296	165
Hydrant .....	W. Race and S. R. C. Mathews...	23,706	338	216
Hydrant .....	J. Fay.....	24,290	422	320
Hydrant .....	N. B. Marsh.....	25,660	618	546
Hydrant .....	C. L. Stacy .....	25,683	622	550
Hydrant .....	W. Jams .....	25,969	664	606
Hydrant for Filtration .....	J. H. Carter .....	25,805	640	573
Hydro-Carbons, supplying, with Oxygen.....	A. H. Webster.....	22,907	214	72
Hygrometer.....	L. S. Ullman .....	25,457	589	510
I.				
Ice, hoisting.....	J. Wagner.....	25,691	623	551
Ice, planing or shaving.....	H. D. J. Pratt.....	24,052	388	281
India Rubber, cutting, into threads .....	H. Messer.....	24,265	419	316
India Rubber, cutting, into threads .....	J. W. Cox.....	24,426	442	340
India Rubber, hard Compound of .....	G. Dieffenbaeh .....	25,957	662	.....
India Rubber, restoring waste .....	F. Baschnagel .....	23,805	353	.....
India Rubber, treatment of .....	H. W. Joslin .....	22,560	158	.....
India Rubber, treatment of .....	A. Shannon .....	23,717	340	.....
India Rubber, treatment of .....	H. W. Joslin and A. K. Eaton.....	26,233	702	.....
India Rubber, vulcanized.....	A. K. Eaton .....	26,172	694	.....
India Rubber, vulcanized, restoring waste.....	F. Baschnagel .....	23,740	343	.....
India Rubber, vulcanized, restoring waste.....	H. L. Hall.....	25,160	548	.....
India Rubber, vulcanized, treatment of .....	H. W. Beins .....	23,151	252	.....
India Rubber, vulcanized, treatment of .....	T. J. Mayall .....	23,773	348	.....
India Rubber, vulcanizing.....	A. K. Eaton .....	24,695	481	.....
India Rubber, vulcanizing.....	A. K. Eaton .....	26,172	694	.....
India Rubber, vulcanizing, Apparatus for .....	E. A. L. Roberts & W. J. Demorest.	23,948	372	264
India Rubber Articles, manufacture of.....	D. D. Parmelee .....	26,519	743	711
India Rubber Goods, hollow moulded .....	D. D. Parmelee .....	26,551	747	717
India Rubber Goods, hollow moulded, manufacture of.	D. D. Parmelee .....	26,286	709	.....
(Sec, also, <i>Caoutchouc</i> .)				
Inkstand .....	G. M. Prentiss .....	22,582	161	19
Inkstand .....	W. Burnett.....	25,175	550	460
Inkstand .....	T. Robjohn .....	25,217	556	467
Insect Powder Blower .....	P. Reynard and V. Varin.....	25,526	599	522
Insect Powder Blower .....	P. Reynard and V. Varin.....	26,055	676	623



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Insects, destroying.....	P. B. Sheldon.....	25,281	564	478
Instrument for ascertaining the Distance between it and the Target.	B. D. Villeroi.....	23,294	272	133
Insulator for Lightning Rods .....	R. Hickok.....	23,373	284	149
Iron at the Rolls, moving .....	C. Hewitt.....	24,304	425	322
Iron, cutting and punching .....	A. J. Peavey .....	22,510	150	7
Iron, fire-plating .....	W. H. Thoss .....	25,291	565	479
Iron, manufacture of.....	A. Thomas .....	23,512	307	.....
Iron, manufacture of.....	B. Lauth .....	25,235	558	.....
Iron, polishing.....	G. J. Prentiss.....	25,850	646	583
Iron, protecting, from oxidation .....	E. G. Pomeroy .....	24,604	468	.....
Iron, protecting surfaces of .....	T. Selleck .....	24,665	477	.....
Iron, refining .....	C. Shunk.....	24,060	389	282
Iron, refining .....	C. Shunk.....	24,766	* 491	393
Iron, rolling .....	H. B. Comer.....	23,425	293	161
Iron, Smoothing.....	A. Ellison .....	23,910	368	257
Ironing Apparatus, Clothes.....	C. Alden .....	26,005	669	613
Ironing Pan .....	J. Spear .....	24,667	477	377
J.				
Jacquard Machines .....	A. Babbett .....	25,796	638	572
Jack, Carriage and Wagon .....	W. N. Rowe .....	25,141	544	453
Jack, Lever .....	F. Stamm .....	23,273	269	130
Jack, lifting Hydrostatic.....	J. Robertson.....	24,759	490	392
Jack, Wagon .....	C. Douglas .....	26,170	694	648
Jack, Wagon, Portable.....	H. Stowell and L. Spencer.....	24,160	403	300
Jack, Wheel, for carriages .....	H. Hooton and J. G. Bicknel .....	24,213	412	308
Jail, Iron-Plate .....	E. Jacobs .....	25,500	740	708
Jewelry, Pearl, connecting strung.....	H. Dubosq.....	23,760	346	227
Jibboom for Vessels.....	C. L. Linnell.....	23,926	370	260
Joint, Dovetailed, for wood... ..	F. S. Barnard.....	23,542	312	184
Joint for Gas and Water Pipes .....	J. E. Quinn .....	23,811	353	237
Joint for Pump Pipes .....	D. Knowlton .....	24,809	497	400
Joint, Universal.....	J. Baylor .....	24,786	494	396
Joints, Box, making .....	J. Stimpson.....	26,060	677	625
Joints in India Rubber Belting, forming .....	J. McDougall.....	25,749	632	562
Journal Box .....	R. Daniels.....	23,664	331	208
Journal Box .....	W. S. Pratt .....	23,704	338	216
Journal Box .....	J. A. Montgomery .....	24,947	515	423
Journal Box, Railroad Car .....	P. Umholtz.....	23,279	270	131
Journal Box, Railroad Car .....	R. McWilliams.....	24,846	502	407
Journal Box for saw mill carriages.....	W. M. Ferry, jr.....	26,262	706	666
Journals, oiling.....	D. B. Jordan .....	23,251	266	126
Journals of Locomotives, oiling .....	S. Scotton.....	22,586	162	20
K.				
Kegs or casks, chamfering and crozing .. ..	J. A. Seaman.....	26,206	699	656
Key for Locks.....	P. Van Antwerp .....	25,923	657	597
Key, &c., for Pianofortes .....	J. Hoffacker and J. Richards .....	24,404	439	337
Key, Tooth.....	B. F. Killam.....	24,940	514	422
Key, Watch .....	J. F. Stirling.....	26,450	734	699
Key Board, tuning .....	R. Humphreys.....	24,392	437	336
Key Board for Pianos .....	A. Gould and C. Marsh .....	24,021	384	276
Key Board for Pianos .....	M. Philippi.....	25,760	633	565
Key Bolt for Thills.....	C. P. Wilhelm.....	23,055	237	93
Knapsack .. ..	W. B. Johns.....	23,582	318	191
Knapsack .....	W. Griffiths .....	23,979	377	269
Knapsack .....	R. C. Buchanan.....	25,625	613	539
Knife, Bread.....	J. Carrier.....	24,099	395	290
Knife, Carving .....	C. W. Sykes .....	26,661	677	625
Knife, pruning.....	G. G. Belcher.....	23,975	376	268
Knife, pruning.....	F. P. Goodall.....	25,818	641	576
Knife, Shoe .....	I. Merritt.....	24,354	431	330
Knife, Sweat, for cutting hat and cap linings ..	E. R. Pye .....	26,052	676	623
Knives, Crozing, operating .....	G. Finn .....	25,498	595	518
Knives of rotary Cutter Heads, adjusting.....	B. Pitts.....	23,763	346	227
Knives, operating, in riving shingles .....	J. Wood .....	23,420	292	160
Knife Cleaner .....	J. McNamee .....	26,040	674	620
Knife Sharpener .....	G. Hinman .....	22,919	216	74
Knitting Machine.....	C. G. Keeney.....	22,735	186	44
Knitting Machine.....	J. Hiller and J. Bullock.....	22,769	191	51
Knitting Machine.....	E. Colvin .....	24,284	422	319
Knitting Machine.....	J. B. Aiken.....	24,916	511	418
Knitting Machine.....	J. F. Waterhouse.....	25,067	533	442
Knitting Machine.....	E. S. Ells.....	25,185	551	461
Knitting Machine.....	F. L. Buel .....	25,230	557	470
Knitting Machine.....	W. Binkley .....	25,698	624	552
Knitting Machine.....	J. Hollen .....	25,827	643	578
Knitting Machine.....	J. Bullock.....	26,085	680	630

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Knitting Machine.....	A. J. and D. Goffe.....	26,231	702	661
L.				
Labels, cutting and attaching.....	C. M. Spencer.....	25,770	634	567
Labels for periodicals.....	R. Dick.....	25,635	614	541
Ladder, Extension.....	J. Moulton.....	24,044	387	280
Ladder, Fire Escape.....	H. Johnston and W. Mathews....	24,909	510	417
Ladder, Fireman's.....	D. Fitzgerald.....	23,669	332	209
Ladder, Fireman's.....	D. Fitzgerald.....	24,728	486	387
Ladle and Fork.....	W. B. Dunbar.....	26,393	726	689
Lamp.....	W. F. Shaw.....	22,516	152	8
Lamp.....	S. Cheney.....	22,703	181	39
Lamp.....	R. Jenkins.....	22,729	185	43
Lamp.....	H. Knowles.....	22,771	192	51
Lamp.....	C. W. Richter.....	23,044	236	92
Lamp.....	E. J. Hale and C. H. Chandler....	23,085	242	98
Lamp.....	M. A. Deitz.....	23,160	255	108
Lamp.....	A. H. North.....	23,483	302	174
Lamp.....	S. A. Hill and D. Alter.....	23,579	317	191
Lamp.....	M. A. Deitz.....	23,832	356	241
Lamp.....	J. L. Drake.....	24,015	383	274
Lamp.....	R. S. Merrill.....	24,397	438	336
Lamp.....	A. L. Fleury.....	24,622	470	370
Lamp.....	J. M. Batchelor.....	24,711	484	384
Lamp.....	G. Marlow and M. Ralphe.....	25,304	567	482
Lamp.....	H. W. Adams.....	25,310	568	483
Lamp.....	J. R. Loomis.....	25,342	573	489
Lamp.....	G. T. Parkhurst.....	25,438	587	506
Lamp.....	L. White.....	25,475	592	513
Lamp.....	J. L. Drake.....	25,493	594	517
Lamp.....	H. Halvorson.....	25,506	596	519
Lamp.....	A. H. Knapp.....	26,071	678	627
Lamp.....	C. W. Richter.....	26,295	711	671
Lamp.....	I. T. Vanvirk and W. M. Fulton..	26,310	712	674
Lamp, Fluid.....	A. Von Schutzenbach.....	24,509	455	353
Lamp, Locomotive.....	N. J. Knapp.....	25,421	584	502
Lamp, Vapor.....	J. K. O'Neil.....	26,200	698	654
Lamps, Holder for.....	C. Monson.....	26,664	174	32
Lamp Lighter.....	L. and J. Thomas.....	23,203	259	116
Lamp Shade.....	C. and A. C. Wilhelm.....	23,875	363	250
Lamp Wick.....	J. B. Wertendyke.....	23,801	352	235
Lamp Wicks, Trimmer for.....	H. Halvorson.....	24,804	496	399
Lance, Bomb.....	P. B. Comins.....	23,827	356	240
Lance, Bomb.....	I. Goodspeed.....	25,080	536	444
Lantern.....	C. Gersten.....	22,723	184	42
Lantern.....	W. M. Kimball and K. Hartmann..	23,253	266	126
Lantern, Railroad Signal.....	S. N. Lemnon.....	22,960	222	79
Lantern, Railroad Signal.....	J. L. Wager.....	22,992	227	84
Lantern, Signal.....	L. Hover.....	25,645	616	543
Last.....	G. H. Taylor.....	22,534	154	12
Last.....	D. M. True.....	22,904	214	71
Last.....	O. S. Squire.....	24,830	500	404
Last, Shoe.....	J. C. F. Deecken.....	22,942	220	77
Lath, Metallic.....	J. W. Mauterstock.....	23,597	320	194
Lath, Metallic.....	W. E. Worthen.....	23,877	363	251
Laths, riving, from the block.....	J. L. Brown.....	22,853	206	64
Laths, sawing.....	E. H. Hancock.....	22,499	148	4
Lath Machine.....	J. H. and A. E. Redstone.....	26,125	687	638
Lathe.....	J. Hess.....	24,805	496	400
Lathe for turning irregular forms.....	C. and A. Spring.....	23,957	374	265
Lathe, Watchmaker's.....	E. Harris.....	23,370	283	148
Lathe, Watchmaker's.....	R. H. St. John.....	23,406	290	157
Lathes, Centring in Watchmaker's.....	P. Leffel and J. H. Mulholland....	25,339	572	488
Lathes, Tool Holders for.....	C. Peck.....	24,574	463	362
Lathe Attachment.....	C. Kilburn.....	26,192	697	653
Lathe Attachment for cutting veneers.....	B. F. Sturtevant.....	26,627	758	729
Lathe Attachment for dental plates.....	E. H. Danforth.....	22,548	156	13
Lathe Clutch.....	W. Johnson.....	23,472	300	171
Lead, Bar, packing.....	Z. Kinsey.....	23,031	234	90
Lead, White, manufacture of.....	B. F. Smith.....	22,679	177	35
Lead, White, manufacture of.....	F. Albert.....	23,815	354	238
Lead, White, manufacture of.....	D. R. Erdmann.....	25,106	540	447
Leather, Artificial, manufacture of.....	E. and J. R. Cushman.....	23,454	298	168
Leather, Facticeous Enamelled.....	J. W. Munroe.....	23,987	378	.....
Leather, finishing.....	T. F. Weston.....	24,344	430	328
Leather, splitting.....	D. H. Chamberlain.....	23,900	366	255
Leather, stretching.....	A. W. Roberts.....	22,893	212	69
Leather, tanning.....	J. Gore.....	24,208	411	307
Leg, Artificial.....	D. Bly.....	23,656	330	206
Leg, Artificial.....	D. Bly.....	24,002	381	272



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Leg, Artificial .....	D. Bly .....	25,238	558	471
Leg for planos .....	F. and C. Gelin.....	24,294	423	321
Letter and Envelope, combined.....	E. B. Gleason.....	23,242	265	124
Letters, fastening to sign boards .....	T. Champion and T. Motley.....	24,374	435	332
Letters, mode of sealing.....	J. Saxton.....	22,982	226	83
Letter File .....	J. H. Shipman.....	25,282	564	478
Lever, Hand.....	E. J. Durant .....	24,202	410	306
Lever Power, applying.....	E. Harris .....	24,025	384	276
Lewis for attaching tackles to stones.....	E. Duchamp.....	22,551	157	14
Light Shade for billiard tables.....	D. Conlan.....	24,285	422	319
Lightning Conductors, making.....	C. Stearns.....	25,534	600	524
Lightning Rod .....	W. Hall.....	25,823	642	577
Lightning Rods, constructing.....	L. S. Baldwin and L. Parks .....	25,077	535	443
Lightning Rods, securing .....	J. E. Enggren.....	24,110	396	291
Limbs, Artificial.....	R. H. Dutton.....	23,559	314	187
Limestone, &c., cutting and screening .....	Q. A. Gilmore .....	25,254	561	474
Lint, manufacture of.....	R. D. Duyer .....	24,970	519	.....
Liquids, cooling .....	V. Hall.....	25,505	596	519
Liquids, cooling .....	J. L. Baudelot .....	25,992	667	610
Liquids, distilling from coal tar.....	M. C. Keen.....	25,552	603	527
Liquids, heating Hydro-carbon .....	P. B. Kitchen.....	26,070	678	626
Lock.....	A. A. Richards.....	22,980	226	83
Lock.....	L. F. Munger.....	23,040	235	91
Lock.....	D. Powers.....	23,113	246	101
Lock.....	G. Clay.....	23,662	331	208
Lock.....	T. K. Webster.....	23,967	375	267
Lock.....	O. Billings.....	24,075	391	286
Lock.....	T. Dougherty .....	24,287	422	319
Lock.....	S. T. Bacon .....	24,709	483	384
Lock.....	C. Duckworth .....	25,959	652	604
Lock.....	G. W. Dana .....	26,569	750	721
Lock, Alarm.....	H. Lockwood.....	23,591	319	193
Lock, Bank .....	W. Johnson .....	24,975	520	427
Lock, Bank and Safe .....	S. T. Bacon .....	24,710	483	384
Lock, Canal.....	C. W. Williams .....	26,314	713	674
Lock, Curtain, for carriages .....	S. Marshall.....	23,036	234	91
Lock for fire-arms .....	M. Tromley .....	24,768	491	393
Lock, Prison.....	S. A. Denio.....	25,394	580	498
Lock for Pianofortes .....	P. F. Dodge.....	23,833	357	241
Lock for repeating fire-arms .....	J. R. Mock.....	24,228	414	310
Lock, Ring .....	W. I. Alston .....	22,613	166	24
Lock, Trunk .....	E. L. Gaylord.....	24,113	397	292
Lock for safes .....	A. Freutel.....	24,802	496	399
Lock and Detector.....	J. H. Lyon .....	25,428	585	504
Lock and Latch .....	W. S. Kirkham.....	23,254	266	126
Lock Attachment.....	J. M. Wilson .....	24,346	430	328
Lock Guard .....	L. Schroder .....	24,523	456	354
Locomotive, Horse-power.....	J. C. Miller.....	25,752	632	563
Locomotive, Portable Traction .....	J. Barrans .....	26,074	679	627
Locomotive for propelling ploughs .....	W. P. Miller .....	23,853	359	246
Locomotive, Traction, carrying its own railway.....	C. F. Mann.....	26,195	697	653
Loom .....	S. G. Mendenhall .....	22,533	154	11
Loom .....	C. Crosley.....	24,378	435	333
Loom, Circular .....	J. A. Grunwald .....	26,585	752	723
Loom, Fancy.....	C. Roder .....	25,869	648	586
Loom, Hand.....	A. R. Nixon .....	25,756	632	564
Loom, Power.....	W. H. Chechani, jr.....	23,446	297	166
Loom for weaving plaids.....	M. A. Furbush and G. Crompton..	24,206	411	307
Looms, let off motion of.....	W. H. Gray.....	24,553	460	359
Looms, let off motion of.....	W. H. Gray .....	24,602	467	367
Looms, Power, picker motion for.....	W. Stearns.....	24,668	477	377
Looms, Trimming, take up for.....	S. Walker.....	25,538	601	524
Lounge .....	J. G. Brocmser.....	22,699	180	38
Lozenge Machine .....	E. Belling.....	25,236	558	471
Lubricator.....	P. G. Brown.....	23,661	331	207
Lubricating Compound.....	R. R. Brown.....	22,621	168	.....
Lubricating Compound.....	H. Vaughn and W. Hutton .....	24,965	518	.....
Lubricating Compound, Solution for thinning..	R. Patterson.....	25,792	638	.....
Lumber, seasoning.....	M. R. Moore.....	24,230	414	311
M.				
Magneto-electric Machine.....	G. W. Beardslee .....	26,557	748	718
Magneto-electric Machine.....	G. W. Beardslee.....	26,558	748	719
Mail Bag .....	W. Ruddach.....	23,863	361	247
Mail Bag .....	R. Gornall.....	23,916	368	258
Mail Bag .....	T. J. Lamdin.....	23,924	369	260
Mail Bag Fastenings.....	J. C. Garland .....	22,866	208	66
Mallets, Construction of.....	L. W. Blanchard .....	23,346	280	143
Mallets, Construction of.....	W. Lance .....	24,744	488	389
Manger, Hay .....	J. Packer.....	23,386	286	152



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Mangle.....	W. W. Hollman.....	25,413	583	501
Mangle.....	W. T. Littlejohn ...	25,656	618	545
Mangle.....	J. T. Coxell .....	26,227	701	660
Manure, Artificial.....	D. Bruce .....	22,544	156	.....
Marble, sawing.....	J. Lyon .....	22,605	165	23
Mashing.....	N. G. Thorn.....	23,125	248	103
Mashing, Apparatus for.....	E. Hacckel .....	25,329	571	486
Match Box, Pocket.....	A. Roesler and C. Frey.....	22,979	225	82
Matches, Friction, composition for.....	W. P. Allen .....	22,538	155	.....
Matches, Friction, Waterproof.....	L. J. Henry .....	23,465	300	.....
Matrices, constructing.....	J. J. C. Smith .....	25,533	600	.....
Mattress.....	H. W. Henley .....	24,302	424	322
Meal and Flour, Machine for making.....	G. W. Holman.....	22,806	198	56
Meat Cleaver.....	E. Pollard .....	22,839	204	61
Meat Masher.....	G. Storer .....	24,831	500	404
Meat Mincer.....	A. W. Hale.....	23,246	265	125
Meat Slicer.....	W. Vine .....	23,966	375	267
Meat Slicer.....	B. Dean .....	25,954	661	603
Meats and Flesh, preserving.....	M. Gross .....	26,427	731	696
Melodcons.....	C. G. Burke .....	26,344	717	680
Metal, coating, with tin.....	C. Winzen .....	22,995	228	.....
Metal, Composition for.....	J. H. Green. ....	26,267	707	.....
Metal, Corrugated, rolling.....	R. Montgomery..	26,607	755	726
Metal, planing.....	J. Carhart .....	24,792	494	397
Metal, polishing.....	R. Cave .....	22,781	194	52
Metal, punching.....	P. Koch.....	25,653	617	545
Metal, rolling, for jewelry.....	J. S. Palmer.....	24,432	444	341
Metal, Sheet, manufacture of.....	H. W. Wimshurst .....	25,601	610	535
Metal, Sheet, corrugating.....	J. Wilson, C. Green, and W. Wil- son, jr.	23,736	342	222
Metal, Sheet, corrugating.....	R. Montgomery .....	23,774	348	230
Metal, Sheet, corrugating.....	W. E. Worthen and H. B. Ren- wick.	24,689	480	381
Metal, Tool for cutting.....	L. F. Goodyear.....	23,364	283	147
Metal Leaf on mouldings.....	R. Marcher .....	23,930	370	261
Metal Plates, corrugating.....	R. Montgomery.....	23,599	320	195
Metal Plates, waved and corrugated, making.....	R. Montgomery.....	24,882	506	412
Metal Plates, waved and corrugated, making.....	R. Montgomery.....	24,883	506	413
Metallic Sheets, corrugating.....	R. Montgomery.....	24,480	450	348
Meter, Dry Gas.....	S. Down .....	24,108	396	291
Meter, Dry Gas.....	H. Logue.....	24,263	419	316
Meter, Dry Gas.....	T. Grodjinski.....	24,736	487	388
Meter, Gas.....	T. B. Fogarty.....	26,423	730	695
Meter, Water.....	A. W. Von Schmidt .....	23,131	249	104
Meter, Water.....	N. B. Marsh.....	23,772	348	229
Meter, Water.....	R. S. Church .....	25,245	559	472
Meter, Water.....	L. Burnell.....	25,948	660	602
Meter, Water.....	B. S. Church .....	26,014	670	615
Meters, Gas, setting in walls.....	A. Potts.....	24,660	476	376
Milking Cows.....	J. W. Kingman.....	25,019	527	434
Milking Cows.....	S. W. Lowe.....	25,022	527	435
Minerals, pulverizing.....	S. and G. E. Mills .....	24,570	463	362
Mill, Burrstone.....	G. Sanford .....	22,829	202	60
Mill, Cast-iron grinding.....	J. Russell.....	24,058	389	282
Mill, Cider.....	J. Rosenkrans .....	23,862	361	247
Mill, Cider.....	A. D. Hoffman.....	26,037	673	619
Mill, Cob and Grain.....	J. R. Marston.....	23,693	336	214
Mill, Coffee.....	R. B. Fitts .....	23,298	273	134
Mill, Coffee and Spice.....	C. R. Edwards.....	23,082	241	97
Mill, Corn.....	J. W. Taylor .....	24,249	417	313
Mill, Corn and Cob.....	J. De Frain .....	22,997	228	85
Mill, Corn and Cob.....	W. Sailor .....	24,082	392	287
Mill, crushing and grinding.....	G. Sanford .....	22,515	151	8
Mill, crushing and grinding.....	P. Perry.....	23,702	337	216
Mill for crushing cane.....	H. C. Emery .....	24,621	470	370
Mill for crushing sugar cane.....	D. Bassett.....	24,922	511	419
Mill for crushing sugar cane.....	F. M. Robinson.....	25,916	655	596
Mill, fanning.....	J. E. Rice .....	22,825	201	59
Mill, grinding.....	T. Bennett .....	22,479	145	1
Mill, grinding.....	A. Prosens .....	22,580	161	19
Mill, grinding.....	F. N. Hemphill .....	23,372	284	149
Mill, grinding.....	G. Selser .....	23,431	294	162
Mill, grinding.....	G. Todd.....	23,799	352	235
Mill, grinding.....	J. C. Lyon .....	23,850	359	245
Mill, grinding.....	A. Orvis.....	24,266	419	316
Mill, grinding.....	J. Sedgebeer.....	24,334	429	326
Mill, grinding.....	J. C. Lyon and H. F. Phillips .....	24,473	450	347
Mill, grinding.....	C. W. Brown.....	25,173	549	459
Mill, grinding.....	J. Carl .....	25,176	550	460
Mill, grinding.....	C. P. Buckingham .....	26,332	716	678
Mill, grinding.....	J. Droughton.....	26,412	728	692



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Mill for grinding cane, &c.....	I. A. Hedges.....	22,802	198	55
Mill for grinding grain.....	W. H. Hope .....	22,807	198	56
Mill, Grist .....	H. W. Shipley and Z. Blair .....	28,144	545	453
Mill, Hand, for grinding apples, &c .....	R. P. Clark.....	25,385	579	496
Mill, rolling .....	J. and G. Fritz.....	25,565	605	530
Mill, Saw .....	A. J. Emlau and E. Richmond .....	26,176	695	649
Mill, Saw .....	S. Tarver .....	26,381	723	687
Mill, Sugar .....	R. Emerson, jr.....	23,237	264	123
Mill, Sugar .....	T. E. Hunt .....	23,287	271	132
Mill, Sugar .....	A. C. Greenleaf.....	23,753	345	226
Mill, Sugar .....	J. L. Brown and J. Burge .....	24,440	445	342
Mill, Sugar .....	J. W. Chapman .....	24,444	445	343
Mill, Sugar .....	J. R. Gates .....	24,697	481	382
Mill, Sugar .....	J. Paynter.....	24,781	493	395
Mill, Sugar Cane .....	W. T. Dennis .....	22,711	182	40
Mill, Sugar Cane .....	A. Van Trump.....	23,128	248	104
Mill, Wind .....	J. M. May.....	22,964	222	80
Mill, Wind .....	J. M. May.....	22,965	223	80
Mill, Wind .....	W. McAllister.....	23,932	371	261
Mill, Wind .....	J. K. Lum.....	24,472	449	*347
Mill, Wind .....	C. Livingston.....	25,269	553	476
Mill, Wind .....	J. W. Neff .....	25,908	654	594
Mill, Wind .....	J. Dickerson.....	26,345	717	681
Mills, cooling and feeding material to.....	B. F. Harrington.....	23,682	334	211
Mills, Hand Block for Saw .....	J. W. Truox.....	24,676	478	379
Mills, Head Block for Saw .....	J. Kurtzeman.....	24,743	488	389
Mills, Saw, operating blocks in .....	A. B. Norris .....	26,609	755	726
Mills, Saw, setting logs in .....	A. Brooks .....	24,850	502	407
Mills, steadying logs in.....	R. Doty .....	25,492	594	517
Mills .....	A. E. Pirkey.....	24,235	415	311
Millstone Bush .....	M. De Camp .....	24,106	396	291
Millstone Bush .....	L. S. Ives.....	25,120	542	449
Millstones, dressing .....	A. Sheek.....	22,831	202	60
Millstones, dressing .....	S. Teasue .....	23,511	307	178
Millstones, dressing .....	H. B. Gill.....	24,385	436	334
Millstones, dressing .....	J. W. Kennedy and J. T. Plummer.....	24,742	487	389
Millstones, picking.....	R. D. Nesmith.....	25,274	563	477
Mole of Drain Ploughs.....	T. S. Cox .....	25,098	538	446
Mosquito Bar.....	T. S. Williams .....	24,255	418	314
Mop Head.....	L. Taylor.....	22,990	227	84
Mop Head.....	J. Fazig.....	25,400	581	499
Mop Head.....	W. A. Baker .....	26,078	679	628
Mortising Machine .....	W. Kegg .....	23,586	318	192
Mortising Machine .....	A. Spencer, jr.....	25,055	531	440
Mortising Machine .....	H. B. Smith .....	25,221	556	468
Mortising Machine.....	W. R. Axe .....	25,479	592	514
Motion, converting alternate circular, into direct circular.	A. Bartholf.....	23,651	329	205
Motion, converting oscillating, into direct circular.	L. Planer.....	24,359	432	330
Motion, converting reciprocating, into alternate circular.	H. Ehrenfeld .....	24,448	446	343
Motion, converting reeiprocating, into intermittent rotary.	H. Ehrenfeld .....	26,261	706	666
Motion, converting reciprocating, into rotary ..	E. A. Smead .....	22,984	226	83
Motion, converting reciprocating, into rotary ..	A. T. Underhill.....	25,550	603	527
Motion, converting rectilinear, into rotary.....	G. W. Richardson and R. Glover..	23,002	229	86
Motion, converting rotary, into reciprocating ..	W. N. Brown .....	25,880	650	588
Motion, converting rotary, into reciprocating ..	C. A. Harper .....	25,966	663	606
Motion, converting rotary, into reciprocating rectilinear.	A. Broughton.....	25,465	590	511
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Motive power .....	C. Mans.....	23,305	274	135
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Motor, Hydraulic .....	M. Keely and G. W. Cressman.....	25,741	630	561
Movement, Mechanical .....	W. H. Baker.....	26,078	679	628
Movement, Rotary.....	W. H. Mitchell.....	25,132	543	451
Mowing Machine.....	T. Windell.....	22,608	166	23
Mowing Machine.....	W. A. Wood .....	23,057	238	93
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Mowing Machine.....	T. H. Dodge.....	26,095	682	632
Moulding for metal casting .....	J. P. Broadmeadow.....	26,321	714	676
Moulding Machine.....	C. Warner .....	24,163	405	301
Moulding, Pipe.....	J. Firth and J. Ingham .....	25,486	739	706
Mouldings, Burnishing.....	R. Marcher.....	24,319	426	324
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Moulds, Brick.....	J. A. Hamer.....	24,972	519	426
Moulds, Brick.....	J. A. Buckwater.....	25,626	613	540
Moulds, Candle.....	H. Halvorson.....	26,429	731	696
Moulds for casting.....	R. Jobson.....	23,375	284	150
Moulds for forming artificial teeth.....	A. Lewenberg.....	23,473	301	172
Moulds for pressing glass.....	T. Shaw.....	24,360	432	330
Moulds for steam castings.....	P. G. Gardiner.....	23,670	333	209
Muffs, construction of.....	J. Phillips.....	25,582	607	532
Music for the Blind, setting and copying.....	E. Marquis.....	26,361	720	683
Music, registering.....	H. F. Bond.....	28,244	704	662
Musical Instrument.....	H. F. Merrill.....	24,396	438	336
Musical Instruments, Reed.....	E. P. Needham.....	23,601	321	195
Musical Notation for the blind.....	C. Malony.....	25,657	618	.....
N.				
Nail, Upholstery.....	B. S. Pardee and T. Rawling.....	25,670	620	548
Nails and Spikes, pointing.....	W. Spink.....	24,705	482	383
Nail Machine.....	D. Dodge.....	25,183	551	461
Nail Machine.....	D. Dodge.....	25,309	568	483
Nail Machine.....	A. V. B. Orr.....	25,910	655	594
Nail Machine, Horse Shoe.....	B. A. Mason.....	22,663	174	32
Nail Machine, wrought.....	C. Clareni.....	24,616	469	369
Nail Plate Feeder.....	J. P. Sherwood.....	25,051	531	439
Nail Plate Feeder.....	J. Newell.....	26,513	742	710
Naval Architecture.....	B. F. Wells.....	25,857	647	584
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Needles, Sewing Machine.....	W. W. Shipman.....	25,531	600	523
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Newspapers, Printing Addresses on.....	A. H. Nurdyke.....	23,107	245	101
Newspapers, Printing Addresses on.....	R. W. and D. Davis.....	25,319	570	485
Newspapers, Printing Addresses on.....	G. Hutchison.....	25,337	572	488
Newspapers, Printing Addresses on.....	C. K. Marshall.....	25,974	664	607
Newspapers, Printing Press for addressing.....	G. Henderson.....	25,363	576	492
Nippers, Pipe.....	G. Smith.....	26,530	745	713
Nippers, Rope.....	W. H. Allen and A. J. Bentley.....	25,709	625	555
Nozzles for fire engines.....	L. Button and R. Blake.....	26,088	681	630
Nut Cracker.....	R. Frisbie.....	24,018	383	275
Nut Cracker.....	E. Ripley.....	24,238	415	312
Nut Machine.....	A. J. Shephard.....	26,446	733	699
O.				
Oakum, Tarring.....	R. Mansley.....	22,662	174	32
Odometer.....	T. K. Work.....	22,912	215	73
Odometer.....	H. Walker.....	23,329	278	140
Oil, Coal, condensing.....	W. G. W. Jaeger.....	24,561	461	360
Oil, Coal, condensing.....	W. T. Barnes.....	24,920	511	419
Oil, Coal, generating.....	W. T. Barnes.....	24,921	511	419
Oil, Coal, manufacture of.....	H. P. Gengembre.....	25,109	540	448
Oil, Coal, manufacture of.....	H. K. Symmes.....	26,000	668	612
Oil, Coal, refining.....	H. Pemberton.....	24,952	516	.....
Oil from Coal, distilling.....	J. Howarth.....	25,568	605	530
Oil from Coal, distilling.....	G. M. Mowbray.....	25,575	606	.....
Oil from Coal, extracting.....	E. N. Horner.....	22,727	184	43
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Oiling Boxes for Vertical Sugar Mills.....	J. Cooper.....	26,340	717	680
Optical Instrument, Double Eye Piece for.....	A. Beckers.....	25,407	728	692
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Ores, Gold and Silver, preparing, for amalgamation.	W. Gluyas.....	25,787	637	.....
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Ores, pyritous, treating.....	J. Fretz.....	25,500	595	518
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Oven.....	G. C. Jennison.....	22,809	199	57
Oven.....	T. Russell.....	21,828	202	60
Oven.....	J. F. Hofmeister.....	24,122	398	294
Oven, Baker's.....	N. F. Rice.....	26,126	687	638
Oven for cooling castings .....	P. F. Geisse.....	23,671	333	209
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P.				
Packing, Metallic Piston .....	A. G. Bill.....	23,439	295	164
Packing for sliding gas lights .....	G. Clay.....	26,015	670	615
Packing for stuffing boxes of pistons .....	C. McBurney.....	24,569	462	362
Packing and Tubing, manufacture of .....	T. J. Mayall.....	26,278	708	668
Packing Piston Rods of Steam Engines .....	T. J. Hudson.....	25,829	643	579
Padlock .....	J. A. Goewey.....	22,869	209	66
Pail.....	J. J. Dutcher.....	22,999	229	86
Pail, Scrubbing.....	A. P. Hawze and L. J. Adams....	22,799	197	55
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Pan, Egg .....	N. Waterman.....	23,517	307	179
Pan for evaporating cane juice .....	C. A. Desobry.....	26,024	672	617
Pan for evaporating sugar juice.....	W. Hedges.....	26,325	715	677
Pan, Milk .....	E. L. Pratt.....	23,429	293	162
Pan, Steam, for clarifying sugar .....	G. M. Longacre.....	25,341	573	489
Pans, Evaporating, heating .....	H. O. Ames.....	24,978	520	428
Pans, Evaporating, heating.....	E. Skelly.....	25,052	531	439
Paper, cutting .....	E. Burroughs.....	24,989	522	430
Paper, cutting .....	T. W. Houtchin.....	26,499	740	708
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Paper, folding .....	C. Chambers, jr.....	26,090	681	631
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Paper, manufacturing.....	S. S. Crocker and G. E. Marshall..	24,377	435	333
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Paper, receiving and piling.....	J. A. Wilkinson.....	25,068	534	442
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Pea Vines; trimming.....	J. T. Bever.....	24,712	484	384
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Pegs, feeding .....	S. D. Tripp.....	25,472	591	512
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Pegging Machine .....	W. R. Landfear.....	25,204	554	464
Pegging Machine .....	L. H. Wood.....	25,989	667	610
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Peg Machine, Shoe .....	C. Cook.....	23,451	297	167
Peg Machine, Shoe .....	E. T. Weeks.....	26,238	703	661
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Pen Holder.....	B. Cole.....	22,938	219	76
Pen Holder.....	A. R. Turner.....	23,800	352	235
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Photographic Printing Machine.....	C. Fontayne.....	25,540	601	525
Photographing Uneven Surfaces .....	J. H. Pein .....	25,276	564	477
Pianoforte .....	G. Vogt .....	23,130	249	104
Pianoforte .....	S. B. Driggs .....	23,834	357	241
Pianoforte .....	C. Glassborow.....	24,865	504	410
Pianoforte .....	J. W. Fischer .....	24,905	509	416
Pianoforte .....	F. C. Lighte.....	25,426	585	503
Pianoforte .....	H. Steinway, jr.....	26,300	711	672
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Pianoforte Actions.....	N. J. Haines.....	24,119	398	293
Pianoforte Actions.....	T. Marschall .....	25,305	568	482
Pianoforte Actions.....	D. Decker .....	25,393	580	498
Pianoforte Actions.....	T. S. Seabury .....	25,919	656	596
Pianoforte Actions.....	F. Mathushek .....	26,550	747	717
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Picker, Clover.....	W. T. Mills .....	22,817	200	58
Pictures, Looking Glasses, &c., hanging .....	W. Foster.....	24,729	486	387
Piers or Breakwaters.....	C. T. Harvey.....	23,574	317	190
Piles, driving .....	T. Place .....	23,858	360	246
Piles for wharves, piers, &c., staying.....	E. H. Angamar .....	24,708	483	384
Pile Driver .....	W. P. Craig .....	23,354	281	145
Pile Driver, Adjustable .....	J. A. Whipple.....	26,073	679	627
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Pin, Clothes.....	W. H. Towers.....	24,503	454	352
Pins, Clothes, Wiring Joints of .....	A. C. Mason .....	25,344	573	489
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Pipe, Clay, making .....	J. Jones .....	22,730	185	43
Pipe, Clay, making .....	H. Arcgood and S. Ustick.....	24,174	406	302
Pipe, Clay, making .....	W. Linton.....	25,233	558	471
Pipe, Drain, making .....	B. S. and M. R. Pierce.....	23,703	337	216
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Pipe, Exhaust, Variable .....	J. Patrick .....	22,820	201	58
Pipe, Metallic .....	W. S. Mayo .....	24,132	400	296
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Pipe, Hose, India Rubber, manufacture of.....	J. H. Cheever.....	22,854	206	64
Pipe, Metal, coiling .....	P. L. Weimer.....	25,294	566	480
Pipe, Metal, Composition for lining .....	W. Johnston and H. Forbes .....	22,654	173	31
Pipe, Waterproof Cement .....	A. F. Jaloureau.....	24,125	398	294
Pipes, Air, for heating blast furnaces .....	S. and J. Thomas.....	26,212	700	657
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Pistons of Pumps .....	R. Poole.....	25,367	577	493
Pistol, Burglars' Alarm.....	J. G. Clark .....	24,349	431	329
Pistol, Repeating .....	G. Tigneres .....	26,538	746	716
Pistols, Tools for manufacturing .....	A. Rebetey .....	23,990	379	271
Pitcher, Beer.....	W. S. Mathers .....	26,115	685	636
Pitcher, Ice .....	J. H. Stimpson .....	23,200	259	116
Pitcher, Ice .....	C. Dickinson and W. Bellamy....	23,455	298	168
Plane, Bench.....	W. S. Loughborough.....	23,928	370	260
Plane, Edge .....	H. Sauerbier.....	24,825	499	403
Plane, Edge, for boots and shoes.....	B. Tolman .....	24,526	457	355
Plane, Hand.....	S. S. Dodge.....	23,978	377	269
Plane Stock, Bench .....	J. Gorham.....	23,678	334	211
Planetarium .....	L. Allen.....	25,476	592	513
Planing Machine, Hand .....	T. P. Butterfield .....	24,076	391	286
Planing Machine, Metal .....	M. Allan .....	26,151	691	644
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Planing Machine, Rotary .....	W. H. Smith .....	23,870	362	249
Planing Machines, arranging feed rollers in wood .....	H. H. Baker.....	22,926	217	74
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Planing curved surfaces .....	J. P. Grosvenor .....	26,584	752	723
Plant Protector .....	E. Mosher .....	23,935	371	261
Planter, Corn.....	J. L. Hoag .....	22,650	172	30
Planter, Corn.....	J. Hughes and N. Stonecipher .....	22,652	172	31
Planter, Corn.....	A. G. and A. Thompson.....	23,126	248	103
Planter, Corn.....	S. Elliott .....	23,235	264	123
Planter, Corn.....	J. Haynes .....	23,371	284	149
Planter, Corn.....	J. G. Mitchell.....	23,382	285	152



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Planter, Corn.....	L. F. Bingham and N. O. Pierce..	23,895	366	254
Planter, Corn.....	A. W. Brinkerhoff.....	23,896	366	254
Planter, Corn.....	R. B. Gilbert.....	23,915	368	258
Planter, Corn.....	S. E. Hartwell.....	23,919	369	259
Planter, Corn.....	W. H. King.....	23,980	377	269
Planter, Corn.....	P. H. Freylinghausen and J. G. Heilman.	24,452	446	344
Planter, Corn.....	A., W., and J. Campbell.....	24,537	458	356
Planter, Corn.....	C. G. Udell.....	24,594	466	365
Planter, Corn.....	J. W. West.....	24,683	479	380
Planter, Corn.....	H. Wiley.....	24,687	480	380
Planter, Corn.....	P. Platter.....	24,703	482	383
Planter, Corn.....	J. P. Coonley.....	24,993	523	430
Planter, Corn.....	M. Mitchell.....	25,033	529	436
Planter, Corn.....	L. G. Pecl.....	25,041	530	437
Planter, Corn.....	W. Lees.....	25,425	585	503
Planter, Corn.....	W. Morrison.....	25,435	586	505
Planter, Corn.....	C. Whitaker.....	25,461	589	510
Planter, Corn.....	J. C. Adams.....	25,613	611	537
Planter, Corn.....	C. Ropp.....	25,675	621	548
Planter, Corn.....	R. M. Varner.....	25,690	622	551
Planter, Corn.....	A. Kirlin.....	25,833	644	579
Planter, Corn.....	E. C. Allen.....	26,006	669	613
Planter, Corn.....	O. P. Moran.....	26,044	674	621
Planter, Corn.....	O. C. McCune.....	26,442	733	698
Planter, Cotton Seed.....	C. C. Garrett.....	23,164	253	109
Planter, Cotton Seed.....	J. P. Cruteher.....	23,554	313	187
Planter, Cotton Seed.....	Z. N. Moriel.....	24,652	475	375
Planter, Cotton Seed.....	E. P. Beauchamp.....	24,984	521	429
Planter, Cotton Seed.....	J. W. Huntley.....	25,119	541	449
Planter, Cotton Seed.....	T. T. and H. W. S. Collier.....	25,388	580	497
Planter, Cotton Seed.....	P. M. Smith and T. T. Collier....	25,449	588	508
Planter, Cotton Seed.....	P. B. Baker.....	26,404	727	691
Planter, Cotton Seed...	R. M. Brooks.....	26,562	749	719
Planter, Cotton Seed.....	C. Kesler and F. Reinhard.....	26,596	754	724
Planter, Potato.....	J. C. Stoddard.....	24,065	390	284
Planter, Seed.....	J. Bryant.....	22,484	146	2
Planter, Seed.....	J. F. Beekwith and A. G. Gage...	22,617	167	25
Planter, Seed.....	J. C. Baker.....	23,069	239	95
Planter, Seed.....	J. C. Benthall.....	23,071	240	96
Planter, Seed.....	G. Watt.....	23,206	259	117
Planter, Seed.....	D. R. Prindle.....	23,391	287	153
Planter, Seed.....	D. S. Fisher.....	23,913	368	257
Planter, Seed.....	D. M. Smith.....	23,955	373	265
Planter, Seed.....	J. MeKown.....	24,135	400	296
Planter, Seed.....	S. L. Stoekstill.....	24,158	403	299
Planter, Seed.....	C. F. Anderson.....	24,185	408	303
Planter, Seed.....	G. Cramton.....	24,541	459	357
Planter, Seed.....	W. Clark.....	24,991	522	430
Planter, Seed.....	W. D. Harrah and B. S. Baldwin..	25,011	526	433
Planter, Seed.....	J. B. McMillan.....	25,026	528	435
Planter, Seed.....	T. B. Rogers.....	25,047	530	438
Planter, Seed.....	W. G. Murphy.....	25,134	544	451
Planter, Seed.....	Z. B. Brown and M. C. Godard...	25,380	579	495
Planter, Seed.....	L. L. Laneaster.....	25,513	597	520
Planter, Seed.....	L. R. Carpenter.....	25,556	603	528
Planter, Seed.....	S. J. Wasterberg.....	25,595	609	534
Planter, Seed.....	J. P. Allen.....	25,616	612	538
Planter, Seed.....	W. H. Stuart.....	25,685	622	550
Planter, Seed.....	A. Maurer.....	25,746	631	562
Planter, Seed.....	A. Klaus.....	25,835	644	580
Planter, Seed.....	G. M. Evans.....	25,889	652	590
Planter, Seed.....	W. Blessing.....	26,410	728	692
Planter, Seed.....	J. H. Lee.....	26,439	732	698
Planter, Seed.....	W. H. Worth and L. Finlay.....	26,455	734	700
Planter, Seed.....	H. Bell.....	26,456	735	701
Planter, Seed.....	J. T. Mereer.....	26,605	755	725
(See, also, <i>Seeding Machine.</i> )				
Plough.....	G. D. Colton.....	22,629	169	27
Plough.....	J. M. Hall.....	23,023	232	89
Plough.....	J. Rulofson.....	23,116	246	102
Plough.....	J. M. Whitney.....	23,134	249	105
Plough.....	S. Williams, jr.....	23,211	260	118
Plough.....	W. J. Griffies.....	23,369	283	148
Plough.....	W. C. Holmes.....	23,580	317	191
Plough.....	W. H. Wilson.....	23,636	327	202
Plough.....	C. M. Bryan.....	23,898	366	254
Plough.....	E. Davidson.....	23,904	367	255
Plough.....	J. C. Moltrup.....	23,933	371	261
Plough.....	W. Nichols.....	23,938	371	262
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Plough	E. Moore	24,399	438	336
Plough	L. E. Burdin	24,536	458	356
Plough	I. Cook and J. T. Bever	24,617	470	369
Plough	W. O'Neill	25,436	586	505
Plough	W. O'Neill	25,437	586	506
Plough	W. B. Williams	25,463	590	510
Plough	W. B. Williams	25,464	590	511
Plough	E. D. and Z. W. Lee	25,654	617	545
Plough	B. R. Hood	25,738	630	560
Plough	D. Eldred	25,816	641	576
Plough	G. Emery and A. C. Wilson	25,817	641	576
Plough	S. Hewitt	25,898	653	592
Plough	I. P. Harris	25,033	673	618
Plough	W. T. Jones	26,111	685	635
Plough	J. T. Townsend	26,133	688	640
Plough	A. A. Dickson	26,259	706	665
Plough	S. T. Peek	26,289	710	670
Plough	J. Gorham	26,349	718	682
Plough	W. F. Yeager	26,390	725	689
Plough	R. M. Brooks	26,563	749	720
Plough	G. W. Roney	26,620	757	728
Plough	S. Walker	26,633	758	730
Plough, Ditching	E. S. Bartlett	25,377	578	495
Plough, Drain, operating	D. Watson	22,522	153	10
Plough, Gang	T. S. Heptinstall	26,587	753	723
Plough, Hillside	E. Van Camp	23,964	375	266
Plough, Mole	J. Case	22,701	180	38
Plough, Mole	M. Bales	22,928	217	75
Plough, Mole	W. P. Goolman	23,334	278	141
Plough, Mole	J. Carrington	23,348	280	144
Plough, Mole	J. Creamer and T. W. Rieards	23,452	298	167
Plough, Mole	D. F. Robbins	23,609	322	197
Plough, Mole	H. W. Roland and E. Forbis	23,745	344	224
Plough, Mole	A. Watson	24,969	519	426
Plough, Mole	A. Elmer	25,105	539	447
Plough, Mole	A. Hammond	25,114	541	448
Plough, Mole	H. R. Jerome	25,121	542	449
Plough, Mole	J. Lec	25,127	543	450
Plough, Mole	C. U. and J. H. Crandall and H. A. Hawkins	25,178	550	460
Plough, Mole	I. Hobson	25,334	572	487
Plough, Mole	H. F. Baker	25,618	612	538
Plough, Mole	R. Hussey and U. Thornburgh, sen.	25,649	617	544
Plough, Mole	A. Miller	25,845	645	582
Plough, Mole	J. Morrison	25,846	645	582
Plough, Mole	S. F. Jones	25,902	653	593
Plough, Mole	G. Whitcomb	25,988	666	609
Plough, Mole	A. Bowers, J. H. Griggs, and J. Wilson	26,082	680	629
Plough, Mole	F. E. Hineckley	26,355	719	683
Plough, Mole	W. P. Goolman	26,426	731	695
Plough, Seeding	J. S. Suida	24,959	517	424
Plough, Snow	M. B. Stafford	24,829	500	404
Plough, Snow, for railroads	W. Rhoads	23,709	338	217
Plough, Snow, for railroads	W. S. Huntington	24,463	448	345
Plough, Steam	S. K. Bassett	22,848	205	63
Plough, Steam	J. Hawkins	25,826	643	578
Plough, Steam	A. E. and S. N. McGaughey	26,279	708	669
Plough, Steam	J. W. McLean	26,397	726	690
Plough, Steam	J. W. Fawkes	26,422	730	695
Plough, Underground Drain	A. Watson	22,906	214	72
Ploughs, Mole, Portable Crab for	E. Thorn	25,855	647	583
Ploughs, moulding	B. F. Avery	25,873	649	587
Plough Beam	J. S. Hall	23,024	232	89
Plug for blasting rocks	J. D. Buckley and S. F. Mosher	24,006	381	273
Pocket Alarm	I. Goodspeed	26,001	668	612
Porous Ware, manufacture of	B. S. and M. R. Pierce	26,614	756	.....
Portfolio	H. T. Sisson	23,506	306	178
Potatoes, digging	J. C. Stoddard	23,408	290	157
Potatoes, digging	G. S. Tiffany	24,505	454	352
Potatoes, digging and gathering	J. B. Parvin	23,988	378	270
Potato Digger	R. L. Allen	22,612	166	24
Potato Digger	R. Niven	23,106	245	100
Potato Digger	P. Marcy	24,474	450	347
Potato Digger	L. B. Griswold	25,010	525	433
Potato Digger	A. S. Capron and D. S. Davis	25,721	628	557
(See, also, <i>Harvester, Potato.</i> )				
Potato Parer	W. B. Coates	26,254	705	664
Power, accumulating and transmitting	E. Stevens	23,794	351	234
Power, applying, to machinery	D. Durfey	25,351	576	492
Power Machine, Foot	F. S. Stoddard	24,064	389	283



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Press .....	H. F. Hicks .....	25, 546	602	526
Press, Cam .....	T. R. Hopkins .....	25, 232	558	470
Press, Cheese .....	C. Taylor .....	23, 323	277	139
Press, Cheese .....	S. Cope .....	23, 352	281	144
Press, Cheese .....	A. H. Emery .....	24, 449	446	344
Press, Cheese, Self-acting .....	W. Leach .....	22, 920	216	74
Press, Cider .....	C. Ritter .....	24, 490	452	350
Press, Copying .....	A. Whiteomb .....	22, 524	153	10
Press, Cotton .....	Z. Atkinson .....	22, 775	193	52
Press, Cotton .....	N. I. Lilly .....	23, 180	256	112
Press, Cotton .....	U. T. and C. E. Stewart .....	23, 201	259	116
Press, Cotton .....	I. G. Roux .....	23, 397	288	155
Press, Cotton .....	T. F. De Bruler .....	23, 759	346	227
Press, Cotton .....	H. W. Randle .....	23, 860	361	247
Press, Cotton .....	E. H. Adams .....	23, 995	380	272
Press, Cotton .....	J. Hawthorn .....	24, 026	384	276
Press, Cotton .....	M. B. Hand .....	25, 161	548	457
Press, Cotton .....	C. N. Lovejoy .....	25, 904	654	593
Press, Cotton .....	E. N. Elliott .....	26, 174	694	649
Press, Cotton .....	P. Williams .....	26, 635	759	730
Press, Cotton and Hay .....	S. Wolff .....	24, 256	418	314
Press, Cotton and Hay .....	E. Stoekbridge .....	24, 672	478	378
Press, Cotton-Bale .....	G. W. Penniston .....	22, 823	201	59
Press, Hand Printing .....	A. and B. Newbury .....	24, 655	476	375
Press, Hay .....	C. Rundlett and J. W. Drummond .....	24, 824	499	403
Press, Hydraulic .....	R. Dudgeon .....	22, 713	182	40
Press, Hydraulic .....	T. Baxter .....	23, 741	343	224
Press, Hydraulic .....	M. H. Clark .....	25, 488	593	516
Press, Hydraulic Oil .....	W. R. Fee .....	25, 402	581	499
Press, Job and Card Printing .....	J. A. Campbell .....	24, 538	458	356
Press, Lithographic Printing .....	W. H. Stubbe .....	22, 519	152	9
Press, Power Gear .....	W. and R. Skene .....	24, 585	465	364
Press, Power Printing .....	F. Morse .....	24, 357	432	330
Press, Power Pulley .....	W. and R. Skene .....	24, 584	465	364
Press, Printing .....	F. O. Degener .....	22, 611	166	24
Press, Printing .....	G. McKay .....	22, 968	224	81
Press, Printing .....	G. P. Gordon .....	23, 677	334	210
Press, Printing .....	S. P. Ruggles .....	23, 951	373	264
Press, Printing .....	G. P. Gordon .....	24, 426	471	371
Press, Printing .....	A. Dougherty .....	25, 000	524	431
Press, Printing .....	G. P. Gordon and F. O. Degener .....	25, 008	525	432
Press, Printing .....	L. T. Wells .....	25, 357	575	491
Press, Printing .....	T. H. Burrige .....	26, 545	747	716
Press, Punching and Stamping .....	S. P. Ruggles .....	23, 864	361	248
Press, Rotary .....	J. A. Wilkinson .....	25, 069	534	442
Press, Serew .....	T. R. Hopkins .....	25, 195	553	463
Press, Seal .....	J. Saxton .....	23, 046	236	92
Press, Self-feeding, for printing cards, &c .....	N. Ames .....	23, 421	292	160
Press, Self-acting .....	L. L. Bond .....	24, 258	418	315
Press, Sugar Cane .....	T. Crane .....	24, 376	435	333
Press, Sugar Cane .....	W. Bull .....	24, 789	494	397
Press, Tobacco .....	E. and W. B. Cunningham .....	23, 831	356	241
Press, Tobacco .....	J. A. Bawsel .....	24, 187	408	304
Press, Tobacco .....	G. Lindsay and W. Cameron .....	25, 427	585	504
Presses, Hydraulic, Retainers for .....	C. E. Rymes .....	26, 622	757	728
Presses, Printing, feeding paper to .....	G. H. and S. Ferguson .....	24, 851	504	409
Presses, Printing, feeding paper to .....	M. S. Beach .....	24, 982	521	428
Presses, Printing, feeding paper to .....	R. M. Hoe .....	25, 199	553	463
Presses, Printing, feeding paper to and from .....	C. Potter, jr., and C. B. Cottrell .....	25, 524	599	522
Pressing Machine, Tailors .....	J. W. Thorp .....	24, 250	417	313
Pressure to top rollers of drawing machinery .....	N. E. Hale .....	26, 031	673	618
Primer, Automatic, for fire-arms .....	J. Rupertus .....	23, 952	373	264
Primer, Self, for fire-arms .....	W. H. Bell .....	22, 618	167	25
Primer, Tape, for fire-arms .....	T. T. S. Laidley .....	22, 957	222	79
Printer's Rules, making .....	R. Doble and M. A. Starr .....	22, 634	170	28
Printing Addresses, etc .....	J. A. Barrington .....	24, 364	433	331
Printing Blocks, Electrotype .....	T. Crossley .....	25, 953	661	603
Printing Floor Cloths .....	J. Albro .....	26, 075	679	627
Printing Oil Cloths .....	J. Albro .....	24, 270	429	317
Printing in different colors .....	J. K. Wright .....	25, 075	535	443
Printing Machine .....	R. M. Hoe .....	24, 875	505	411
Printing surfaces, obtaining curved .....	W. H. Elliot .....	23, 236	264	123
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Prisons, construction of .....	E. May .....	25, 662	619	546
Projectile, for fire-arms .....	W. H. Arnold .....	23, 538	311	184
Projectile for fire-arms .....	J. Holroyd .....	26, 967	663	606
Projectile for killing whales .....	R. Brown .....	24, 371	434	332
Projectile for ordnance .....	J. W. Cochran .....	25, 951	661	603
Projectile for rifled ordnance .....	J. W. Cochran .....	26, 016	670	615
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Propeller .....	S. P. Snyder and G. W. Cook.....	23,199	258	116
Propeller .....	C. R. M. Wall:.....	24,069	390	285
Propeller .....	L. H. Markley.....	24,130	399	295
Propeller .....	L. Holtslander.....	25,336	572	488
Propeller .....	D. Hughes .....	26,106	684	634
Propeller, Canal Boat .....	R. Cartwright .....	24,794	495	398
Propeller for canals .....	B. Burling .....	23,010	230	87
Propeller, Marine.....	J. Taggart.....	23,432	294	163
Propeller, Marine.....	H. Hirsch .....	25,197	553	463
Propeller, Marine Hand .....	E. C. Braekett.....	24,368	434	332
Propeller, Reciprocating.....	J. Galt .....	24,552	460	359
Propeller, Ship's.....	J. K. Peters .....	23,112	246	101
Propeller, Screw.....	B. F. Bee.....	22,525	153	10
Propeller, Screw.....	A. Jouan.....	22,731	185	44
Propeller, Screw.....	G. E. Safford .....	23,117	247	102
Propeller, Screw.....	J. Montgomery .....	23,598	320	194
Propeller, Serew.....	J. J. B. Vergne.....	24,508	454	353
Propeller, Water Wheel .....	T. Tripp .....	26,213	700	657
Propelling Apparatus, Ship's .....	A. E. Harding .....	23,463	299	170
Propelling and Steering Apparatus .....	M. Lytle .....	24,129	399	295
Protractor .....	C. Gordon.....	23,365	283	147
Pulley, Cast Metal .....	J. A. Evarts .....	25,998	668	611
Pulley, Friction.....	E. Spaulding .....	24,156	403	299
Pulley, Ratchet, for blind cords.....	J. R. Holmes, jr.....	26,433	732	697
Pulleys, Shipper Gear for.....	A. Betteley.....	25,169	549	459
Pulley Blocks .....	S. F. Lewis .....	26,038	673	620
Pump .....	W. Peek .....	22,743	187	45
Pump .....	C. F. Bellows .....	22,777	193	52
Pump .....	J. L. Fagan .....	23,019	232	88
Pump .....	E. Lawrence and R. Safley, 2d...	23,094	243	99
Pump .....	J. M. Lunquest.....	23,100	244	100
Pump .....	L. B. Schafer.....	23,314	275	137
Pump .....	W. R. Brown.....	23,443	296	165
Pump .....	J. B. Christian and A. Beeler.....	23,447	297	166
Pump .....	J. E. Cronk .....	23,453	298	167
Pump .....	J. K. O'Neil.....	23,485	302	174
Pump .....	J. Powers .....	23,489	303	175
Pump .....	A. Beeler and J. B. Christian.....	23,544	312	185
Pump .....	B. Douglas .....	23,649	329	205
Pump .....	A. C. Laning .....	23,690	336	213
Pump .....	A. W. Lloyd .....	23,849	359	245
Pump .....	J. Selser .....	23,953	373	264
Pump .....	A. B. Keeley and J. S. Beek .....	24,032	385	278
Pump .....	J. H. Young.....	24,073	391	285
Pump .....	E. Hartzler.....	24,868	505	410
Pump .....	J. M. May.....	25,207	554	465
Pump .....	J. M. May.....	25,208	555	465
Pump .....	W. M. Henderson .....	25,642	616	542
Pump .....	S. Hewit .....	25,898	653	592
Pump .....	J. Edson .....	26,025	672	617
Pump .....	W. Wright .....	26,139	689	641
Pump, Cattle .....	H. Garred .....	22,640	171	29
Pump, Cattle .....	J. H. Irwin.....	22,653	173	31
Pump, Cattle .....	D. P. Farnham .....	22,862	208	65
Pump, Cattle .....	W. Nichols.....	26,399	726	690
Pump, Cattle .....	J. Augspurger .....	26,465	736	703
Pump, Chain .....	D. De Pré .....	24,288	422	320
Pump, Double-acting.....	W. H. Davis... ..	24,797	495	398
Pump, Force .....	F. Kettler .....	24,876	506	411
Pump, Force .....	F. Kettler .....	24,877	506	412
Pump, Forcing .....	R. Poole .....	25,366	576	493
Pump, Portable .....	W. T. Vose .....	26,135	688	640
Pump, Rotary .....	G. Wingate .....	22,762	190	49
Pump, Rotary .....	J. L. Fagan .....	23,162	253	109
Pump, Rotary .....	T. Frecman, jr.....	23,764	347	228
Pump, Rotary .....	J. Megaw .....	24,650	475	375
Pump, Rotary .....	C. H. Hersey .....	24,872	505	411
Pump, Rotary .....	J. J. Flanders.....	25,999	668	612
Pump, Submerged .....	H. Lindsey.....	25,340	573	489
Pumps, working .....	B. Robbins .....	24,822	499	403
Pump Box.....	F. and J. Stoek.....	23,795	351	234
Pump Box.....	J. Munson .....	23,937	371	262
Pump Gearing .....	J. P. Carr .....	24,193	409	305
Punch, Hand .....	R. Wood.....	25,599	609	535
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Punching Holes in Leather.....	G. L. Bailey.....	25,083	536	444
Punching Metal .....	J. H. Brown.....	24,191	409	304
Punching Railway Bars .....	G. Shone.....	22,983	226	83
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Quarrying Stone.....	J. Ellis.....	23,667	332	209
Quartz, Mill for crushing.....	G. T. and W. F. Kearsing.....	24,878	506	412
Quartz, Mill for crushing and pulverizing.....	J. P. Gage.....	25,964	663	605
Quartz, Pulverizing.....	W. Bauham.....	26,555	748	718
Quartz Crusher.....	T. S. Brown.....	26,249	705	663
Quartz Crushing Machine.....	H. Brevoort.....	25,243	559	472
Quartz Crushing Machine.....	M. Goodman.....	25,819	642	576
Quartz Mill.....	E. P. Steen.....	25,234	558	471
Quilting Frame.....	J. Wetherill.....	23,631	326	201
<b>R.</b>				
Raft, Life-preserving.....	A. G. Mack.....	24,747	488	390
Railroads, construction of.....	J. Young.....	23,804	352	236
Railroads, construction of.....	A. Webb.....	24,895	508	414
Railroads, preventing collisions on.....	A. Dehuff.....	23,232	263	122
Railroads for streets.....	S. A. Beers.....	23,891	365	253
Railroad Bar.....	H. Webb.....	24,436	444	342
Railroad Bars, cutting.....	B. A. Mason.....	26,441	733	698
Railroad Bars, piling, for rerolling.....	J. Thomas.....	25,237	703	661
Railroad Station Indicator.....	L. Koch.....	25,081	536	444
Railroad Track, raising.....	W. Henney.....	24,121	398	294
Railroad Trains to Telegraph their Passings.....	E. O. Pohl.....	22,610	166	24
Rails, Adjustable, for replacing cars on the track.	J. A. Stephan.....	25,771	635	567
Rails, Cast-iron, for railways.....	J. E. Russell.....	23,269	269	129
Rails, Hand, for Stairs, making.....	C. R. Shaeffer.....	24,763	490	392
Rails, Railroad Bars or.....	H. Betts.....	24,533	458	356
Rails, Railroad, connecting and supporting.....	M. O. Davidson.....	23,758	346	227
Rails for railroads.....	G. S. Avery.....	25,376	578	495
Rails for railroads.....	G. W. R. Bayley.....	25,942	660	601
Rails for street railroads.....	S. Nicholson.....	23,778	349	230
Rails for street railroads.....	A. Rcese.....	26,523	744	712
Railway Alarm.....	H. Maule.....	22,507	150	6
Railway Bars, connecting.....	J. Davis.....	24,724	485	386
Railway Crossings.....	S. Macferran and S. Kneass.....	23,101	244	100
Railways, watering and sweeping.....	W. C. Allison.....	25,359	575	492
Rake.....	T. Crane.....	24,286	422	319
Rake, Automatic, for reaping machines.....	B. G. Fitzhugh and McC. Young, jr.....	25,327	571	486
Rake, Horse.....	W. H. Brown.....	22,482	146	1
Rake, Horse.....	B. Bridendolph.....	22,526	153	10
Rake, Horse.....	L. S. Deming.....	22,632	169	27
Rake, Horse.....	F. C. Kneeland.....	23,091	242	98
Rake, Horse.....	W. H. Long.....	23,098	244	99
Rake, Horse.....	W. H. White.....	23,133	249	105
Rake, Horse.....	I. C. Burget.....	23,155	252	108
Rake, Horse.....	G. S. Reynolds.....	23,943	372	263
Rake, Horse.....	E. Geiger.....	24,114	397	292
Rake, Horse.....	H. Hersh.....	24,389	437	335
Rake, Horse.....	E. Harris.....	24,631	472	371
Rake, Horse.....	P. Lebzelter.....	24,645	474	374
Rake, Horse.....	M. Bradley.....	25,088	537	445
Rake, Horse.....	O. Pier.....	25,441	587	507
Rake, Horse.....	T. J. Steffe.....	25,535	600	524
Rake, Horse.....	G. Peirce.....	26,293	710	671
Rake, Horse.....	M. Reazcr.....	26,294	710	671
Rake, Horse.....	G. N. Hall.....	26,396	726	690
Rake, Horse.....	L. Lessing.....	26,599	754	725
Raking Attachment for harvesters.....	G. Tatlock.....	23,959	374	266
Raking Attachment for harvesters.....	C. P. Gronberg.....	24,555	461	359
Raking hay.....	D. Ramler.....	23,782	349	231
Ramrods, Adjustable Wormers for.....	G. E. Baldwin.....	23,223	262	120
Razor Strop.....	M. Posz.....	22,746	187	46
Razor Strop.....	C. Y. Haynes.....	25,932	658	599
Razor Strop, Metallic.....	M. A. Holcomb.....	25,265	562	475
Reels for harvesters.....	G. S. Curtis.....	25,560	604	529
Refrigerator.....	S. Hickok.....	22,871	209	66
Refrigerator.....	W. Sims.....	22,897	213	70
Refrigerator.....	H. L. McAvoy.....	23,184	256	113
Refrigerator.....	J. Marx.....	23,478	301	172
Refrigerator.....	A. Yost.....	23,803	352	236
Refrigerator.....	W. H. Lazelle.....	24,262	419	315
Refrigerator.....	T. B. Burtis.....	25,719	627	557
Register, Billiard.....	H. I. Behrens.....	22,849	206	63
Register, Billiard.....	F. M. Sofge.....	26,131	687	633
Register, Detective, for doors of railroad cars.....	W. C. Smith.....	23,791	351	233
Register, Detective, for watchmen.....	P. H. Duffy.....	26,260	706	665
Register, Hot Air.....	E. A. Tuttle.....	25,355	575	491
Register, Omnibus.....	R. F. White.....	24,345	430	328



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Register, Omnibus.....	H. C. and J. C. Howells.....	24,390	437	335
Register, Omnibus.....	W. M. Kcague.....	25,740	630	560
Register, Pocket, of Count.....	P. D. Richards and F. N. Thayer..	24,757	490	391
Register, Portable.....	C. S. Watson.....	26,639	759	731
Register for railroad cars.....	S. F. Covington.....	26,565	749	720
Register for sheets of paper.....	S. T. Bacon.....	23,146	251	106
Register for sheets of paper.....	J. North.....	23,221	262	120
Register, Time.....	B. T. Harris.....	23,918	369	258
Registrar, Ventilating.....	J. Leeds.....	22,658	173	31
Registers, Time, operating the index of.....	R. McKenna.....	24,224	413	310
Registering Apparatus.....	J. A. Wilkinson.....	25,543	601	525
Registering Apparatus.....	G. W. Atkins and W. B. Aitken...	26,391	725	689
Regulator for Time-keepers.....	R. S. Mershon.....	23,810	353	237
Rein, Safety, for bridles.....	R. A. Nathurst and J. L. Stewart.	25,135	544	452
Resins, preparation of.....	E. Hunt and H. D. Pochin.....	22,558	158	.....
Retort, Coal Oil.....	W. Smith.....	23,719	340	219
Retort for distillation of coal.....	J. L. Stewart.....	24,587	465	364
Retort for distilling coal oil.....	N. B. Hatch.....	22,798	197	55
Retort for distilling coal oil.....	J. E. Holmes.....	23,427	293	161
Retort for distilling coal oil.....	R. W. Haslett and J. H. Hobbs...	24,211	411	307
Retort for distilling coal oil.....	H. P. Gengembre.....	24,454	447	344
Retort for distilling coal oil.....	M. Hodgkinson.....	26,326	715	677
Retort for distilling oil from coal.....	J. O'Hara.....	22,573	160	18
Retort for distilling oil from coal.....	J. Nicholson.....	22,973	224	81
Retort for distilling oil from coal.....	J. E. Holmes.....	24,212	412	308
Retort for distilling oil from coal.....	W. G. W. Jaeger.....	24,217	412	308
Retort for distilling coal oil, revolving.....	J. Gillespie.....	23,362	282	147
Retort, Gas.....	H. K. Symmes.....	22,591	163	21
Retort, Gas.....	D. L. Weatherhead.....	23,433	294	163
Retort, Gas.....	A. Marsh.....	24,038	386	279
Retort, Gas.....	E. Walcott.....	24,510	455	353
Retort, Gas.....	J. W. Smith.....	24,524	457	355
Retort, Gas.....	W. Beaumont.....	24,531	457	355
Retort, Gas.....	W. Stratton.....	24,670	478	378
Retort, Gas.....	C. A. Robbe.....	25,046	530	438
Retort, Gas.....	H. K. Symmes.....	25,225	557	469
Retorts, Gas, preventing deposition of carbon in.....	A. Marsh.....	25,790	637	.....
Rice, cleaning.....	W. Ager.....	26,331	715	678
Rice, polishing.....	L. H. Colborn.....	23,449	297	167
Rice, polishing.....	C. E. Rowan.....	25,981	665	608
Rifles, Amalgamating.....	J. S. Briggs.....	23,072	240	96
Rig for vessels.....	T. Bell.....	24,090	393	288
Rims of Carriage Wheels, finishing the.....	R. Fretz.....	24,623	470	370
Rims for locomotive wheels, chilling.....	H. W. Moore.....	23,775	348	230
Rims, Watch, making.....	C. W. Clewley.....	25,318	569	485
Rims and Field Pieces for watch and locket cases.....	J. N. Allen.....	24,528	457	355
Ring, Finger.....	S. Bogert.....	25,172	549	459
Ring, Martingale.....	G. T. Bushnell.....	26,086	681	630
Rivets, Bullets, &c., making.....	C. B. Allen.....	22,843	205	62
Roaster.....	J. Mulligan.....	23,936	371	262
Rocket, Exhibition.....	A. Lanargan.....	24,468	449	346
Rockets, Sticks for exhibition.....	C. Hadfield.....	26,428	731	696
Rocking-horse.....	A. and D. Woodworth and M. T. Hitchcock.	23,003	229	86
Roll for forming tire.....	J. H. Gage.....	24,453	446	344
Roller, Elastic Friction.....	A. A. Moss.....	24,653	475	375
Roller, Electro-plated.....	J. W. Wilcox.....	23,633	326	202
Roller for expressing water from clothes.....	J. Allender.....	22,539	155	12
Roller, Field.....	G. Lindley.....	24,219	413	309
Roller for printing paper hangings.....	T. Vandeventer.....	26,387	724	688
Roller, Yielding Feed, operating.....	J. H. Brinton.....	22,931	218	75
Rolling Machine, Dough.....	J. Hecker and W. Hotine.....	23,301	273	135
Roofs, Connecting Boards for.....	W. T. De Golyer.....	24,546	459	357
Roofs for Railroad Cars.....	A. P. Winslow.....	25,071	534	443
Roofs, securing Sheet Metal.....	E. Pollard.....	23,000	229	86
Roofing, Iron, attaching.....	T. W. H. Mosely.....	23,600	321	195
Roofing Composition.....	H. Lester.....	22,563	158	.....
Roofing Composition.....	J. Hobrecker.....	23,248	266	.....
Roofing Composition.....	J. M. Day and E. H. A. Oakley...	24,105	395	.....
Roofing Composition.....	S. M. Logan.....	26,600	754	.....
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Rope, laying.....	G. W. Pittman and W. C. Boone..	23,491	303	175
Rope, opening old.....	A. Ford.....	24,292	423	320
Rope Machinery.....	J. W. Peer.....	23,486	302	174
Rubber Head for lead pencils.....	W. W. Shaw.....	23,504	305	177
Ruches, manufacture of.....	D. Penman and E. Fitzgerald....	26,328	715	677
Rudders, operating.....	C. F. E. Blaich.....	25,878	650	588
Rudders, Support for backs of.....	A. H. Manchester.....	24,037	386	278
Ruling Machine, Attachment to.....	I. B. Blair.....	23,152	252	107



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Sabres, attaching, to belts .....	J. E. B. Stuart .....	25,684	622	550
Saccharine Juices, defecating and clarifying ...	J. Spangenberg .....	22,988	227	.....
Saccharine Juices, evaporating .....	L. P. Harris .....	22,648	172	30
Saccharine Juices, evaporating .....	D. I. Durfey .....	24,016	383	275
(See, also, <i>Cane Juices</i> and <i>Sugar Juices</i> .)				
Saddle .....	S. E. Tompkins .....	23,411	290	158
Saddle, Elastic .....	L. Bishop .....	22,480	145	1
Saddle Tree .....	H. Adams .....	25,375	578	495
Saddle Tree, Harness .....	S. E. Tompkins and J. McClure ..	22,841	204	62
Saddle Tree, Spring .....	J. H. Boyd .....	25,485	593	515
Saddle Trees, covering .....	J. Maclure .....	25,867	648	585
Safe, Burglar-proof .....	J. B. Cornell .....	22,547	156	13
Safe, Confectionary .....	R. Shaler .....	24,764	490	392
Safe, Kitchen .....	W. McElwee .....	25,024	527	435
Safe, Meat .....	E. L. Pratt .....	25,165	548	458
Safe, Milk .....	W. H. Tambling .....	25,773	635	567
Sails for fore-and-aft rigged vessels .....	A. W. Stewart .....	24,157	403	299
Sails, fore-and-aft, reefing .....	J. L. Townsend .....	24,167	405	301
Sails, fore-and-aft, reefing .....	S. Samuels .....	25,917	656	596
Sails, fore-and-aft, reefing .....	W. R. Satterly .....	25,982	666	608
Sails, reefing .....	L. B. Wakeman .....	22,683	178	35
Sails, reefing .....	R. B. Benson .....	23,440	295	164
Sails, reefing .....	E. E. Mulliner .....	23,776	348	230
Sails, reefing .....	J. F. Brouard .....	24,370	434	332
Sails, reefing .....	H. Bessling .....	24,854	503	408
Sails, reefing .....	G. B. Cornish .....	25,491	594	516
Sails, reefing and furling .....	C. E. Bishop .....	22,920	218	75
Salinometer .....	R. H. Long .....	24,746	488	390
Salt, Common, manufacture of .....	H. Pemberton .....	24,951	516	.....
Sandals .....	W. McConnell .....	23,480	301	173
Sanding Painted Surfaces .....	E. May .....	26,363	720	684
Sash, Window, attaching cords to .....	P. A. Gladwin .....	23,675	333	210
Sash Cord Fastener .....	J. R. Payson .....	23,699	337	215
Sash Fastener .....	A. H. Emery .....	24,450	446	344
Sash Fastener .....	M. Chittenden .....	25,487	593	515
Sash Fastener .....	J. M. Forest .....	26,027	672	617
Sash Fastener .....	N. Barnum .....	23,405	727	691
Sash Fastener, Window .....	E. K. Breckenridge .....	25,379	578	495
Sash Supporter .....	J. F. Peabody .....	22,821	201	59
Sash Supporter, Window .....	S. Cooper .....	24,077	391	286
Sash Supporter, Window .....	W. H. Mitchell .....	25,666	619	547
Sash Weights .....	J. B. Cornell .....	26,416	729	693
Sausage Stuffer .....	R. V. Jones .....	22,559	158	16
Sausage Stuffer .....	H. L. De Zeng .....	23,080	241	97
Sausage Stuffer .....	J. Wagner .....	23,416	291	159
Sausage Stuffer .....	J. G. Perry .....	25,440	587	507
Saw, Circular, Segmental .....	R. K. Hawley .....	25,411	582	501
Saw, Reciprocating .....	R. H. Osgood .....	25,214	555	467
Saw, Stone .....	P. Sweeney .....	25,287	565	479
Saw, Wood .....	E. Blake .....	24,903	509	415
Saws, Circular, adjusting .....	J. Colville .....	25,996	668	611
Saws, Circular, setting laterally .....	J. D. C. Carpenter .....	22,546	156	13
Saws, filing .....	A. M. Beardsley .....	23,655	330	206
Saws, filing .....	A. Hadley .....	24,118	397	293
Saws, filing Gin .....	J. W. Elliott .....	23,835	357	241
Saws, filing Gin .....	C. P. Pool .....	25,042	530	437
Saws, grinding .....	G. Walker .....	22,834	203	61
Saws, grinding .....	W. Clemson .....	24,196	409	305
Saws, grinding and polishing .....	J. A. Hendrick .....	22,803	198	55
Saws, grinding and polishing .....	S. S. Campbell .....	23,228	263	121
Saws, Reciprocating, hanging .....	J. C. Clime .....	22,705	181	39
Saws, Reciprocating, hanging .....	A. Crosby .....	23,286	271	132
Saws, Reciprocating, hanging .....	P. Crosby .....	25,632	614	541
Saws, Reciprocating, operating .....	T. J. Alexander .....	23,004	229	86
Saws, Scroll, operating .....	E. Beck .....	24,532	457	356
Sawing, Cross Cut .....	J. Battin .....	23,070	239	95
Sawing Machine .....	B. Barker .....	22,846	205	63
Sawing Machine .....	W. H. Crittenden .....	23,355	281	145
Sawing Machine .....	I. W. Schmidt .....	24,762	490	392
Sawing Machine .....	E. H. Hancock .....	24,869	505	410
Sawing Machine .....	B. Fulghum .....	25,108	540	448
Sawing Machine .....	S. D. Vaughan .....	25,250	560	473
Sawing Machine .....	S. Littlefield .....	25,972	664	607
Sawing Machine .....	A. V. B. Orr .....	23,047	675	621
Sawing Machine, Cross-Cut .....	G. W. Parker .....	24,232	415	311
Sawing Machine, Cross-Cut .....	M. W. Knox .....	24,564	462	361
Sawing Machine, Cross-Cut .....	J. Hamilton .....	25,113	541	448
Sawing Machine, Locomotive Cross-Cut .....	J. Walker .....	25,778	635	568
Sawing Machine, Portable .....	S. R. Smith and P. P. Lane .....	24,913	510	418



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Sawing Machines, feeding mechanism for.....	P. P. Weis and F. Schutle .....	23,054	237	93
Sawing Machines, feeding the saw to the stuff to.	J. F. Gamble .....	25,189	552	462
Sawing winding forms .....	J. C. Hintz .....	22,726	184	740
Saw Filer .....	S. Wood .....	24,172	406	302
Saw Filing Machine .....	T. E. King .....	24,309	425	323
Saw Frame, Wood.....	J. Haynes .....	25,015	526	434
Saw Gummer.....	W. Porter .....	24,820	498	403
Saw Jointer .....	S. McLean .....	23,744	344	224
Saw Set.....	O. A. Brooks .....	23,434	294	163
Saw Set.....	A. Shoemaker .....	24,408	440	337
Saw Set.....	S. Smith .....	25,681	621	549
Saw Set.....	J. Beach.....	26,155	691	645
Scale for cutting boots and shoes.....	S. F. Burdett and H. Still .....	25,947	660	602
Scales.....	W. W. Kelly .....	25,203	554	464
Scales.....	A. Turnbull .....	25,473	591	512
Scales, Automatic Grain .....	J. R. Gates .....	22,603	165	22
Scales, Letter .....	T. Fairbanks .....	26,026	672	617
Scales, Platform .....	E. Sampson.....	24,143	401	297
Scales, Platform .....	F. M. Strong and T. Ross .....	24,162	404	300
Scales, Platform .....	R. F. Walcott .....	25,991	667	610
Scales, Platform .....	T. Fairbanks .....	26,484	738	706
Scales, Platform .....	T. Fairbanks .....	26,485	739	706
Scales, Platform .....	A. B. Morey.....	26,512	742	710
Scales, Platform, for railroads.....	T. Fairbanks .....	25,962	662	605
Scales, Weighing.....	O. W. Jipson .....	22,810	199	57
Scales, Weighing.....	S. Peirec .....	23,700	337	215
Scales, Weighing.....	W. D. Guseman .....	24,023	384	276
Scales, Weighing.....	F. M. Strong and T. Ross .....	24,161	404	300
Scales, Weighing.....	J. W. Strange.....	24,669	477	378
Scales, Weighing.....	F. M. Strong and T. Ross .....	25,148	545	454
Scales, Weighing.....	W. D. Guseman .....	25,638	615	542
Scaring Crows, Battery for.....	T. Lipshuts and D. C. Jones.....	25,021	527	434
Scoria, casting and annealing articles made of..	W. H. Smith .....	23,317	276	138
Scraper, Cotton.....	J. Henderson .....	23,171	254	110
Scraper, Cotton.....	P. Sharkey .....	23,788	350	232
Scraper, Cotton.....	J. H. Mitchell.....	25,434	586	505
Scraper, Cotton.....	M. Earnhart .....	26,096	682	632
Scraper, Dirt.....	A. J. Robison .....	23,610	322	197
Scraper, Foot.....	W. L. Williams .....	23,419	292	159
Scraper, Mast .....	R. N. Tate.....	26,535	745	715
Scraper, Road .....	G. and D. C. Caward.....	26,161	692	646
Screw, Coffin.....	W. H. Nichols .....	24,911	510	417
Screw, Wood .....	N. G. Thom.....	23,409	290	158
Screw, Wood.....	H. L. Kendall .....	24,393	438	336
Screw, Wood.....	C. Miller .....	26,509	742	710
Screws, cutting .....	R. Nuttall and J. Kirkpatrick.....	24,153	403	299
Screws, Female, moulding .....	E. L. Lamb and S. Wood .....	23,176	255	111
Screws, nicking heads of.....	I. Griggs.....	23,569	316	189
Screws, nicking and trimming heads of .....	N. G. Thom.....	25,150	546	454
Screws, threading.....	I. Griggs.....	23,568	316	191
Screws, Wood, burning threads on .....	T. B. Smith .....	22,985	226	83
Screws, Wood, pointing and threading.....	N. G. Thom.....	24,964	517	425
Screw Blanks, shaving heads of .....	A. Wood .....	22,837	203	61
Screw Plate .....	P. D. Nichols.....	23,041	235	91
Screw Stock.....	S. Goodfellow .....	24,906	509	416
Screw Tap .....	W. and R. Foster .....	26,487	739	707
Screw Threads, cutting, on gas pipes .....	C. C. Walworth.....	25,779	636	569
Scythe Rifle .....	T. J. Mayall.....	26,197	697	653
Scythe Snath.....	S. B. Batchelor .....	23,288	271	132
Seal, Metallic .....	C. A. McEvoy.....	24,041	386	279
Seal, Metallic, for letters.....	C. A. McEvoy.....	25,842	645	581
Seaming Machine, Double .....	J. and W. Wilson, jr., and C. Green	23,735	342	222
Seaming Machine, Double.....	W. Burton .....	24,441	445	342
Seat, Car.....	T. E. McNeill .....	22,568	159	17
Seat, Car.....	W. L. Childs .....	22,782	194	53
Seat, Car.....	F. F. Wagner and P. P. Dickinson.	24,511	455	353
Seat, Car.....	W. M. Henderson.....	25,116	541	449
Seat, Car.....	C. A. Smith .....	25,448	588	508
Seat, Car.....	E. Wheeler.....	25,499	595	518
Seat, Carriage .....	E. H. Harris .....	26,032	673	618
Seat, Carriage, Spring Back.....	N. Cowles and A. Hurlburt.....	25,725	628	558
Seat, Extension, for carriages .....	F. J. Flowers.....	26,578	751	722
Seat for churches, schools, &c.....	C. Perley.....	24,151	402	298
Seat, Folding.....	T. Reeve and M. B. Swezey.....	23,708	338	217
Seat on City Cars, confining driver's ..	W. C. Allison .....	26,066	678	626
Seat for sleeping cars.....	R. Dirks.....	24,998	523	431
Seats, Carriage, attaching rails of.....	C. Schofield .....	23,712	339	218
Seat and Couch, Car.....	W. M. Baker .....	22,693	179	37
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Seat and Couch, Car.....	T. T. Woodruff.....	24,257	418	315
Seat and Couch, Car.....	E. D. Sargent.....	25,049	531	439
Seat and Couch for sleeping car.....	T. E. McNeill.....	24,136	400	296
Seeding Machine.....	W. G. Bulgin.....	22,622	168	26
Seeding Machine.....	J. F. Seaman.....	22,676	176	34
Seeding Machine.....	C. and D. E. Eggelston.....	23,083	241	97
Seeding Machine.....	D. and A. S. Markham and D. Eldred.	23,183	256	113
Seeding Machine.....	E. O. Baxter.....	23,213	260	118
Seeding Machine.....	F. M. Davis.....	23,357	281	145
Seeding Machine.....	M. Simmons.....	23,403	289	156
Seeding Machine.....	A. R. Root.....	23,430	294	162
Seeding Machine.....	O. H. Melendy.....	23,481	302	173
Seeding Machine.....	M. D. Wells.....	23,630	326	201
Seeding Machine.....	S. R. Hunter.....	23,769	347	229
Seeding Machine.....	G. W. Richardson.....	23,812	354	237
Seeding Machine.....	S. Henry.....	23,920	369	259
Seeding Machine.....	C. Messenger.....	24,042	386	279
Seeding Machine.....	T. Short.....	24,059	389	282
Seeding Machine.....	T. H. Tatlow, jr.....	24,248	417	313
Seeding Machine.....	A. Simmons.....	24,410	440	338
Seeding Machine.....	E. Stimson.....	24,413	441	338
Seeding Machine.....	F. Veal.....	24,419	441	339
Seeding Machine.....	D. Nichols.....	24,431	443	341
Seeding Machine.....	J. C. Bean.....	24,530	457	355
Seeding Machine.....	D. Foreman.....	24,601	467	367
Seeding Machine.....	J. Andrews.....	24,979	521	428
Seeding Machine.....	J. Andrews.....	24,980	521	428
Seeding Machine.....	E. McKinney.....	25,025	528	435
Seeding Machine.....	W. D. Johnson.....	25,417	583	502
Seeding Machine.....	J. Maize.....	25,430	585	504
Seeding Machine.....	S. G. Randall.....	25,443	587	507
Seeding Machine.....	H. Sloan.....	25,447	588	508
Seeding Machine.....	M. L. Tourtelett.....	25,456	589	509
Seeding Machine.....	A. N. Merrill.....	26,041	674	620
Seeding Machine.....	O. H. Dennis.....	26,420	729	694
Seeding Machine.....	J. Bouton.....	26,559	749	719
Seeding Machine.....	W. W. Penn.....	26,611	756	726
Seeding Machine.....	J. W. Prentiss.....	26,615	756	727
Seeding Machines, Arms of Broadcast.....	H. J. Hale.....	22,870	209	66
(See, also, <i>Planter, Seed.</i> )				
Sewing Machine.....	I. M. Singer.....	22,517	152	8
Sewing Machine.....	W. A. Fosket and E. Savage.....	22,719	183	41
Sewing Machine.....	W. W. Wade.....	22,833	203	60
Sewing Machine.....	C. Marsh.....	22,961	222	79
Sewing Machine.....	W. Snyder.....	22,987	227	84
Sewing Machine.....	J. H. Cooper.....	23,157	252	108
Sewing Machine.....	E. S. Boynton.....	23,285	271	132
Sewing Machine.....	W. C. Hicks.....	23,577	317	190
Sewing Machine.....	T. Shaw.....	23,789	350	233
Sewing Machine.....	D. W. Clark.....	23,823	355	239
Sewing Machine.....	A. Bartholf.....	24,000	380	272
Sewing Machine.....	E. O. Baxter.....	24,001	380	272
Sewing Machine.....	A. H. Boyd.....	24,003	381	273
Sewing Machine.....	J. Gray.....	24,022	384	276
Sewing Machine.....	A. H. Hook.....	24,027	384	277
Sewing Machine.....	J. C. Speneer.....	24,061	389	283
Sewing Machine.....	W. Millar.....	24,081	392	287
Sewing Machine.....	P. S. Carhart.....	24,098	395	290
Sewing Machine.....	A. B. Irving.....	24,216	412	308
Sewing Machine.....	J. S. Moody.....	24,324	427	325
Sewing Machine.....	J. S. McCurdy.....	24,395	438	336
Sewing Machine.....	H. H. Goodwyn.....	24,455	447	345
Sewing Machine.....	W. Grout.....	24,629	472	371
Sewing Machine.....	G. Hensel.....	24,737	487	389
Sewing Machine.....	S. Parker.....	24,780	493	395
Sewing Machine.....	L. Planer.....	24,847	502	407
Sewing Machine.....	E. A. Goodes and E. L. Miller.....	24,863	504	409
Sewing Machine.....	W. Hall.....	24,870	505	410
Sewing Machine.....	J. W. Morton.....	24,881	506	412
Sewing Machine.....	I. M. Singer.....	24,892	507	414
Sewing Machine.....	H. W. Hayden.....	24,937	513	421
Sewing Machine.....	D. Kelsey.....	24,939	514	422
Sewing Machine.....	G. L. Jencks.....	24,973	520	427
Sewing Machine.....	J. P. Emswiler.....	25,002	524	432
Sewing Machine.....	C. N. Farr.....	25,004	524	432
Sewing Machine.....	J. Harrison, jr.....	25,013	526	433
Sewing Machine.....	W. F. Pratt.....	25,043	530	437
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Sewing Machine.....	W. T. Barnes.....	25,084	537	444
Sewing Machine.....	E. Booth.....	25,087	537	445
Sewing Machine.....	O. N. Stoddard.....	25,223	557	469
Sewing Machine.....	J. Hinkley.....	25,231	557	470
Sewing Machine.....	J. Harrison, jr.....	25,262	552	475
Sewing Machine.....	J. W. Hardie.....	25,331	571	487
Sewing Machine.....	J. S. Buell.....	25,381	579	496
Sewing Machine.....	J. C. Silvy.....	25,471	591	512
Sewing Machine.....	K. Vogel.....	25,692	623	551
Sewing Machine.....	W. O. Grover, W. E. Baker, and O. B. Potter.	25,730	629	559
Sewing Machine.....	F. G. Woodward.....	25,782	636	569
Sewing Machine.....	O. D. Barrett.....	25,785	637	570
Sewing Machine.....	W. T. Barnes.....	25,876	649	587
Sewing Machine.....	C. O. Crosby.....	25,885	651	589
Sewing Machine.....	T. J. W. Robertson.....	25,913	655	595
Sewing Machine.....	I. B. Sawyer and T. Alsop.....	25,918	656	596
Sewing Machine.....	W. G. Budlong.....	25,946	660	602
Sewing Machine.....	W. A. Fosket and E. Savage.....	25,963	663	605
Sewing Machine.....	H. Hudson.....	25,968	663	606
Sewing Machine.....	W. C. Hieks.....	26,035	673	619
Sewing Machine.....	I. M. Rose.....	26,057	676	624
Sewing Machine.....	C. Seofield.....	26,059	677	624
Sewing Machine.....	E. C. Singer.....	26,130	687	639
Sewing Machine.....	W. Pearson.....	26,201	698	654
Sewing Machine.....	T. J. W. Robertson.....	26,205	698	656
Sewing Machine.....	J. S. McCurdy.....	26,234	703	661
Sewing Machine.....	E. Clark.....	26,336	716	679
Sewing Machine.....	C. W. Dickinson.....	26,346	718	681
Sewing Machine.....	G. W. Mitchell.....	26,366	721	684
Sewing Machine.....	C. Miller.....	26,462	735	702
Sewing Machine.....	J. Thorne.....	26,536	746	715
Sewing Machine.....	J. Harrison, jr.....	26,586	752	723
Sewing Machine.....	J. Rowe.....	26,638	759	731
Sewing Machines, attachment to treadles of.....	H. B. Knowles.....	25,652	617	544
Sewing Machines, Cord Guides for.....	A. Golar.....	25,255	561	474
Sewing Machines, Guider for.....	O. G. Brady.....	26,561	749	719
Sewing Machines, Guides for.....	L. W. Serrell.....	26,207	699	656
Sewing Machines, hemming Guides for.....	W. Clemmons.....	23,079	241	97
Sewing Machines, hemming Guides for.....	D. Barnum and S. G. Tyler.....	24,088	393	288
Sewing Machines, hemming Guides for.....	S. E. Blake and T. Johnston.....	25,715	626	556
Sewing Machines, Thread tension for.....	E. L. Pratt.....	26,537	746	715
Shackles of Telegraph Cables.....	G. Gilmour.....	22,948	220	78
Shaft, driving, for mills, &c.....	J. Massey.....	24,475	450	348
Shaft, Propeller and Paddle Wheel.....	W. Peters.....	26,290	710	670
Shafts, Safety Cage for coal.....	D. Glover.....	24,296	423	321
Shafting for endless horse powers.....	T. Sharp.....	23,954	373	265
Shank Laster.....	D. G. Chase.....	25,995	667	611
Shearing Sheep.....	W. F. Morgan.....	23,187	257	114
Shears.....	J. H. Roomc.....	25,140	544	453
Shears.....	M. Irion.....	25,303	567	482
Shears for separating paper.....	J. A. Wilkinson.....	25,298	566	481
Shears, Tailor's.....	R. Heiniseh.....	25,508	596	519
Shelves, Portable.....	J. S. Voorheis.....	25,927	657	598
Shingle.....	J. Sweetser.....	25,288	565	479
Shingles, jointing.....	S. C. Coffin.....	24,283	422	319
Shingles, sawing.....	W. H. Auld.....	23,887	365	253
Shingles, sawing, from the bolt.....	A. B. McCans.....	22,567	159	17
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Shingle Machine.....	W. P. Valentine.....	23,327	277	140
Shingle Machine.....	H. H. Low.....	23,692	336	214
Shingle Machine.....	W. Kirkpatrick.....	23,846	359	244
Shingle Machine.....	C. G. Conover.....	24,445	445	343
Shingle Machine.....	F. Godfrey.....	24,733	486	388
Shingle Machine.....	L. Beaudreau.....	24,985	521	429
Shingle Machine.....	N. Waterbury.....	25,293	566	480
Shingle Machine.....	H. Miller.....	25,433	586	505
Shingle Machine.....	W. H. Bitzer.....	25,945	660	601
Shingle Machine.....	J. E. Sturdy.....	26,302	712	673
Shingle Machine.....	E. R. Morrison.....	26,463	736	702
Shingle Machine, Rotary.....	A. Olcott.....	23,109	245	101
Shingle Machines, clamping bolts in circular sawing.	K. Freeman.....	24,111	396	292
Shingle Machines, feeding the bolt in.....	O. Stoddard.....	26,533	745	714
Ships.....	H. Hirsch.....	25,198	553	463
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Ships and other navigable Vessels.....	R. Germain.....	26,099	683	633
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Ship's Warping Chock.....	D. Knowlton .....	24,810	497	401
Shirt .....	L. S. Ballou, jr .....	25,937	659	600
Shirt .....	C. Minzisheimer.....	26,043	674	621
Shirt Stud.....	D. Morris .....	24,884	507	413
Shirt Stud.....	H. Simon .....	24,891	507	414
Shirt Stud.....	D. Wilcox .....	25,928	657	598
Shirt Studs, Fastening for .....	B. Clayton .....	23,292	272	133
Shirt Studs, Fastening for .....	B. Clayton .....	23,551	313	192
Shirt Studs, Fastening for .....	H. Simon .....	23,617	323	199
Shirt Studs, Fastening for .....	B. Clayton .....	25,386	579	496
Shoe for grain separators .....	H. Aldridge.....	24,084	392	287
Shoes and Gaiters .....	A. Hay .....	26,493	740	707
Shoe Horn.....	D. E. Eaton .....	22,714	182	41
Shot, manufacture of.....	C. B. Tatham .....	23,202	259	116
Shot and Shells, Rotating.....	J. B. Hyde .....	23,468	300	171
Shovel, Grain .....	D. B. Rogers.....	23,949	373	264
Shovel, Sifting.....	P. A. Sabbaton .....	22,514	151	8
Show Case .....	T. L. Ball .....	24,919	511	419
Shuttle for sewing machines .....	G. W. Mitchell.....	26,511	742	710
Shutter Operator.....	J. K. Barker.....	23,541	311	184
Sickle Guard for harvesters.....	A. Shogren .....	24,957	516	424
Sieve, Coal.....	S. T. Savage .....	24,761	490	392
Sifter, Ash .....	A. Cummings.....	23,158	252	108
Sifter, Coal.....	M. Battel.....	25,877	650	587
Sifter, Coal.....	J. B. Buckland .....	26,474	737	704
Sight for fire-arms .....	H. W. Colvin.....	25,389	580	497
Sight, Adjustable, for fire-arms .....	R. S. Lawrence.....	22,958	222	79
Sight, Back, of fire-arms .....	E. Maynard .....	25,663	619	546
Signals for firemen.....	H. D. Treadwell.....	23,873	363	249
Signals, Pyrotechnic Night .....	G. A. Lillicudahl .....	23,529	309	182
Signals, Pyrotechnic Night .....	M. J. Coston .....	23,536	310	183
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Sizing for colored paper.....	C. Williams.....	22,836	203	.....
Skates .....	N. C. Sandford .....	22,895	213	70
Skates .....	T. W. Brown .....	22,932	218	75
Skates .....	M. Vandenburg.....	23,129	248	104
Skates .....	D. H. Shirley.....	23,615	323	198
Skates .....	I. W. and F. M. Noreross.....	23,696	337	215
Skates .....	U. Josephs .....	23,844	358	243
Skates .....	E. Norton .....	25,035	529	436
Skates .....	A. Wheeler .....	25,295	566	480
Skates .....	J. McCluskey, jr.....	25,665	619	547
Skates .....	J. P. McLean.....	25,751	632	563
Skates, attaching, to boots.....	T. S. Whitman.....	25,540	746	715
Skates, Fastening.....	E. Behr .....	23,344	280	143
Skates, Fastening.....	J. Charlton.....	23,349	280	144
Skates, Fastening.....	T. P. Costello .....	23,341	717	680
Skate Fastening .....	C. Chevey.....	23,822	355	239
Skate Fastening .....	J. H. Coe and W. B. Sniffen .....	23,826	355	240
Skate Fastening .....	E. Behr .....	23,893	366	254
Skate Fastening .....	E. Wirths .....	26,542	746	716
Skate Straps.....	E. Behr and L. Froelich.....	25,993	667	611
Skins, Kid, dressing .....	T. Newhall .....	24,139	400	296
Skins, turning .....	J. Mayer .....	24,814	497	401
Skirt, Skeleton .....	E. F. Woodward.....	25,073	535	443
Skirt, Skeleton .....	C. Neumann.....	25,136	544	452
Skirt, Skeleton .....	J. Wesley .....	25,374	578	494
Skirt, Skeleton .....	J. Draper.....	25,701	624	553
Skirt, Skeleton .....	C. Neumann.....	25,976	665	608
Skirt, Skeleton .....	C. Neumann .....	26,514	742	710
Skirts, Hooped, making.....	C. Neumann .....	25,163	548	458
Skirts, Hooped, Fastening for .....	A. W. Hale.....	25,260	561	474
Skirts, Ladies' Hoop.....	F. Hull .....	22,875	210	67
Skirts, Ladies' Hoop.....	J. Holmes .....	23,841	358	243
Skirt Supporter.....	M. Chambers .....	24,720	485	385
Skirt Supporter.....	J. McNeven .....	25,905	654	593
Skirt Supporter.....	H. F. Brown .....	26,473	737	704
Skirt Supporter.....	D. B. Hale .....	26,491	739	707
Skiving Machine .....	J. A. Safford and J. W. Chase....	25,444	587	507
Slates, preparing and mounting .....	H. Beche.....	23,343	280	143
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Sled Runner.....	J. M. Spooner .....	24,412	440	338
Sleeve Fastener .....	R. L. Allen.....	25,239	703	662
Sluice for water wheels .....	J. Temple.....	22,901	213	71
Smoke Stack for engine houses.....	H. Clayton .....	23,825	355	239
Smoking Tube.....	W. M. Bryant.....	25,803	639	573
Smut Machine.....	E. M. Clark .....	23,490	147	3
Smut Machine.....	D. P. Shaw and F. C. Brown.....	23,119	247	102
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Smut Mill .....	C. Frank .....	22,720	183	42
Smut Mill .....	G. H. Starbuck and L. D. Gilman.	23,405	289	157
Soap .....	W. Dawes .....	24,011	382	.....
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Soap, Composition for making .....	G. W. Tolhurst.....	26,306	712	.....
Soap, Frames for the manufacture of .....	R. P. Thomas .....	24,593	466	365
Soap, making.....	A. Miller .....	25,517	598	.....
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Soda Water Apparatus.....	T. Daniels.....	22,549	156	14
Soda Water Apparatus.....	E. Bigelow .....	22,697	180	38
Sofa Frame.....	P. Born .....	22,619	168	25
Sole, Shoe .....	W. J. Lyman .....	24,317	426	324
Sole, India Rubber, for boots and shoes .....	C. McBurney.....	23,479	301	173
Sole, Water-proof .....	J. W. Smith.....	24,180	407	303
Soles of Boots and Shoes, chamfering .....	W. Johnson.....	23,585	318	191
Soles of Boots and Shoes, channelling and edging.	M. Wesson.....	24,182	407	303
Soles, Boot and Shoe, cutting .....	G. W. Parrott and C. K. Bradford.	26,049	675	622
Soles of Boots and Shoes, cutting .....	A. Warren.....	23,516	307	179
Soles, Boot and Shoe, planing the edges of.....	H. Saucrbier.....	24,494	453	350
Soles of Boots and Shoes, smoothing the.....	O. Gilmore .....	23,674	333	210
Soles, cutting .....	J. S. Shattuck.....	24,141	401	297
Soles, cutting .....	J. Thompson .....	24,165	404	300
Soles, cutting Leather into .....	C. H. Griffin.....	26,350	718	682
Soles, Wooden, rebating .....	J. Kimball.....	26,113	685	636
Sole Cutting Machine.....	A. P. Howard and A. Rowe, jr....	22,873	209	67
Sole Cutting Machine.....	J. Batchelder .....	23,889	365	253
Sole Cutting Machine.....	W. Munroe .....	25,758	633	564
Soot and Spark Arrester.....	W. A. Peaslee.....	22,887	201	69
Sounding Apparatus, Deep Sea.....	A. Jouan .....	22,877	210	67
Sounding Apparatus, Deep Sea.....	W. P. Trowbridge.....	23,726	341	220
Sounding Apparatus, Deep Sea.....	G. W. McCord .....	25,547	602	526
Sowing Machine. ....	J. B. Duane .....	23,558	314	193
Sowing Machine.....	S. P. Hubbell.....	24,391	437	335
Sowing Machine for guano, &c.....	J. M. Leach.....	22,505	150	6
Spading Machine.....	G. B. Field .....	22,496	148	4
Spading Machine, Rotary.....	G. W. B. Gedney.....	22,867	208	66
Spading Machine, Steam.....	J. W. Goodell.....	23,767	347	228
Spark Arrester.....	J. F. Page .....	23,602	321	195
Spark Arrester.....	I. E. Jones .....	25,650	617	544
Spark Arrester and Chimney of Locomotives ..	W. A. Peaslee and J. I. D. Lilley.	26,373	722	686
Spark Extinguisher .....	J. Keniston.....	23,252	266	126
Speaking Tubes for ships .....	D. S. Neal.....	23,261	268	128
Spectacles.....	J. Beurt and W. W. Willard.....	22,485	146	2
Spectacle Frame.....	T. S. Noel.....	22,572	160	18
Spectacle Frame.....	W. H. Peckham.....	26,444	733	698
Speed, Varying .....	J. A. Stoddard.....	24,159	403	300
Speeder and Stretcher Flyers.....	J. N. Sawtell.....	24,406	439	337
Spermatic Ring.....	D. Gibbons .....	22,796	197	55
Spike, Hook-headed .....	G. W. R. Bayley.....	26,343	717	680
Spinal Curvature, Relieving .....	C. F. Taylor.....	26,628	758	729
Spindles and Flyers.....	C. E. Brown.....	26,636	759	730
Spinning Flyers.....	D. F. Smith .....	23,868	362	248
Spinning Frame, Ring Traveller.....	J. W. Wattles.....	24,169	405	301
Spinning Machinery, Cotton .....	E. Leigh .....	25,839	644	581
Spinning Machines, Drawing Heads for.....	J. E. Crowell.....	24,010	382	274
Spinning Mechanism, Ring and Traveller.....	J. W. Wattles.....	24,681	479	380
Spinning Mule, Self-acting.....	J. Wright .....	24,690	480	381
Spinning Mule Carriage Tops, cleaning .....	R. Greaves .....	24,297	424	321
Spirit Level .....	T. S. Scoville .....	25,446	588	508
Splice for bar rails.....	W. M. C. Cushman.....	22,785	194	53
Splice for Railroad Track Bars .....	C. Hilton.....	23,026	233	89
Spoke Machine.....	N. Olney and C. H. Kellogg .....	22,509	150	7
Spoke Machine.....	L. J. Diekason and J. Frazee.....	22,633	170	27
Spoke Shave .....	B. Tolman .....	23,927	370	259
Spokes, tenoning .....	W. Thomas .....	22,903	214	71
Spokes of Wheels, attaching .....	J. Y. Schelly .....	26,447	733	699
Spoons, Iron, manufacture of.....	G. I. Mix.....	25,518	598	521
Spoons, Making .....	J. Seymour.....	25,765	634	566
Spring, Air.....	S. G. Randall.....	23,497	304	176
Spring, Air, for Cars .....	G. M. Alsop .....	24,184	407	303
Spring, Cylindrical Balance, of Watches .....	A. L. Dennison.....	22,550	157	14
Spring, Bed .....	S. D. Newbro .....	25,577	606	531
Spring, Bed Bottom.....	H. M. Scott .....	26,235	703	661
Spring, Car.....	A. B. Davis .....	22,941	219	77
Spring, Car.....	D. B. Rogers and J. A. Wood.....	24,888	507	413



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Spring, Car.....	W. F. Converse.....	26,019	671	616
Spring, Car.....	W. E. Cooper.....	26,068	678	626
Spring for Cars, India Rubber.....	T. B. De Forest.....	25,100	539	446
Spring, Car, Vulcanized Rubber.....	H. W. Beins.....	24,693	481	381
Spring, Car and Carriage.....	P. G. Gardiner.....	23,766	347	228
Spring, Carriage.....	E. Maynard.....	23,102	244	100
Spring, Carriage.....	H. S. Clark.....	25,246	560	472
Spring, Carriage.....	S. P. Pect.....	25,439	587	507
Spring, Door.....	J. Barkley.....	22,540	155	12
Spring, Door.....	J. S. Gray.....	22,554	157	15
Spring, Door.....	G. L. Hudson.....	22,874	209	67
Spring, Door.....	A. S. Blake.....	23,819	355	238
Spring, Door.....	O. D. Barrett.....	25,602	610	535
Spring, Elastic.....	J. W. Lawrence.....	26,461	735	702
Spring, Friction, for window sash.....	E. D. Williams.....	24,254	417	314
Spring, Truss.....	J. W. Riggs.....	22,674	176	34
Spring, Upholstery.....	C. A. and S. W. Young.....	24,259	418	315
Springs as a Motive Power.....	G. W. Morgan.....	23,260	267	127
Springs, bending and setting.....	J. Evans.....	23,018	231	88
Springs, Elliptic, connecting to vehicles.....	J. W. Lawrence.....	26,461	735	702
Springs, Steel, Tempering.....	J. Jenkinson.....	23,142	250	106
Springs, Upholstery, making.....	J. Harrison, jr.....	24,557	461	360
Springs, Watch, measuring strength of.....	J. W. Bottum.....	24,366	434	332
Springs, Watch, equalizing tension of.....	J. J. Parker.....	23,308	274	136
Spring Balance for sashes.....	F. H. Smith.....	24,154	403	299
Spring Snap for Rcins.....	M. X. Tschus.....	24,677	478	379
Stairs, Revolving.....	N. Ames.....	25,076	535	443
Stall for horses on shipboard.....	S. Samuels.....	23,045	236	92
Stamp, lifting, for crushing Orcs.....	D. E. Rice.....	24,578	464	363
Stamp, Post Office Hammer.....	E. Miller.....	23,307	274	136
Stamps, Post, marking.....	M. P. Norton.....	25,036	529	436
Starch, manufacture of.....	W. Duryea.....	22,789	195	54
Starch, &c., packing.....	I. A. Brownell.....	26,084	680	629
Stave Jointing Machine.....	J. K. Derby.....	25,956	662	604
Stave Machine.....	J. Decker.....	25,603	610	536
Stave Machine.....	H. Hays.....	25,639	615	542
Stave Machine.....	J. Little.....	26,505	741	709
Stave Machine, Rotary.....	G. Starkweather.....	23,274	269	130
Stave Machines, Chopping Block for.....	A. H. Crozier and C. Carrier.....	23,356	281	145
Stave Machines, drawing dust from.....	M. Brayer.....	23,550	313	186
Staves, cutting, from the block.....	J. Little.....	23,181	256	112
Staves, jointing.....	H. Benter.....	23,007	230	86
Staves, jointing.....	J. Troop.....	23,514	307	179
Staves, jointing.....	J. G. Stephenson.....	24,499	453	351
Staves, riving, from the block.....	L. Lyman, J. P. Hodgkins, and E. Rawson.....	22,882	211	68
Staves, sawing.....	R. Densmore.....	25,321	570	485
Staves, sawing, from the bolt.....	H. H. Evarts.....	24,079	392	286
Steam as a Motor, applying.....	R. Blair.....	26,009	669	614
Steam as a Motor to City Cars.....	W. Darker.....	26,230	702	660
Steam, generating.....	T. Moore.....	25,907	654	594
Steam, superheating.....	G. A. Stone.....	23,958	374	265
Steam, warming by.....	C. A. Wilson.....	24,896	508	414
Steam Boiler.....	E. Kendall.....	23,030	233	90
Steam Boiler.....	J. G. E. Larned.....	23,093	243	98
Steam Boiler.....	E. M. Ivens.....	23,470	300	171
Steam Boiler.....	G. Menzel.....	23,482	302	173
Steam Boiler.....	S. Pierce.....	23,490	303	175
Steam Boiler.....	E. Lynch.....	23,593	320	193
Steam Boiler.....	E. Whiteley.....	23,733	342	221
Steam Boiler.....	L. Lefebvre.....	23,848	359	244
Steam Boiler.....	B. L. Griffith.....	24,117	397	293
Steam Boiler.....	W. Oldman.....	24,326	427	325
Steam Boiler.....	R. Hooper.....	25,017	526	434
Steam Boiler.....	J. Harrison, jr.....	25,640	615	542
Steam Boiler.....	M. S. Bringier.....	25,802	639	573
Steam Boiler.....	S. H. Head.....	26,002	668	612
Steam Boiler.....	E. Crane.....	26,021	671	616
Steam Boiler.....	P. N. Burke.....	26,333	716	678
Steam Boiler.....	B. F. Campbell.....	26,334	716	678
Steam Boiler Furnace.....	J. Amory.....	23,650	329	205
Steam Boilers, blowing off.....	J. H. Washington.....	22,757	189	48
Steam Boilers, Feed Apparatus for.....	T. Armitage.....	25,617	612	538
Steam Boilers, Feed Water Apparatus for.....	J. B. Thompson.....	25,290	565	479
Steam Boilers, Feed Water Apparatus for.....	W. Barnes.....	25,360	575	492
Steam Boilers, Feed Water Apparatus for.....	W. P. Curry.....	25,811	640	575
Steam Boilers, Foam Collector for.....	T. G. Gardner.....	25,328	571	486
Steam Boilers, heating.....	D. Hess.....	24,637	473	372
Steam Boilers, heating feed water of.....	S. Lamon and W. S. Gaskill.....	23,588	319	192
Steam Boilers, heating feed water of.....	J. T. Brooks.....	24,094	394	289



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Steam Boilers, purifying the feed water of.....	J. Guhmann.....	23,244	265		124	
Steam Boilers, skinning the water in.....	A. M. Sprague.....	23,320	276		138	
Steam Boilers, Safety Apparatus for.....	L. E. Lincoln.....	25,655	618		545	
Steam Boilers, supply of water to.....	I. L. Colman.....	23,229	233		122	
Steam Boilers, Water Indicator for.....	J. L. Frisbie.....	24,017	333		275	
Steam Boilers, Water Indicator for.....	G. Lutz.....	25,516	597		521	
Steam Engine.....	G. Sandford.....	22,981	226		740	
Steam Engine.....	J. A. Conover.....	23,450	297		167	
Steam Engine.....	J. Black.....	23,524	308		181	
Steam Engine.....	E. Lyneh.....	23,594	320		194	
Steam Engine.....	W. W. Burgoyne.....	23,754	345		226	
Steam Engine.....	G. F. Lombard.....	23,992	379		271	
Steam Engine.....	J. A. Whipple.....	23,993	379		271	
Steam Engine.....	G. H. Corliss.....	24,618	470		369	
Steam Engine.....	H. Bertolet.....	25,480	592		514	
Steam Engine.....	D. Barnum.....	25,798	639		572	
Steam Engine.....	J. Cumming.....	25,955	662		603	
Steam Engine, Condensing.....	J. Sutton.....	24,246	416		313	
Steam Engine for land carriages.....	R. E. Rogers.....	26,619	756		728	
Steam Engine, Marine.....	W. Kennish, jr.....	22,736	186		44	
Steam Engine, Oscillating.....	J. A. Reed.....	24,821	499		403	
Steam Engine, Rotary.....	H. B. Thomas.....	22,832	203		60	
Steam Engine, Rotary.....	M. Smith.....	23,956	374		265	
Steam Engine, Rotary.....	J. I. Montjoy and J. B. Sawyer.....	25,133	543		451	
Steam Engine, Rotary.....	L. Johnson.....	26,190	697		652	
Steam Engines, heating the feed water of.....	J. M. White.....	25,296	566		480	
Steam Engines, oiling cylinders, &c., of.....	C. A. Stebbens.....	24,606	468		368	
Steam Engines, regulating draft of.....	W. S. Hudson.....	22,808	199		56	
Steam Engines, Water Heater for.....	J. Speers.....	26,299	711		672	
Steam Generator.....	A. B. Latta.....	23,589	319		192	
Steam Generator.....	M. Battel.....	25,085	537		445	
Steam Generator.....	W. M. Storm.....	25,147	545		454	
Steam Generator, Portable.....	W. C. Grimes.....	23,528	309		182	
Steam Pressure Indicator, Alarm.....	S. W. Brown.....	25,486	593		515	
Steam Pressure Regulator.....	A. P. Pitkin.....	24,402	439		337	
Steam Radiator.....	C. A. Wilson.....	24,897	508		414	
Steam Trap.....	E. T. Jenkins and F. P. Polley.....	25,510	597		520	
Steam Vessels, construction of.....	J. Montgomery.....	23,105	245		100	
Steam Vessels, extinguishing fires in.....	W. Arthur.....	23,435	294		163	
Steamer, Side Wheel.....	A. McD. Sprague.....	23,507	306		178	
Steel, manufacture of.....	F. A. Lohage.....	22,687	178		.....	
Steel, manufacture of.....	F. A. Lohage.....	23,139	250		.....	
Steel, Cast, manufacturing tools from.....	P. G. Gardiner.....	22,864	205		.....	
Steel, Cast, manufacturing tools from.....	P. G. Gardiner.....	22,865	208		.....	
Steels.....	T. J. Mayall.....	26,277	708		668	
Steels for sharpening knives, making.....	S. Lee.....	23,982	377		269	
Steering Apparatus.....	G. W. Robinson.....	23,265	268		128	
Steering Apparatus.....	W. Goodsoe.....	24,351	431		329	
Steering Apparatus.....	H. Higgins.....	25,734	629		559	
Steering Apparatus.....	J. S. Lake.....	25,836	644		580	
Steering Apparatus.....	N. Snow, jr.....	25,983	666		609	
Steering Apparatus for barges.....	M. Lytle.....	25,429	585		506	
Steering Apparatus, Ship's.....	W. Beers.....	23,150	251		107	
Steering Apparatus, Ship's.....	D. J. Wilcoxon.....	23,534	310		183	
Stencil, Changeable.....	J. Bigelow.....	25,481	593		514	
Stereoscope.....	W. Loyd.....	23,257	267		127	
Stereoscopic Apparatus.....	J. Lee.....	22,838	204		61	
Stereoscopic Apparatus.....	T. C. Roche.....	26,525	744		713	
Stereoscopic Case.....	A. Beckers.....	23,543	312		184	
Stereoscopic Instruments.....	A. Beckers.....	24,855	503		408	
Stereoscopic Pictures, Cases for.....	H. Glosser.....	24,115	397		292	
Stereoscopic Pictures, displaying.....	J. Beckel.....	22,695	180		37	
Stereoscopic Pictures, exhibiting.....	A. Beckers.....	23,438	295		164	
Stereoscopic Pictures, exhibiting.....	S. Perry.....	24,327	427		325	
Stereotype Plates, casting.....	W. Blanchard.....	23,009	230		87	
Stereotype Plates, punching.....	D. B. Ray.....	24,662	476		377	
Sticks, tapering.....	H. S. Hall, A. D. Hunt, and C. J. Winchester.....	23,570	316		189	
Stirrup.....	W. J. Hamersley.....	23,572	316		189	
Stitches, Single Thread.....	J. S. McCurdy.....	23,984	378		270	
Stone, Artificial.....	I. L. G. Ward.....	24,769	491		.....	
Stone, breaking, for roads.....	T. Adams.....	24,783	493		395	
Stone, breaking, for roads.....	I. Scoville.....	25,371	577		494	
Stone, dressing.....	H. Chancey.....	25,093	538		446	
Stone, sawing.....	A. T. Merriman.....	24,478	450		348	
Stones, &c., from clay, separating.....	C. Bamberg and R. Blaser.....	23,888	365		253	
Stones, Machine for holding.....	E. B. Knight.....	25,268	563		476	
Stone Cutting Machine.....	G. Morgan.....	22,569	160		17	
Stool, Camp.....	E. B. Belknap.....	25,555	603		528	
Stove.....	P. Shreiner.....	22,754	189		47	



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Stove	P. Dodge	22,787	195	53
Stove	N. W. Northrup	22,886	211	68
Stove	J. D. Bruner	22,933	218	76
Stove	D. N. Martin	22,963	222	80
Stove	F. Gilliland	23,363	282	147
Stove	H. R. Robbins	23,396	288	154
Stove	F. E. Tupper	23,412	291	158
Stove	T. J. Whitehead	23,418	292	159
Stove	G. J. Kingsbury	23,587	319	192
Stove	P. P. Stewart	23,622	324	200
Stove	D. Stuart	23,624	325	200
Stove	S. B. Sexton	23,716	339	218
Stove	W. H. Smith	23,720	340	219
Stove	R. W. Belson	23,748	344	225
Stove	R. W. Belson	23,749	344	225
Stove	J. V. and H. V. Barringer	23,963	375	266
Stove	J. G. Widmann	23,970	375	267
Stove	R. B. Pullan	24,148	402	298
Stove	F. Bueher	24,192	409	304
Stove	G. H. Russell	24,241	416	312
Stove	C. Harris and P. W. Zoiner	24,352	431	329
Stove	W. I. Cantelo	24,539	459	357
Stove	M. L. Horton	24,559	461	360
Stove	J. Henderson	24,634	472	372
Stove	S. E. Hewes	24,738	487	388
Stove	P. N. Burke	24,791	494	397
Stove	R. Dawes and W. C. Choate	24,798	495	398
Stove	J. D. Field	24,800	496	399
Stove	J. G. Treadwell	24,832	500	404
Stove	J. G. Treadwell	24,833	500	405
Stove	J. C. Henderson	24,844	501	406
Stove	J. Magee	25,128	543	450
Stove	J. Scheeper	25,143	545	453
Stove	G. S. G. Spence	25,222	556	468
Stove	E. M. Manigle	25,343	573	489
Stove	D. G. Stafford	25,351	574	491
Stove	J. Martino	25,365	576	493
Stove	T. Shaw	25,549	602	527
Stove	O. Paddock	25,579	607	532
Stove	C. L. Whitney	25,596	609	534
Stove	J. G. Abbott and A. Lawrence	25,612	611	537
Stove	D. W. C. Farrington	25,931	658	598
Stove	J. G. Treadwell	25,987	666	609
Stove	C. C. Schieferdecker	26,058	676	624
Stove	J. G. Treadwell	26,308	712	673
Stove	A. Ransom	26,522	744	712
Stove	J. G. Treadwell	26,631	758	729
Stove, Coal	R. D. Granger	22,643	171	29
Stove, Cooking	P. P. Stewart	22,681	177	35
Stove, Cooking	J. V. Meigs	23,185	257	113
Stove, Cooking	R. Peterson	23,191	257	114
Stove, Cooking	J. Cox	23,829	356	240
Stove, Cooking	H. G. Leonard	23,983	377	270
Stove, Cooking	S. S. Jewett	24,028	385	277
Stove, Cooking	R. D. Granger	25,193	552	462
Stove, Cooking	D. Stuart	25,451	588	509
Stove, Cooking	J. L. Meafoy	25,573	606	531
Stove, Cooking	P. Getz	25,637	615	542
Stove, Cooking	S. Smith	26,298	711	672
Stove, Foot	J. H. Maydole	24,813	497	401
Stove, Franklin	D. Stuart	22,518	152	8
Stove, Gas-burning	J. Spear	23,318	276	138
Stove, Ship's	G. W. Slater	26,528	744	713
Stoves, Cooking, Damper for	L. L. Thomas	24,849	502	407
Stoves, Cooking, feeding fuel to fire boxes of	M. C. Cronk	25,930	658	598
Stoves, Cooking, moulding Covers for	G. W. Gardner	23,022	232	89
Stoves, Cooking, Pot-hole Covers for	L. E. Clow	23,332	278	141
Stoves, Ranges, &c	J. M. Read	26,054	676	623
Stove Cover	I. G. Johnson	23,584	318	191
Stove Covers, moulding	D. L. Stiles	25,707	625	554
Stove Cover Lifter	P. P. Stewart	23,625	325	200
Stove Pipe	M. C. Chamberlin	24,100	395	290
Stove Pipe, Elbow for	A. K. Tupper	24,834	500	405
Stove Pipe, Elbow for	N. Bedell	24,840	501	406
Stove Plates, Cover for	J. H. Gould	25,466	590	511
Stove Polish Mixer and Seraper	J. C. Reed	23,784	349	231
Studs and Sleeve Fastener	F. A. Finn	25,891	652	591
Stump Extractor	J. L. Knowlton	22,561	158	16
Stump Extractor	E. B. Hall	22,917	216	73
Stump Extractor	G. D. Harris	23,464	299	170
Stump Extractor	E. Wills	25,070	534	443



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Stump Extractor.....	C. B. Pate.....	26,056	676	624
Stump Extractor.....	E. Hosmer.....	26,498	740	708
Stump Extractor and Press.....	G. Kenny.....	23,688	335	213
Stumps, extracting, &c.....	H. Rieman, jr.....	23,608	322	197
Sugar, cracking.....	J. H. Murrill.....	24,910	510	417
Sugar, crushing and mixing.....	F. Ebeling.....	24,204	410	306
Sugar, defecating.....	R. A. Stewart.....	24,961	517	425
Sugar, manufacture of.....	E. Pesier.....	22,578	161	.....
Sugar, refining.....	J. Aspenwall.....	26,007	669	613
Sugar Cane, cutting.....	A. Philipp.....	24,487	452	350
Sugar Cane, stripping, &c.....	L. E. Porter.....	24,149	402	298
Sugar Cane and Bagasse Carriers, &c., fastening slats on.	C. Neames.....	23,777	348	230
Sugar Juice, evaporating.....	A. Jouan.....	22,732	185	44
Sugar Juice, evaporating.....	J. Smart.....	23,270	269	129
Sugar Juice, evaporating.....	E. Duchamp.....	26,574	751	721
Sugar Juices, &c., clarifying and refining.....	H. G. C. Paulsen.....	26,050	675	.....
Sugar Juices, defecating.....	M. H. Nicolas & L. J. Champagne.....	24,572	463	.....
Sugar Juices, defecating.....	A. H. Tait.....	24,592	466	.....
(See, also, <i>Cane Juices</i> and <i>Saccharine Juices</i> .)				
Sulphur, precipitated, manufacture of.....	D. E. Paynter.....	23,141	250	.....
Sulphurets, Metalliferous, treating.....	H. Holland.....	26,590	753	.....
Surgical Splints.....	D. Abl.....	23,996	380	.....
Surveying Instrument.....	G. Windle.....	22,598	164	21
Surveying Instrument.....	S. R. Seibert.....	25,678	621	549
Surveying Instrument.....	R. Root.....	26,621	757	728
Surveying Instrument for determining inaccessible heights and distances.	M. Ingersoll.....	22,876	210	67
Surveyor's Chain.....	J. M. Grumman.....	23,680	334	211
Swage, Adjustable Dental.....	E. H. Danforth.....	23,293	272	133
Sweeping Machine.....	S. W. Smith.....	22,678	177	34
Switch, Railroad.....	T. Mayhew.....	23,931	370	261
Switch, Railroad.....	J. Youngman.....	24,074	391	286
Switch, Railroad.....	J. Beachler.....	24,839	501	406
Switch, Railroad.....	T. Dougherty.....	25,101	539	447
Switch, Railroad.....	F. H. Joyner.....	26,270	707	667
Switch, Railroad Safety.....	G. S. Appleton.....	22,844	205	62
Switches on Railroads, dispensing with.....	W. Wharton, jr.....	26,454	734	701
Switches, Railroad, operating.....	C. Foster.....	24,384	436	334
Switch Stand for railroads.....	T. Dougherty.....	25,396	581	498
Syringe, Barrel.....	S. P. Hart.....	25,409	582	500
Syringe, Elastic Bulb.....	J. J. Essex.....	25,186	551	460
Syringe, Elastic Enema.....	F. B. Richardson.....	26,204	698	655
Syringing Apparatus.....	E. Bagnicki.....	22,615	167	24
Syrup-charging Apparatus.....	W. C. Turner.....	23,515	307	179
T.				
Table, Billiard.....	F. Fedderke.....	23,458	298	169
Table, Billiard.....	J. G. Kappner.....	26,112	685	635
Table, Bread making.....	W. K. Wyckoff.....	23,283	271	132
Table, Extension.....	T. Gray.....	23,219	261	120
Table, Extension.....	A. Isky.....	23,469	300	171
Table, Extension.....	L. Meyer.....	26,116	685	636
Table, Invalid's.....	J. M. Allen.....	23,068	239	95
Table, Ironing.....	J. F. Galley.....	24,929	512	420
Table, Shoemaking.....	T. Carpenter.....	26,011	670	614
Tables, Tops for.....	N. Sargent.....	25,529	599	523
Table and Clothes Dryer combined.....	E. Culver.....	24,694	481	382
Table and Clothes Dryer combined.....	L. Pagin.....	25,669	620	548
Tablet, Writing.....	G. Munger.....	25,576	606	.....
Tackle Block.....	I. E. Palmer.....	25,978	665	608
Tanks, Lining, for fatty acids.....	M. Werk.....	26,221	701	659
Tanning.....	L. C. England.....	22,717	183	41
Tanning.....	H. Johnson.....	23,471	300	.....
Tanning.....	J. Brainerd and W. H. Burridge.....	24,278	421	.....
Tanning.....	J. Gove.....	24,457	447	345
Tanning.....	J. Brainerd and W. H. Burridge.....	25,241	559	.....
Tanning.....	J. Brainerd and W. H. Burridge.....	25,315	569	.....
Tanning, Apparatus for.....	D. L. Hubbard.....	24,560	461	360
Tanning, Apparatus for.....	L. C. England.....	24,727	485	383
Tanning, Apparatus for.....	J. B. Read.....	25,045	530	438
Tanning, Composition for.....	S. Pierce and F. F. Beardsley.....	25,671	620	.....
Tanning Hides and Skins.....	T. T. Fergusson.....	23,360	282	146
Tanning Leather, Composition for.....	T. S. Page.....	25,522	598	.....
Tea Kettle.....	A. C. Ketchum.....	25,742	630	561
Tea and Coffee Pot.....	I. W. Sener.....	23,715	339	218
Tea and Coffee Pot.....	T. Bishop.....	25,994	667	611
Teeth, Artificial, bases for.....	G. Dieffenbach.....	24,544	459	.....
Teeth, Artificial, coloring.....	G. Dieffenbach.....	24,545	459	.....
Teeth, Artificial, securing.....	N. B. Slayton.....	25,053	531	439



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Teeth, comb, cutting .....	W. Noyes, jr. ....	24,358	432	330.
Teeth, Cultivator .....	W. P. and T. H. Ford .....	22,946	220	77
Teeth, Cultivator .....	G. Maynard .....	24,568	462	362
Teeth, Cultivator .....	H. Sanders .....	26,297	711	672
Teeth, grinding, of mowers and reapers .....	D. Hinman .....	25,412	583	501
Teeth, hair comb, pointing .....	C. B. Rogers .....	22,513	151	8
Teeth, Harrow .....	D. M. Cummings .....	26,167	693	648
Teeth, Saw .....	W. A. Wilson .....	23,330	278	140
Teeth, Saw, cutting .....	K. H. Kinne .....	24,466	448	346
Teeth, Saw, cutting and setting .....	C. G. Loynes .....	22,737	186	44
Telegraph Apparatus, Electric .....	F. O. J. Snaith .....	26,625	757	729
Telegraph poles, Means for climbing .....	J. H. McNeely .....	26,280	709	669
Telegraphic Instruments, protecting .....	E. F. Barnes .....	25,939	659	600
Telegraphic Machine .....	L. Bradley .....	25,718	627	556
Telegraphic Machine .....	G. M. Phelps .....	26,003	668	612
Telegraphic Machine .....	M. G. Farmer .....	26,097	683	632
Telegraphing, Electro-magnetic .....	D. E. Hughes .....	22,530	154	11
Telegraphing, mode of .....	S. K. Zook .....	26,140	689	641
Telegraphing Machine .....	D. E. Hughes .....	22,770	192	51
Telegraphing from Railroad Cars .....	D. Chesebro .....	24,721	485	386
Tempering and moulding Plastic Materials .....	S. C. Salisbury .....	23,710	339	217
Temple, Loom .....	W. H. Howard .....	24,306	425	323
Temple for Looms .....	J. C. Tilton .....	22,594	163	21
Tenons, cutting .....	J. R. Perry .....	26,122	686	638
Tenons, cutting round .....	C. O'Bryan .....	25,791	637	571
Thermometric Regulator for heating .....	L. W. Leeds and C. Vaux .....	25,514	597	520
Thermostat .....	C. A. Wilson .....	25,860	647	584
Thermostat for steam boilers .....	O. M. Stillman and S. Wilcox, jr. ....	23,747	344	224
Thills, attaching, to axles .....	G. Kenny .....	22,604	165	22
Thills, attaching, to axles .....	F. L. Kidder .....	23,173	255	111
Thills, attaching, to axles .....	J. Miller .....	24,137	400	296
Thills, attaching, to vehicles .....	R. B. Prindle .....	22,672	176	34
Thills, attaching, to vehicles .....	D. Bly .....	23,549	313	186
Thills, attaching, to vehicles .....	E. Duehamp .....	25,103	539	447
Thills, Wagon, attaching harness breeching to ..	A. Parker .....	23,854	360	246
Thimble .....	J. C. R. Steirley .....	25,450	588	508
Thimbles, manufacture of .....	P. S. Bishop .....	25,482	593	514
Thread, webbing single strands of .....	M. Celerier .....	24,615	469	369
Thread, winding .....	L. Dimock .....	25,181	551	461
Thread, winding, on spools .....	H. Conant .....	26,415	729	693
Thread, winding skeins of .....	A. T. Ring .....	24,782	493	395
Threshing Machine .....	J. B. Ford, A. Sullivan, & A. Gregg ..	22,718	183	41
Threshing Machine .....	J. J. Sigler .....	23,647	329	204
Threshing Machine .....	J. R. Moffitt .....	24,138	400	296
Threshing Machine .....	J. I. Rollow .....	24,704	482	383
Threshing Machine .....	J. H. Siddall .....	24,767	491	393
Threshing Machine .....	J. Rohman .....	25,527	599	523
Threshing Machine .....	D. A. Willbanks .....	25,389	725	688
Throistle Frames, regulating the twist in .....	J. Smith .....	22,899	213	70
Tickets, Railroad and other, printing .....	R. M. Hoe .....	23,172	255	111
Ticket Holder for railroads, etc .....	C. Taylor .....	25,226	557	469
Ticket Holder, Travellers' .....	S. T. McDougall .....	25,750	632	562
Ties for cotton bales .....	E. Garrett .....	24,112	396	292
Ties, Iron, for cotton bales .....	J. Nuttall .....	23,940	371	262
Ties, Iron, for cotton bales .....	W. Boyd .....	25,240	559	472
Tile, Drain, laying .....	B. B. Briggs .....	25,624	613	539
Tile Machine .....	G. S. Tiffany .....	25,687	622	550
Tile Machine, Drain .....	J. Daines .....	24,379	435	333
Tin Foil, manufacture of .....	W. W. Huse .....	23,088	242	.....
Tin Folding Machine .....	C. H. Raymond .....	25,369	577	494
Tinman's Machine .....	C. H. Raymond .....	25,278	564	740
Tire, bending .....	W. Patterson .....	23,388	286	153
Tire, Cast-iron, for railroad wheels .....	L. B. Tyng .....	24,678	479	379
Tire, Tools for handling .....	J. and H. Brubaker .....	26,250	705	664
Tire, upsetting .....	C. L. Crowell and R. Smith .....	24,009	382	274
Tire, Wagon, bending .....	W. and I. H. Mosher .....	25,346	574	490
Tire, Wheel, rolling .....	N. Washburn .....	23,414	291	158
Tobacco, Plug Chewing, preparing .....	W. J. Van Horn and W. Alexander ..	26,632	758	730
Tobacco, preparations of .....	G. Jaques .....	26,594	753	.....
Tobacco, preparing, for pressing .....	E. S. Collins and T. N. Read .....	25,557	604	528
Tobacco, squeezing and straightening .....	M. D. Elson .....	22,944	220	77
Tobacco Stems, coloring and curing .....	B. Payn .....	22,668	175	.....
Tongs, Ice .....	J. Tyler .....	22,991	227	84
Tongs, Pipe .....	J. R. Brown .....	24,927	512	420
Tonguing and Grooving Machine .....	H. H. Baker .....	25,313	569	484
Top, Spinning .....	F. Milward .....	24,430	443	341
Towel Rack .....	R. Maxwell .....	25,130	543	451
Toy, Roeking .....	J. A. Crandall .....	24,008	382	273
Toys, Elastic .....	L. P. Porter .....	23,001	229	86
Trace Fastener .....	D. H. Hull .....	24,462	448	345
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Trace Trimmer .....	A. Stempel .....	25,706	625	554
Tram Staff for facing mill stones .....	T. Brown .....	23,074	240	96
Trap, Animal .....	A. S. Blake .....	23,750	344	225
Trap, Animal .....	H. S. North and J. O. Couch .....	24,573	463	362
Trap, Animal .....	L. Wetmore .....	24,771	491	393
Trap, Animal .....	Z. Swope .....	25,224	557	469
Trap, Fish .....	R. Gray .....	22,644	171	29
Trap, Fish .....	D. Bowman .....	23,154	252	108
Trap, Fly .....	R. Shaler .....	22,840	204	61
Trap, Fly .....	S. W. Smith and H. Bigelow .....	22,986	226	84
Trap, Fly .....	E. D. Blakeman .....	23,422	292	160
Trap, Fly .....	I. S. Clough and S. R. Burrell .....	24,375	435	333
Trap, Fly .....	A. Eames .....	25,961	662	604
Trap, Fly .....	W. Elwell .....	25,997	668	611
Trap, Rat .....	H. Gortner .....	23,917	368	258
Trap, Rat .....	J. Borton .....	24,715	484	385
Trap, Rat .....	E. H. Crane .....	25,179	550	461
Trap, Rat .....	S. S. Henderson .....	26,495	740	707
Trap, Water .....	J. A. Lowe .....	26,506	741	709
Traps, Water, moulding .....	J. A. Lowe .....	25,572	606	531
Tray, Butler's .....	W. Hoffman .....	26,432	731	696
Treadle Stand .....	H. C. Spalding .....	23,048	236	92
Tread Power, moving .....	L. Koch .....	25,903	653	593
Treecing Sticks .....	L. L. Pollard .....	23,606	322	196
Trees, girdling and felling .....	A. P. Torrence .....	26,385	724	688
Trip Hammer .....	B. Hotchkiss .....	24,428	443	341
Trip Hammer, Foot .....	C. V. Statler and G. W. Wilson .....	22,589	163	20
Troughs, Wooden, manufacture of .....	S. F. Field .....	22,792	196	54
Trucks for Railroad Cars .....	T. E. Roberts .....	25,139	544	452
Trunk .....	H. Clifton .....	23,156	252	108
Trunk .....	M. Ludlum .....	24,648	475	374
Trunk .....	J. Parker .....	25,347	574	490
Trunks, Travelling, Cover for .....	E. Foster .....	23,562	315	188
Trunnion Box Lining for oscillating engines .....	J. A. Reed .....	24,663	477	377
Truss, Belt .....	H. H. Reynolds .....	22,747	188	46
Trusses, Hernia .....	J. Danforth .....	23,555	314	187
Trusses, Hernia .....	S. S. Ritter .....	23,947	372	263
Trusses, Hernial .....	R. S. Shevenal .....	26,623	757	728
Trusses for relieving piles .....	H. M. Smith .....	25,851	646	583
Trusses for roofs and bridges .....	S. J. Reeves and M. C. Meigs .....	24,323	427	325
Turning irregular forms .....	D. H. Krauser .....	23,175	255	111
Turning irregular forms .....	L. B. Miller .....	26,567	750	720
Turning ovals .....	J. Irving .....	24,642	477	373
Turnouts for railways .....	F. Brown .....	25,299	567	481
Turn Table, portable .....	J. Robinson .....	26,053	676	623
Turn Table, railroad .....	A. and J. H. Putnam .....	24,525	456	354
Tuyere .....	G. W. Dean .....	24,012	382	274
Tuyere .....	S. L. Bond .....	24,852	503	408
Tuyere .....	J. P. Markham .....	25,129	543	451
Twine Spools .....	F. A. Parmelee .....	26,287	710	670
Type Case for printers .....	T. N. Rooker .....	23,500	305	177
Type Setter and Distributor .....	F. W. Gilmer .....	26,149	690	643
U.				
Umbrella .....	L. K. Selden .....	23,503	305	177
Umbrella Fastenings .....	C. De Saxe .....	22,943	220	77
Umbrella Frame .....	J. Bloom .....	22,686	178	36
Umbrella Frame .....	R. E. Rogers .....	25,763	633	565
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Urn, Stove .....	J. Spear .....	25,284	565	478
V.				
Valve .....	W. Bramwell .....	24,369	434	332
Valve, Butterfly .....	N. Cope and W. Hodgson .....	23,902	367	255
Valve, Cut-off, for steam engines .....	A. S. Cameron .....	22,935	218	76
Valve, Cut-off, for steam engines .....	E. R. Arnold .....	25,936	659	599
Valve, Cut-off, for steam engines .....	G. R. Reynolds .....	26,400	727	691
Valve, Cut-off, for steam engines, operating .....	W. W. W. Wood and H. Howson .....	24,707	483	384
Valve for dry gas-meters .....	H. Howson .....	24,089	392	287
Valve, Puppet, of Steam Engines .....	S. Gaty and A. Howe .....	23,165	254	109
Valve, Regulator, for steam engines .....	N. C. Travis .....	25,794	638	571
Valve for retarding and arresting flow of Gases .....	N. S. Manross .....	25,658	618	545
Valve, Slide, Steam .....	J. J. Parker .....	25,137	544	452
Valve, Slide, of Steam Engines .....	D. Stoddart .....	25,146	545	454
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Valve, Steam .....	H. Goulding .....	22,641	171	29



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Valve, Steam.....	C. A. Schultz.....	23,714	339	218
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Valve, Steam.....	L. B. Brooks.....	26,160	692	646
Valve, Steam.....	C. W. Carr.....	26,480	738	705
Valve for steam engines.....	R. Bailey.....	22,692	179	37
Valve for steam engines.....	W. Shepherd, jr.....	23,885	364	252
Valve for steam engines.....	A. Crosley.....	25,248	560	474
Valve for steam engines, operating.....	T. Carpenter.....	25,722	628	557
Valve for Stoves, Furnaces, &c.....	B. W. Dunklee.....	25,893	652	591
Valve for Water Closets.....	J. Gilfillan.....	24,866	504	410
Valves to extinguish fires, opening.....	S. H. Wilder.....	25,358	575	492
Valves of pumping engines, operating.....	L. J. Knowles.....	22,503	149	5
Valve arrangement of Steam-Engines.....	H. Clayton.....	23,448	297	166
Valve Bung.....	F. Dahis.....	22,857	207	64
Valve Gear.....	A. A. Wood.....	23,137	250	105
Valve Gear of Oscillating Steam Engines.....	H. Winter.....	22,763	190	50
Valve Gear of Steam Engines.....	E. Ware.....	23,629	326	201
Valve Gear of Steam Engines.....	T. Hawkins.....	23,839	358	242
Valve Gear of Steam Engines.....	P. Louis.....	26,275	708	668
Valve Gear of Steam Engines.....	D. Stoddart.....	26,301	711	672
Valve Governor.....	B. Fitts.....	25,005	525	432
Valve Motion for steam engines.....	G. D. West.....	23,519	308	180
Valve Slide of Steam Engines.....	J. Freeland and R. H. Lecky.....	22,794	196	54
Valve Slide of Steam Engines.....	R. C. Bristol.....	24,439	444	342
Valve Slide of Steam Engines.....	A. C. Ancona.....	25,477	592	513
Valve Slide of Steam Engines.....	N. Cope.....	25,952	661	603
Vapor Apparatus, Hydro-Carbon.....	E. H. Covel.....	24,200	410	306
Vapor Apparatus, Hydro-Carbon.....	A. A. Moss.....	25,032	528	436
Vapor Apparatus, Hydro-Carbon.....	G. H. Bronson.....	26,458	735	701
Vapor Apparatus, Hydro-Carbon.....	L. L. Hill.....	26,497	740	708
Vapor Apparatus, Ophthalmic.....	T. F. Frank.....	25,252	560	473
Varnish.....	S. Page.....	25,757	633	.....
Varnish, Copal.....	L. Hull.....	26,232	702	.....
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Vegetable Slicer.....	C. Parmlee.....	26,443	733	699
Vehicles, attaching horses to.....	E. D. Lockwood.....	23,476	301	172
Vehicles, Guide Attachment for.....	N. Drake.....	23,557	314	187
Vehicles, hanging Bodies of.....	J. H. Case.....	24,719	484	385
Vehicles, Locomotive Traction.....	J. H. Bailey.....	26,466	736	703
Vehicles, Running Gear of.....	A. R. Bartram.....	26,406	727	692
Vehicles, Wheeled, hanging bodies of.....	C. Bradfield.....	25,158	547	457
Veneers, cutting.....	M. Bonnell and I. I. Cole.....	25,622	613	539
Veneering Machine.....	R. D. Bartlett.....	26,556	748	718
Ventilation, House.....	J. H. Griscom.....	22,646	172	30
Ventilator.....	G. D. Greenleaf.....	24,387	436	335
Vessels, evaporating.....	J. P. Hale.....	26,182	695	651
Vessels, Navigable.....	R. H. Tucker, jr.....	23,626	325	200
Vessels, unloading.....	I. I. Magee.....	25,973	664	607
Vinegar, manufacture of.....	B. Koegel.....	26,271	707	667
Violins, Tail Pieces for.....	J. Pfaff.....	24,329	428	326
Vise.....	H. C. Hunt.....	25,118	541	449
Vise, Bench.....	G. A. Gray, jr.....	26,266	707	666
Vise, Photographic Plate.....	M. H. Rison.....	22,748	188	46
Vise, Photographic Plate.....	S. W. and W. L. Pearsall.....	22,822	201	59
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W.				
Wadding, manufacture of.....	J. C. Hurd and M. A. Jolinson.....	24,640	474	.....
Wadding and Paper, cutting and folding.....	J. Wood.....	23,802	352	235
Wads, adaptation of, to shots and shells.....	S. C. Abbott.....	25,795	638	571
Wagon, Dumping.....	T. Bailey.....	23,147	251	107
Wagon, Dumping.....	A. Iske.....	24,741	487	389
Wagon, Dumping.....	W. B. Twiford.....	25,062	533	441
Wagon, Sail.....	W. Thomas.....	23,277	270	130
Wagon, Stone-loading.....	D. S. Fancher.....	26,421	730	694
Wagon, Stone-loading.....	N. Drake.....	26,482	738	706
Wagons, shifting tops for.....	H. H. Dikeman.....	26,547	747	717
Wallet, Cotton Pickers'.....	G. H. Peabody.....	26,288	710	670
Wardrobe.....	F. C. Payne and A. Reid.....	23,604	321	196
Warps, winding, upon the beam.....	D. Hussey.....	25,236	562	475
Washboard.....	J. K. O'Neil.....	22,667	175	33
Washer, Leather.....	G. Miller and C. M. Andrews.....	26,510	742	710
Washing Machine.....	M. Gillam.....	22,497	148	4
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Washing Machine .....	W. B. Twiford .....	22,756	189	48
Washing Machine .....	G. W. Wilson and A. Johnson ..	22,761	190	49
Washing Machine .....	G. L. Witsil .....	22,764	191	50
Washing Machine .....	Z. Casterline .....	22,780	194	52
Washing Machine .....	J. Hebden .....	22,801	197	55
Washing Machine .....	B. Douglas .....	22,855	207	65
Washing Machine .....	T. A. Dugdale .....	22,998	229	85
Washing Machine .....	L. A. Dole .....	23,081	241	97
Washing Machine .....	W. N. Slason .....	23,120	247	102
Washing Machine .....	J. L. Rowley .....	23,268	269	129
Washing Machine .....	G. W. Tolhurst .....	23,276	270	130
Washing Machine .....	W. C. Grimes .....	23,527	309	182
Washing Machine .....	B. Bradbury .....	23,657	330	207
Washing Machine .....	M. Van Debogert .....	23,728	341	220
Washing Machine .....	L. and J. H. Gail .....	23,765	347	228
Washing Machine .....	O. Shostrom .....	23,866	361	248
Washing Machine .....	J. R. Rogers .....	24,056	388	281
Washing Machine .....	A. Gray .....	24,116	397	292
Washing Machine .....	G. Geer .....	24,207	411	307
Washing Machine .....	D. S. Ayres .....	24,272	420	317
Washing Machine .....	S. Wiswall .....	24,347	430	328
Washing Machine .....	P. Armstrong .....	24,363	433	331
Washing Machine .....	R. Brown .....	24,612	469	368
Washing Machine .....	C. Pendleton .....	24,754	489	391
Washing Machine .....	L. Allen .....	24,784	493	396
Washing Machine .....	G. Hall and A. Scudder .....	24,871	505	411
Washing Machine .....	J. T. Mudge .....	24,948	515	423
Washing Machine .....	W. A. and J. F. Suddith .....	25,058	532	440
Washing Machine .....	T. J. Jolly .....	25,123	542	450
Washing Machine .....	J. Wagoner and A. Severson, jr..	25,152	546	455
Washing Machine .....	H. M. Coombs and L. W. Nelson.	25,177	550	460
Washing Machine .....	F. J. Crissey .....	25,247	560	473
Washing Machine .....	G. W. Tolhurst .....	25,455	589	509
Washing Machine .....	A. Bissell .....	25,483	593	515
Washing Machine .....	A. Wilkinson .....	25,542	601	525
Washing Machine .....	W. H. Tambling .....	25,774	635	567
Washing Machine .....	S. E. Lamphear and O. D. Barrett.	25,838	644	581
Washing Machine .....	R. C. Cyphers .....	25,887	651	590
Washing Machine .....	R. H. Champlin .....	25,949	661	602
Washing Machine .....	J. Patton .....	26,120	686	637
Washing Machine .....	S. Barber .....	26,153	691	645
Washing Machine .....	M. B. Bishop .....	26,157	692	646
Washing Machine .....	D. Walling .....	26,214	700	657
Washing Machine .....	M. D. Wells .....	26,215	700	657
Washing Machine .....	R. G. Wilkins .....	26,217	700	658
Washing Machine .....	J. Williams .....	26,218	700	659
Washing Machine .....	S. A. Andrus .....	26,240	703	662
Washing Machine .....	T. Harvey .....	26,324	715	677
Washing Machine .....	C. Carter .....	26,335	716	678
Washing Machine .....	G. W. Tolhurst .....	26,384	724	688
Washing Machine .....	I. Hann .....	26,430	731	696
Washing Machine .....	L. A. Dole .....	26,572	750	721
Watch .....	C. E. Jacot .....	25,364	576	493
Watch .....	J. Ives .....	25,934	658	599
Watch .....	H. Boehm .....	26,593	753	724
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Watch Case .....	J. Boss .....	23,820	355	238
Watch Case .....	P. Bettle .....	24,986	522	429
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Water, elevating .....	S. H. Tift .....	26,305	712	673
Water, elevating, from wells, &c. ....	L. Taylor .....	26,211	699	657
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Water, heating .....	J. M. Jay and J. Danner .....	26,595	754	724
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Water, raising .....	D. E. Teal .....	23,275	270	130
Water, raising .....	J. A. Ayres .....	24,273	420	317
Water, raising .....	P. Shank .....	24,337	429	327
Water, raising .....	A. Bower .....	24,925	512	420
Water, raising, by animal power .....	Z. F. Wilder .....	25,598	609	535
Water, raising, from wells .....	E. Puffer .....	25,912	655	595
Water Closet .....	T. Birch and L. Bradley .....	22,543	156	13
Water Closet .....	D. Wellington .....	23,335	278	141
Water Closet .....	W. S. Carr .....	25,092	538	446
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Webbing, manufacturing.....	J. C. Cooke.....	22,528	153	10
Weights, Raising.....	S. A. Hotchkiss.....	26,357	719	683
Welts, splitting.....	J. Critcherson and E. S. Moulton..	25,558	604	529
Wharves.....	A. Stephens.....	23,122	247	103
Wharves, Safety Guard for ferry.....	E. F. Woodward.....	24,899	508	415
Wheel, Car.....	E. A. Lester.....	25,020	527	434
Wheel, Centrifugal Water.....	H. Abbott.....	26,224	701	659
Wheel, Elastic Polishing.....	L. Hale.....	23,571	316	189
Wheel, Fifth, of fire engines, &c.....	R. Poole.....	25,164	548	458
Wheel, Fly, for rolling mills.....	J. Geysler.....	23,299	273	134
Wheel for buggy boats.....	P. Davis.....	24,725	485	386
Wheel for traction engines.....	W. Bray.....	23,289	272	133
Wheel, Horizontal.....	A. Andrews and H. Halbach.....	25,237	558	471
Wheel, Horizontal Water.....	J. K. O'Neil.....	25,521	598	522
Wheel, Horizontal Water.....	J. T. Wilder.....	25,859	647	584
Wheel, Horizontal Water.....	E. G. Cushing.....	26,342	717	680
Wheel, Horizontal Water.....	A. M. Ford and C. W. Warner....	26,424	730	695
Wheel, Iron Carriage.....	J. D. Murphy.....	23,695	336	214
Wheel, Paddle.....	N. Oreutt.....	22,688	178	36
Wheel, Paddle.....	J. May.....	22,884	211	68
Wheel, Paddle.....	N. Thompson.....	23,324	277	139
Wheel, Paddle.....	J. Thompson and M. L. Doty.....	24,067	390	284
Wheel, Paddle.....	J. W. Harris.....	24,300	427	322
Wheel, Paddle.....	W. Gorman.....	24,627	477	371
Wheel, Paddle.....	J. Speers.....	25,871	649	586
Wheel, Propelling.....	J. L. Husband.....	26,187	696	651
Wheel, Railroad.....	A. Cameron and D. Matthew.....	25,317	569	484
Wheel, Railroad Car.....	E. Crane.....	26,022	671	616
Wheel, Railroad Carriage.....	A. R. Morrill.....	22,972	224	81
Wheel, Steering.....	C. F. E. Blaich and P. A. Bishop..	23,284	271	132
Wheel, Steering.....	D. Knowlton.....	23,770	347	229
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Furnace, Hot Air.....	Hiram Bissell.....	1,081	794
G.			
Gas Burner.....	H. B. Musgrave.....	1,082	794
Gas Cocks, &c.....	B. M. Johnson.....	1,150	799
H.			
Handle, Caster.....	Allen Leonard.....	1,165	800
Handle, Spoon and Fork.....	William H. Lewis.....	1,098	795
Handle, Spoon and Fork.....	Henry Hebbard.....	1,114	796
Handle, Spoon and Fork.....	Henry Hebbard.....	1,136	798
Handle of spoons and forks.....	P. B. Gilbert.....	1,143	798
Handle, Fork or Spoon.....	William H. Lewis.....	1,166	800
Handle of spoons, forks, &c.....	Henry Hebbard.....	1,145	798
Hat Rack.....	Edward Reynolds.....	1,090	795
I.			
Ink Bottle.....	Thaddeus Davids.....	1,078	794
M.			
Match Box.....	P. J. Clark.....	1,111	796
S.			
Scales.....	Francis M. Strong and Thomas Ross..	1,137	798
Sepulchral Monuments.....	Richard Barry.....	1,104	796
Sewing Machine.....	S. B. Ellithorp.....	1,105	796
Sewing Machines, Arms of.....	James S. McCurdy.....	1,110	796
Sewing Machines, Arms of.....	James S. McCurdy.....	1,152	799
Sewing Machines, Frame of.....	S. B. Ellithorp.....	1,149	799
Sewing Machines, ornamenting.....	William Newton Brown.....	1,156	799
Stereoscopic Case.....	William Lloyd.....	1,085	794
Stereoscopic Case.....	Alexander Beckers.....	1,086	794
Stove.....	Appollos Richmond.....	1,080	794
Stove.....	Sherman S. Jewett and Francis H. Root	1,099	795
Stove.....	Garrettson Smith and Henry Brown...	1,094	795
Stove.....	Garrettson Smith and Henry Brown...	1,118	797
Stove.....	Garrettson Smith and Henry Brown...	1,133	797
Stove.....	Garrettson Smith and Henry Brown...	1,153	799
Stove.....	Garrettson Smith and Henry Brown...	1,167	800
Stove, Air-tight.....	Garrettson Smith and Henry Brown...	1,093 $\frac{1}{2}$	795
Stove, Box.....	E. J. Cridge.....	1,151 $\frac{1}{2}$	799
Stove, Cook.....	David Hathaway.....	1,125	797
Stove, Cook.....	George W. and John Pittock.....	1,126	797
Stove, Cooking.....	Conrad Harris and P. W. Zoiner.....	1,076	794
Stove, Cooking.....	James R. Hyde.....	1,079	794
Stove, Cooking.....	A. C. Barstow.....	1,089	795
Stove, Cooking.....	Sher. S. Jewett and Fr. H. Root.....	1,095	795
Stove, Cooking.....	Anthony J. Gallagher and Jacob Beesley	1,106	796
Stove, Cooking.....	James Greer and Rufus I. King.....	1,112	796
Stove, Cooking.....	John Martino.....	1,147	798
Stove, Cooking.....	Anthony John Gallagher.....	1,157	799
Stove, Cooking.....	Thomas H. Wood, John S. Roberts, and H. S. Hubbell.	1,160	799
Stove, Cylinder.....	John Martino and James Horton.....	1,148	799
Stove, Dining Room.....	Conrad Harris and P. W. Zoiner.....	1,075	794
Stove, Parlor.....	S. W. Gibbs.....	1,077	794
Stove, Parlor.....	Robert Ham.....	1,128	797
Stove, Parlor.....	Conrad Harris and P. W. Zoiner.....	1,158	799
Stove, Parlor.....	Garrettson Smith and Henry Brown...	1,177	801
Stove, Parlor Coal.....	Isaac De Zouche.....	1,131	797
Stove, Parlor Cook.....	David Hathaway.....	1,088	795
Stove, Parlor Cooking.....	William W. Stevens.....	1,127	797
Stoves, Cooking, Plates of.....	S. H. Ransom.....	1,093	795
Stoves, Cooking, Sides and Doors of.....	James Greer and Rufus I. King.....	1,113	796
Stoves, Plates of.....	S. H. Ransom.....	1,092	795
Stoves, Sheet-iron, Tops and Bases of.....	S. W. Gibbs.....	1,109	796
Stove Plates.....	J. W. Lane.....	1,101	795
Stove Plates.....	David Hathaway.....	1,102	796
Stove Plates.....	S. W. Gibbs.....	1,107	796
Stove Plates.....	S. W. Gibbs.....	1,108	796

Invention or Discovery.	Name of Patentee.	No.	Text.
			Vol. I.
T.			
Tea Pot, &c .....	George W. Smith.....	1,096	795
Trade Mark.....	J. H. McLean .....	1,155	799
Trade Mark.....	T. and S. Hargrove .....	1,163	800
Trade Mark.....	O. T. Bragg and M. Burrows .....	1,172	800
Trade Mark for soap boxes .....	T. and L. Lincoln .....	1,173	800
W.			
Watch Guards ... ..	George Blanchard .....	1,100	795

ADDITIONAL IMPROVEMENTS, 1859.

Invention or Discovery.	Name of Patentee.	No. of Imp.	No. of Patent.	Text.	Plates.
				Vol. I.	Vol. II.
Altitudes of the sun, taking .....	Fred. Yciser.....	247	22,913	805	737
Arithmometer for addition.....	O. L. Castle.....	229	21,941	803	734
Axes, making.....	Jonas Simmons.....	227	9,601	803	734
Bed Bottom, Spring .....	Henry S. Smith.....	220	18,357	802	732
Bedstead Fastening .....	Oliver Robinson .....	224	22,456	802	733
Corn Sheller.....	Wm. Wells .....	232	22,523	803	734
Curtain Fixture.....	Joseph F. Hall.....	254	19,560	805	738
Cutter, Straw.....	W. W. Hollman.....	258	19,779	806	739
Gold Washer .....	M. Nelson .....	255	25,667	805	738
Harness .....	Freedom Monroe .....	238	21,267	804	735
Hominy Mortar.....	John Keezer.....	216	19,507	801	732
Journals, mode of oiling.....	Douglas B. Jordan .....	250	23,251	805	739
Lock.....	Henry W. Covert.....	222	18,228	802	733
Lock.....	Amos A. Richards .....	246	22,980	805	737
Lubricator, Automac, for car axles.....	Wm. Baker .....	233	17,957	803	735
Mangle.....	D. Cumming, jr.....	234	21,044	803	735
Mill Stones, Machine for dressing.....	S. W. and R. M. Draper.....	230	14,859	803	734
Naval Architecture.....	B. F. Wells .....	257	25,857	806	739
Ore Crushing Machine .....	Samuel F. Hodge.....	236	17,374	804	735
Paper Hangings, trimming edges of.....	John Waugh.....	219	21,710	802	732
Pins, Clothes, making .....	Ephraim Parker .....	259	14,110	806	739
Planter, Corn .....	A., W., and J. Campbell.....	251	24,537	805	738
Plough .....	George Watt.....	245	19,321	804	737
Plough, Mole .....	Moses Balcs.....	248	22,928	805	737
Press, Tobacco.....	W. R. Musser and J. Coleman..	252	19,256	805	738
Railways, Watering and Sweeping.....	W. C. Allison .....	256	25,359	806	739
Refrigerator .....	Wm. Sims .....	260	22,897	806	739
Saccharine Juices, evaporating .....	L. P. Harris .....	239	22,648	804	736
Saccharine Juices, evaporating .....	L. P. Harris .....	249	22,648	805	737
Sawing Machine, Cross-cut.....	A. Heth and G. Hall .....	215	21,256	801	732
Sawing Machine, Picker .....	John Haw.....	244	17,626	804	736
Saws, Reciprocating, hanging and operating..	Carlyle Whipple.....	218	16,416	802	732
Seat, Spring, of chairs, sofas, &c .....	Charles Robinson.....	240	19,582	804	736
Seeding Machine.....	Charles Cox James .....	228	18,852	803	734
Shingle Machine.....	James Crary.....	217	18,681	801	732
Slate, preparing and mounting.....	Hubbard Beebe.....	242	23,343	804	736
Spokes, Tool for tenoning .....	John J. Croy .....	221	16,532	802	733
Spring, Railroad Car .....	A. B. Davis.....	241	22,941	804	736
Stove, Car.....	James Spear.....	226	17,756	803	733
Stove, Cooking .....	James Spear.....	225	20,450	802	733
Stove, Cooking .....	Samuel B. Spaulding .....	237	20,668	804	735
Thills, attaching, to vehicles.....	Douglas Bly .....	253	23,549	805	738
Trap, Fly.....	Wm. Riley .....	223	20,091	802	733
Ventilator, Railroad Car.....	D. H. Fox and John Fink .....	235	12,818	804	735
Window Sash, hanging.....	T. F. Hall.....	243	22,365	804	736
Wool, Machine for packing.....	Charles Carlisle.....	231	18,322	803	734



## EXTENSIONS, 1859.

Invention or Discovery.	Names of Patentees.	No.	Text.
			Vol. I.
Barrel Machinery, (Reissue No. 132) .....	Wm. Trapp, jr. ....	4,218	809
Boats and other vessels, making, of sheet iron, &c..	Joseph Francis .....	3,974	807
Bridges, Wooden.....	George W. Thayer.....	4,004	807
Buttons.....	Joseph B. Thaxter.....	3,915	806
Chair for invalids .....	James G. Holmes .....	3,761	807
Combs, Machinery for dressing.....	Calvin B. Rogers.....	4,321	811
Corn Sheller .....	Thomas D. Burrall.....	4,300	811
Cotton and Wool, ginning. ....	Stephen R. Parkhurst .....	4,023	808
Dredging Machine.....	James Hamilton .....	8,840	811
Forges.....	Christian V. Queen.....	4,273	810
Gas Burner .....	Wm. Blake.....	4,141	809
Gauge, Magnetic Water, for boilers.....	John S. Rappe.....	4,288	810
India Rubber Fabrics, manufacture of.....	H. B. Goodyear.....	4,047	808
Loom, Power, for weaving plaids, (Reissue No. 146).	E. B. Bigelow .....	3,987	807
Match Splints, making and arranging.....	A. Fessenden and Luke L. Knight....	4,013	807
Mill, Fan .....	Isaac T. Grant.....	4,105	809
Mill, Grinding .....	Beriah Swift .....	4,149	809
Planing Machine.....	John M. Farrar .....	4,283	810
Press, Cotton (Reissue No. 92).....	Philos B. Tyler.....	3,885	806
Press, Printing.....	Richard M. Hoe .....	4,025	808
Ruling Machine.....	Lewis Edwards.....	4,223	810
Steam Boiler, (Reissue No. 122) .....	James Montgomery .....	4,331	811
Stove.....	F. L. Hedenberg.....	4,032	808
Stove, Cooking .....	C. J. Woolson.....	4,201	809
Stove, Cooking, (Reissue Nos. 91 and 99).....	Samuel Pierce.....	4,299	811
Teeth, Cultivator.....	David B. Rogers .....	4,245	810
Types, casting .....	David Bruce, jr.....	4,072	808
Valves, Tripping Cut Off .....	F. E. Sickels .....	4,201	809
Vault Covers, (Reissue No. 303) .....	Thaddeus Hyatt .....	4,265	810
Weights, Machine for lowering and raising .....	Ephraim Norris.....	4,097	808
Wood, shaping irregular surfaces in .....	Warren Hale and Allen Goodman....	4,120	809

## DISCLAIMERS ENTERED IN 1859.

Alkalies, Caustic, putting up, (Reissue No. 654).....	Geo. Thompson; J. G. Hollingsworth, president Pennsylvania Salt Manu- facturing Company, George Thomp- son, secretary Pennsylvania Salt Manufacturing Company.	15,957	812
Gas Burners .....	Wm. Blake.....	4,141	812
Nut Machine.....	Samuel C. Tatum.....	17,534	812
Nut Machine.....	Samuel C. Tatum..	18,259	812
Nut Machine.....	Samuel C. Tatum.....	21,860	813





REPORT  
OF THE  
COMMISSIONER OF PATENTS  
FOR THE YEAR 1859.

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UNITED STATES PATENT OFFICE,  
*January 26, 1860.*

SIR: In compliance with the fourteenth section of the act entitled "An act in addition to the act to promote the progress of science and useful arts," approved March 3, 1837, I have the honor to submit the following report of the operations of this office during the year terminating the 31st of December, 1859.

WILLIAM D. BISHOP,  
*Commissioner.*

No. 1.

Number of applications for patents during the year 1859.....	6,225
Number of patents granted, including designs, reissues, and additional improvements.....	4,538
Number of caveats filed.....	1,097
Number of applications for extension of patents.....	41
Number of patents extended.....	32
Number of patents expired 31st December, 1859.....	563

Of the patents granted there were—

To citizens of the United States.....	4,491
To subjects of Great Britain.....	23
To subjects of the French empire.....	16
To subjects of other foreign governments .....	8

The patents issued to citizens of the United States were distributed among the several States, Territories, &c., as follows:

New York.....	1,237
Pennsylvania.....	532
Massachusetts.....	492
Ohio.....	390
Connecticut.....	256
Illinois.....	206
Indiana.....	142
New Jersey.....	119
Maryland.....	116
Rhode Island.....	85
Wisconsin.....	71
Virginia.....	65
New Hampshire.....	65
Michigan.....	64
Vermont.....	63
Missouri.....	63
Georgia.....	58
District of Columbia.....	58
Maine.....	51
Louisiana.....	51
California.....	43
Kentucky.....	41
Iowa.....	37
Tennessee.....	31
Texas.....	29
North Carolina.....	26
Alabama.....	26
Mississippi.....	25
South Carolina.....	15
Delaware.....	12
Arkansas.....	5
Minnesota.....	5
Florida.....	4
Oregon.....	1
Washington Territory.....	1
United States army.....	4
United States navy.....	2
Total.....	<u>4,491</u>

## No. 2.

*Statement of money received at the Patent Office during the year 1859.*

Received on applications for patents, reissues, additional improvements, extensions, caveats, disclaimers, and appeals.....	\$228,864 00
Received for copies, and for recording assignments.....	17,078 15
Total.....	<u>245,942 15</u>



No. 3.

*Statement of expenditures from the patent fund during the year 1859.*

For salaries.....	\$93,242 36
Temporary clerks.....	43,475 25
Contingent expenses.....	41,561 48
Payments to judges in appeal cases.....	875 00
Refunding money paid into the treasury by mistake	391 00
Refunding money on withdrawals.....	30,733 32
	<hr/>
Total.....	210,278 41
	<hr/> <hr/>

No. 4.

*Statement of the condition of the patent fund.*

Amount to the credit of the patent fund 1st January, 1859.	\$50,241 88
Amount paid in during the year.....	245,942 15
	<hr/>
Total .....	296,184 03
Deduct the amount of expenditures during the year.....	210,278 41
	<hr/>
Which leaves in the treasury, 1st January, 1860, the sum of.....	85,905 62
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No. 5.

*Table exhibiting the business of the office for seventeen years ending December 31, 1859.*

Years.	Applications filed.	Caveats filed.	Patents issued.	Cash received.	Cash expended.
1843.....	819	315	531	\$35,315 81	\$30,776 96
1844.....	1,045	380	502	42,509 26	36,344 73
1845.....	1,246	452	502	51,076 14	39,395 65
1846.....	1,272	448	619	50,264 16	46,158 71
1847.....	1,531	533	572	63,111 19	41,878 35
1848.....	1,628	607	660	67,576 69	58,905 84
1849.....	1,955	595	1,070	80,752 78	77,716 44
1850.....	2,193	602	995	86,927 05	80,100 95
1851.....	2,258	760	869	95,738 61	86,916 93
1852.....	2,639	996	1,020	112,056 34	95,916 91
1853.....	2,673	901	958	121,527 45	132,869 83
1854.....	3,324	868	1,902	163,789 84	167,146 32
1855.....	4,435	906	2,024	216,459 35	179,540 33
1856.....	4,960	1,024	2,502	192,588 02	199,931 02
1857.....	4,771	1,010	2,910	196,132 01	211,582 09
1858.....	5,364	943	3,710	203,716 16	193,193 74
1859.....	6,225	1,097	4,538	245,942 15	210,278 41

The above statement of the transactions of the Patent Office during the year 1859 affords a gratifying indication of the advancement of our country in the arts of civilized life, and demonstrates the wisdom of Congress in enacting laws to protect the inventor in the enjoyment of the fruits of his labor. The patent laws of this country are based upon the idea that, if the inventor is afforded a reasonable protection for his invention, his energies and talents will be constantly exerted in devising something new and useful to the public.

These laws have answered, to a great extent, the purposes for which they were intended; but experience has proved that they are yet defective in many respects.

The necessity of further legislation, on the part of Congress, for the purpose of remedying these defects, has been urged by my predecessors for the last five years. Congress, however, has failed to afford the remedies so urgently desired. Notwithstanding this, I deem it my duty again to call its attention to this subject, in the hope that the still greater necessity which now exists for further legislation, and the important bearing which the patent laws now have upon all sections of the country, will prove sufficient to engage its immediate attention.

Under existing laws, no provision is made for securing the testimony of witnesses in contested cases pending before this office. As a natural consequence of this, cases are frequently decided involving thousands and even hundreds of thousands of dollars upon the testimony of merely voluntary witnesses. Many persons whose testimony is important in such cases, well knowing that there is no law by which they can be compelled to testify, either decline to appear as witnesses at all, or govern their action according to the amount of money which may be offered by the parties in interest. The result of this is, that in such cases the poor are completely in the power of the rich, the weak in the hands of the strong. This is not only repugnant to the great principle of equality upon which our government is based, but is at war with every principle of justice and equity.

There are many other alterations and amendments to the present patent laws required in order to adapt them to the wants and necessities of inventors and the public. These have been so frequently alluded to by my predecessors, in their annual reports, and so urgently recommended by them to the favorable consideration of Congress, that I deem it unnecessary to do anything more than to indorse the recommendation made by them.

The practice of the office, however, has suggested one or two additional features which have not heretofore been brought to the attention of Congress, but which deserve serious consideration at their hand. Under the eighth section of the act of July 4, 1836, the Commissioner is required, whenever an application is made for a patent which would interfere with any other application already pending, or with any unexpired patent already granted, to declare an interference between the parties in order to establish the question of priority of invention. It has been held by the judges, on appeal, and is now held by this office, that he is the first and original inventor, within the meaning of the patent law, who first conceived the idea of the invention and first gave such an expression to that idea, either verbally or in any other manner



as would enable any person skilled in the art to which such invention appertains, to construct therefrom a working model or machine.

Scarcely a patent is granted which proves profitable to the inventor and important to the public but that, under this section of the law, is brought into interference with subsequent applications. Thus, not only the first patentee, but all those who have purchased rights under him, on the strength of letters patent issued by the United States, are liable to be deprived of their property upon the testimony of witnesses that a subsequent applicant for a patent for the same invention had conceived and explained to others the same idea previous to the date of the invention of the patentee. The ease with which testimony of this kind can be obtained, and the liability on the part of witnesses to be mistaken in regard to the extent and details of an invention explained to them many years before, renders property in patents extremely precarious and uncertain. An honest and *bona fide* inventor, who has expended years of labor and large amounts of money in perfecting and patenting an invention and creating a market for it, is liable to be deprived of his property by any person who can find witnesses to swear that he conceived and described the same invention prior to the invention of the patentee. There is no species of property in this country subject to the same hazards and uncertainty as property in patents, subject as it is to the above-named contingencies. Neither are there any cases in which false testimony can be presented with as little liability to detection as in the trial of interferences to establish priority of invention. The error in the law, as it now stands, consists in awarding priority to the person who first conceived and described the invention, and in giving no consideration to the *bona fide* inventor who first reduced his invention to practice, or first notifies the office of his invention either by a caveat or by an application for a patent. As, between two independent inventors, he certainly is entitled to the most credit, and best deserves the reward, who first reduces his invention to a practical shape and first gives the public the opportunity to use it. One man may conceive an invention and yet require years before he may be able to reduce it to practice. In the meantime, another, conceiving the same invention, may reduce it to practice and present it to the public as a perfect working machine, secured by letters patent of the United States, before the first inventor has even commenced a drawing or written description of the same. Still, in this case, the first but tardy inventor, by the aid of the very working machine of his more diligent rival, may finally succeed in reducing his invention to practice, and then obtain a patent for the same device, and thus render the well-earned property of the other perfectly worthless. In order to remedy this defect in the law, I would recommend that, in interference cases, he shall be deemed the first and original inventor who, previous to the application of either party for a patent, first filed a caveat in the Patent Office describing his invention, and in case no caveat is so filed, he who first presented to the office and completed his application for a patent shall be entitled to the patent, unless it shall appear from the testimony submitted that the person first filing such caveat, or first making such application, was not an original and *bona fide* inventor of the device for which he seeks a patent. Such an amendment to the



present law would work no hardship to an honest inventor, and would prove an effectual bar to a vast amount of perjury, while it would render the rights of patentees and of the public more secure. In addition to this, it would very materially reduce the number of contested cases before the Patent Office as well as before the courts.

I believe this recommendation will be sanctioned by most men of standing and respectability who have been accustomed to the investigation and trial of patent cases. At the same time, it is not at all improbable that a certain class of patent agents, who seek to make profit by aiding dishonest men in annoying and robbing honest inventors of their just rights rather than by an honorable practice of their profession, may endeavor to defeat any amendment of the law which will diminish litigation, fraud, perjury, and corruption. It is a matter of regret that the present law affords so many facilities for the dishonest practices of such men, by whom innocent inventors are continually plundered. The business of the Patent Office is rapidly increasing from year to year, as is evinced by the fact that the number of applications for patents during the year 1859 was nearly sixty per cent. more than during the year 1855. Notwithstanding this, the number of principal and first-assistant examiners remains the same. To these gentlemen is intrusted the examination of all applications for patents, in order to determine their novelty and patentability. The labor of performing this duty on every application for a patent must necessarily increase in proportion to the number of applications for similar inventions previously made. Hence, it follows that the labor and time necessary to investigate thoroughly the novelty and patentability of an invention increases from year to year. Unless, therefore, authority is given by law for the increase of the number of these officers, in proportion to the increase of the number of applications for patents, one of two evils must necessarily occur: either hasty and imperfect examinations, or great delay to the business. The former results in continual and almost endless litigation, while the latter would soon become so annoying and troublesome to inventors as to prevent them from seeking to obtain patents at all.

Rather than suffer the business of the office to become seriously delayed we have been compelled to grant patents upon hasty examinations. As a natural consequence, many things have been patented which ought to have been rejected. This difficulty must continue to exist unless Congress confers upon the Commissioner authority to add to the force of examiners from time to time, as the necessities of the business require. As the inventors of the country pay for all the expenses of these examinations, it is no more than just to them that their business should be transacted properly and with dispatch. I would therefore recommend that such authority be conferred upon the Commissioner, subject, however, to the provision that the annual expenses of the office shall in no case exceed the annual receipts. For some time past, three of the principal examiners have been withdrawn from their appropriate duties, and have been entirely occupied in the examination of appeals from the decisions of the examiners in rejected applications for patents. In the meantime, their duties have been performed by first assistant examiners. Under these circumstances, it



is no more than right that such first assistant examiners should be allowed the salaries of principal examiners for the time that they have performed their duties. They have performed the duties assigned to them with credit and fidelity, and I earnestly recommend that they be allowed the salaries as suggested.

For several years in succession Congress has been appealed to by the Patent Office, by the public, and by the inventors of the country, to revise and amend our patent laws. These inventors are an intelligent, deserving, influential, and important portion of our citizens, whose just demands and urgent necessities should no longer be disregarded.

For these reasons it is to be hoped that Congress will no longer delay taking such action upon this subject as will fully meet the wants and necessities of the country.

The fourth section of the act of Congress approved March 3, 1859, and entitled "An act making appropriations for the legislative, executive, and judicial expenses of the government for the year ending the thirtieth of June, 1860," provided "that the Secretary of the Interior be and he is hereby directed to cause the Annual Report of the Commissioner of Patents on Mechanics hereafter to be made to the Senate and House of Representatives, to be prepared and submitted in such manner as that the plates and drawings necessary to illustrate each subject shall be inserted so as to comprise the entire report in one volume not to exceed eight hundred pages."

The fourteenth section of the act of Congress approved March 3d, 1837, entitled "An act in addition to an act to promote the progress of science and useful arts," requires the Commissioner to report annually to Congress, in the month of January, a list of all patents granted during the preceding year, designating under proper heads the subject of such patents, and furnishing an alphabetical list of the patentees, with their places of residence. Also, a list of all patents which shall have become public property during the same period, together with such other information of the state and condition of the Patent Office as may be useful to Congress and the public.

It will be observed from the foregoing provisions of law, that the Commissioner is required to report annually to Congress :

1st. A list of all patents granted during the year preceding, and an alphabetical list of the patentees with their places of residence.

2d. A list of all patents which shall have expired during the preceding year.

3d. Plates and drawings, to illustrate each subject.

4th. Such other information of the state and condition of the Patent Office as may be useful to Congress and the public.

Every effort has been made to limit the size of this mechanical report, so that it might be embraced within 800 pages, as required by law; but this is found to be a physical impossibility.

The list of patents expired and granted during the year 1858, will occupy about 260 pages of the printed report. The drawings or plates necessary to illustrate each subject will require about 340 pages, while the claims and descriptions necessary to explain the drawings, and without which the report would be utterly worthless, will require about 1,200 pages more. This information, which is required by law to be reported, cannot, therefore, be published in less than 1,800 pages.



We have thus been reluctantly compelled to present a report exceeding the limit prescribed by the last Congress by 1,000 pages, and have no doubt but that Congress, in view of these facts, will so modify the law that future embarrassments of this kind may not arise. Nothing is embraced in this report but such information as is believed to be absolutely necessary to enable Congress and the public to understand the condition of the Patent Office and the character of the inventions which have been patented during the last year, while even this is condensed into the smallest space that the nature of the case will admit of.

The act of Congress approved February 5, 1859, entitled "An act providing for keeping and distributing all public documents," authorized and directed a transfer of all matters pertaining to copyrights, from the State Department to the Department of the Interior. The Secretary of the Interior has very properly placed this matter under the immediate supervision of the Commissioner of Patents. It therefore becomes my duty to call the attention of Congress to this subject.

The object of the copyright law is to protect authors in the exclusive ownership and control of their own literary productions, in a similar manner in which inventors of mechanical improvements are protected in the exclusive enjoyment of their own new and original inventions. The law now requires a person who may desire to secure the benefit of a copyright, to make his application to the clerk of the district court of the United States for the district in which the applicant resides. The clerk of said court is directed to keep a record of all such applications, and to transmit at least once in each year to this office a certified list of the said records, and all copies of books or other works deposited in his office in accordance with the provisions of the copyright law. The copies of records and books, &c., thus received are to be preserved in this office. The only fee paid by the person to whom a copyright is granted is a fee of fifty cents to the clerk of the district court, no provision being made by which the necessary expenses incurred by this office in taking charge of and preserving the records and books are to be paid by those for whose benefit this law was established. I see no good reason why authors should not be required to pay these expenses in the same manner that inventors are required to pay the expenses incurred in transacting their business before this office. Neither can I discover any good and sufficient reason why applications for the benefit of the copyright act should not be made direct to this office, instead of being made to the clerks of the United States courts. It is found to be impossible to conduct the business with uniformity and accuracy under the present system. This evil must necessarily continue to exist as long as the execution of the law is committed to the hands of so many different persons in various sections of the country. The law should, therefore, be amended in such a manner as to remedy this objection. The amount of fees to be paid by those who desire to avail themselves of the benefit of the copyright law should also be sufficient to meet the necessary expenses of the office in attending to that particular branch of the public business.

WILLIAM D. BISHOP,  
*Commissioner.*

Hon. WILLIAM PENNINGTON,  
*Speaker of the House of Representatives.*



ALPHABETICAL LIST OF PERSONS WHOSE PATENTS FOR INVENTIONS AND DISCOVERIES HAVE EXPIRED DURING THE YEAR 1859.

No.	Patentee.	Invention or discovery.	Date.	Class.
3998	Allen, Ethan.....	Pistols, and other fire-arms.....	April 16, 1845.....	XIX.
4313	Allen, John.....	Teeth, setting.....	Dec. 16, 1845.....	XX.
4020	Allen, Oliver.....	Excavating or dredging.....	May 1, 1845.....	IX.
4060	Alrichs, Jacob.....	Latch, door.....	May 24, 1845.....	II.
4281	Anderson, Alexander.....	Spindle, mode of steadying the live.....	Nov. 21; antedated May 21, 1845.....	III.
4155	Anderson, Solomon.....	Hammers.....	Aug. 20, 1845.....	II.
3900	Andrews, John.....	Cloth, felting apparatus for.....	Jan. 31, 1845.....	III.
3927	Arndt, Jacob.....	Saws, machine for filing.....	Feb. 24, 1845.....	II.
4160	Arthur, Charles.....	Grindstones for dressing tools.....	Aug. 26, 1845.....	XIII.
3975	Atwood, Anson.....	Stoves, air-tight.....	Mar. 26, 1845.....	V.
3959	Aylesworth, Chadial.....	Water-wheels.....	Mar. 21, 1845.....	XI.
4077	Babeock, Charles.....	Stoves, coal.....	June 10, 1845.....	V.
4241	Badlam, Edward.....	Piano-fortes.....	Oct. 25, 1845.....	XVIII.
3989	Baker, Arrow.....	Gates, balance-sliding, for fences.....	April 10, 1845.....	IX.
4261	Baker, J. W., and William W. Riley.....	Teeth, instrument for extracting.....	Nov. 8, 1845.....	XX.
4239	Baldamus, C. F., and F. W. Siemens.....	Printing, anastatic.....	Oct. 25, 1845.....	XVII.
3918	Ball, E.....	Ploughs.....	Feb. 20, 1845.....	I.
4263	Ball, John.....	Ploughs.....	Nov. 8, 1845.....	I.
4319	Ball, Jonathan.....	Pipes, machinery for riveting.....	Dec. 20, 1845.....	II.
4203	Barlett, Nelson.....	Baths, portable.....	Sept. 23, 1845.....	XX.
4094	Barlow, Thomas H.....	Hemp, process of preparing.....	June 25, 1845.....	IV.
3968	Barnum, Daniel.....	Loom, power.....	Mar. 26, 1845.....	III.
4301	Barrows, Ebenezer.....	Furnaces, air-heating.....	Dec. 11, 1845.....	V.
4215	Baxter, William.....	Spinners, mode of driving bobbins in.....	Sept. 30, 1845.....	III.
4232	Bean, Samuel H.....	Cars, railroad, manner of replacing upon the track.....	Oct. 11, 1845.....	X.
4311	Bebee, William.....	Hot-water, apparatus for the circulation of.....	Dec. 16, 1845.....	V.
4195	Bennett, Charles.....	Mortising machines.....	Sept. 17, 1845.....	XIV.
3890	Bennett, James H.....	Flax-pullers.....	Jan. 21, 1845.....	I.
4177	Bennett, Phineas.....	Raising wrecks, mode of discharging and.....	Sept. 2, 1845.....	IX.
4328	Benson, Benjamin S.....	Rams, hydraulic.....	Dec. 26, 1845; antedated Aug. 5, 1845.....	XI.
4162	Bentzen, J. C., and H. W. Zimmermann.....	Washing-machine.....	Aug. 26, 1845.....	XVII.
3884	Beverley, Charles F.....	Straps, fastening.....	Jan. 16, 1845.....	XVI.
5589	Bewley, Henry.....	Gutta-percha, making flexible syringes, tubes, &c., of.....	May 23, 1848; antedated Sept. 4, 1845.....	IV.
3961	Bicknell, Benjamin.....	Planing lumber, method of fastening the cutters in machinery for.....	Mar. 21, 1845.....	XIV.
3925	Bigelow, Erastus B.....	Looms, weaving, jaw-templates for.....	Feb. 24, 1845.....	III.
3926	Bigelow, Erastus B.....	Looms, regulating the tension of warps in.....	Feb. 24, 1845.....	III.
3948	Bigelow, Erastus B.....	Tenoning-machines.....	Mar. 12, 1845.....	III.
4268	Biggs, James.....	Hemp-rotting.....	Nov. 12, 1845.....	XIV.
4041	Billings, G. W., and John Harrison.....	Hemp, breaking and cleaning.....	May 10, 1845.....	IV.
4071	Billings & Harrison.....	Paper, machinery for separating sand, &c., from pulp in the manu- facture of.....	June 7, 1845.....	III.
4341	Bishop, William.....	Paper, machinery for separating sand, &c., from pulp in the manu- facture of.....	Dec. 31, 1845.....	III.
3932	Bissell, Levi.....	Ship's cables, apparatus relieving, &c.....	Feb. 28, 1845.....	VII.
3943	Black, James.....	Engine, steam, reacting-rotary.....	Mar. 12, 1845.....	VI.

*Persons whose patents for inventions have expired.*

No.	Patentee.	Invention or discovery.	Date.	Class.
4135	Bliss, John, and Frederick Creighton.....	Time-keepers, composition balance of.....	Aug. 4, 1845 .....	VIII.
4294	Bogardus, Abraham A.....	Tailor's measures.....	Nov. 29, 1845 .....	XXI.
4278	Bogardus, James.....	Shirring-machine.....	Nov. 21, 1845 .....	IV.
4280	Bogardus, James.....	India-rubber into shreds, machine for cutting.....	Nov. 21, 1845; antedated May 21, 1845.	IV.
4010	Boyd, Alexander.....	Printing calico, and other material, self-acting feeder for.....	April 21, 1845.....	III.
3957	Brackett, Rufus, and Henry.....	Leather, dicing and polishing.....	Mar. 15, 1845.....	XVI.
3980	Brand, Nathan.....	Hoe-necks, and other articles, swages, dies, &c., for manufacturing.....	April 1, 1845.....	II.
4185	Briggs, Cornelius.....	Tables, extension.....	Sept. 9, 1845.....	XVII.
4238	Briggs, John C.....	Pegging-machine.....	Oct. 9, 1845.....	XIV.
4079	Briggs, Joseph D.....	Corn-shellers.....	June 14, 1845.....	I.
3902	Brooks, James S. O.....	Salt, making.....	Feb. 12, 1845.....	IV.
3893	Brooks, S., and W. N. Clark.....	Screws, manufacture of wood.....	Jan. 23, 1845.....	II.
5592	Brooman, Richard A.....	Gutta-percha, making articles of, by molding, stamping, or embossing.....	May 23, 1848; antedated Mar. 11, 1845.	IV.
4473	Broughton, William.....	Mills, grinding.....	April 25, 1846; antedated July 21, 1845.	XIII.
4225	Brown, Benjamin.....	Planing-machines.....	Oct. 9, 1845.....	XIV.
4246	Brown, James.....	Hats, firemen's.....	Nov. 1, 1845.....	XXI.
1060	Brown, John.....	Sail vessels, mode of constructing gaff of.....	Dec. 31, 1838.....	VII.
4179	Brundred, Benjamin.....	Spinners, throstle.....	Sept. 9, 1845.....	III.
4110	Bullock, S. W.....	Presses, self-adjusting.....	July 10, 1845; antedated Jan. 10, 1845.	XII.
3873	Bullock, William.....	Presses, cotton.....	Jan. 4, 1845.....	XII.
4127	Bullock, William.....	Ploughs.....	July 30, 1845.....	I.
4088	Burt, Enoch.....	Looms, stop-apparatus for.....	June 20, 1845.....	III.
4295	Butcher, William.....	Stoves, ash-pit of.....	Nov. 29, 1845.....	V.
4259	Buttrick, Nathan, jr.....	Pipes, lead, machinery for making.....	Nov. 8, 1845.....	II.
4061	Caldwell, Robert.....	Saddles, spring.....	Nov. 24, 1845.....	XVI.
4240	Campbell, Ethan.....	Sugar, making.....	Oct. 25, 1845.....	IV.
4200	Carpenter, Aaron B.....	Doors and windows, mode of framing.....	Sept. 19, 1845.....	IX.
4128	Chapman, Abner.....	Water-wheels, reaction.....	July 30, 1845.....	XI.
4021	Chapman, Isaac L.....	Hat-bodies, manner of cutting fabrics to be made into, by sewing.....	May 1, 1845.....	III.
3999	Chase, William H.....	Cements, mastic.....	April 16, 1845.....	IV.
2222	Cheek, Pendleton.....	Millstones, with ventilators for cooling the flour, &c., manner of dressing.....	July 26, 1845; antedated June 5, 1845.	XIII.
4206	Cheney, Samuel.....	Lath, machinery for cutting.....	Sept. 27, 1845.....	XIV.
3888	Cherry, G. W., assignor to E. L. Walker.....	Piano-fortes.....	Jan. 16, 1845.....	XVIII.
4122	Cherry, G. W.....	Ilats, ventilating.....	July 26, 1845.....	XXI.
4133	Chilson, Gardner.....	Furnaces, hot-air.....	Aug. 4, 1845; antedated Feb. 4, 1845.	V.
4260	Chollar, Jones, & Low.....	Stoves, cooking.....	Nov. 8, 1845.....	V.
4102	Clark, Edward.....	Ink, printer's, making.....	July 5, 1845.....	IV.
4103	Clay, William N., assignor to William Green, jr.....	Iron, manufacturing malleable, directly from the ore.....	July 5, 1845.....	II.
4007	Close, George C., and Edward Field.....	Tanning and coloring matter, separating, in queiretron bark.....	April 22, 1845.....	XVI.
4008	Clough, William F.....	Oil, from rosin, manufacture of.....	April 22, 1845.....	IV.
4197	Clute, Peter I.....	Stoves.....	Sept. 19, 1845.....	V.
4092	Cochrane, John.....	Engines, steam, method of checking the motion of drop cut-off valves of.....	April 16, 1845.....	VI.
4093	Cochrane, John.....	Engine, auxiliary, method of arranging the parts of an, to be used in supplying steam-boilers with water.....	April 16, 1845.....	VI.
4085	Coffin, James B.....	Boring machines.....	June 20, 1845.....	XIV.



3935	Coffman, George A.	Cutting sausage-meat, machine for.	Feb. 28, 1845	XVII.
4342	Coleman, Ezra.	Inclined planes, ascending and descending, locomotives for.	Dec. 31, 1845	X.
7437	Collier, Elisha H.	Nails, method of making, by rolling.	June 16, 1850	II.
4006	Colt, J. C., assignor to D. Goss.	Presses, cotton, and other, self-adjusting platens for.	April 22, 1845	XII.
4343	Colton, Aaron.	Bee-hives.	Dec. 31, 1845	I.
4134	Colvin, Ephraim.	Supporters, uterine.	Aug. 4, 1845	XX.
4113	Connings, Robert.	Ditching-machine.	July 14, 1845	IX.
4169	Cooley, Anthony.	Winnowing-machines.	Sept. 2, 1845	I.
4084	Cooper, Peter.	Gelatine, preparation of portable.	June 20, 1845	IV.
4318	Cornell, Ezra.	Electro-magnetic telegraphs, mode of operating.	Dec. 20, 1845	VIII.
4098	Cornell, Silas.	Globes, mounting.	July 5, 1845	VIII.
4039	Cornelius, John D., and James Mott.	Seins, knitting fishing, and other net-work, machinery for.	May 10, 1845	XXII.
3894	Coston, Benjamin F.	Gas, for light-houses, generating and burning.	Jan. 31, 1845	IV.
4344	Cradlock, Joseph T.	Filters and refrigerators.	Dec. 31, 1845	XI.
4231	Crane, Alanson.	Burring-machines.	Oct. 11, 1845	III.
4308	Cunningham, Robert P.	Looms, operating shuttles in, machinery for.	Dec. 12, 1845	III.
4136	Curtis, F. C.	Horse-collars.	Aug. 4, 1845	XVI.
4009	Danc, James.	Saw-mill carriages.	April 22, 1845	XIV.
4345	Davis, James, jr.	Booms, saddle and jaws for.	Dec. 31, 1845	VII.
4050	Davis, Jane A., administratrix of Henry G. Davis, deceased.	Cotton-whippers and cleaners.	May 16, 1845	III.
3939	Davy, John T.	Stoves, cooking.	Mar. 12, 1845	V.
4150	Day, Horace H.	Hose, construction of.	Aug. 16, 1845	IV.
4073	Day, H. H., H. G. Tyer, and John Helm.	India rubber into threads, machine for cutting.	June 7, 1845	IV.
4059	De Bretton, J., sen.	Sugar, making.	May 24, 1845	IV.
4129	Decker, Abraham.	Bee-hives.	July 30, 1845	I.
4075	Deering, Richard, sen.	Hemp, &c., machines for loosening and separating the boon from the fiber of.	June 10, 1845	III.
4093	Deering, Richard, sen.	Hemp, preparation of.	June 25, 1845	IV.
3941	Dexter, John C.	Stone, picks for dressing.	Mar. 12, 1845	XV.
4262	Downs, Almon.	Sash-machinery.	Nov. 8, 1845	XIV.
4082	Draper, Simon W.	Piano-fortes.	June 20, 1845	XVIII.
4286	Dripps, William.	Water-wheels.	Nov. 20, 1845; antedated May 26, 1845.	XI.
4217	Duff, William.	Spark-arresters.	Sept. 30, 1845	VI.
4254	Dunning, William.	Brakes for carriage-wheels, operating.	Nov. 1, 1845	X.
4310	Duplessis, Francis.	Sugar-boilers.	Dec. 16, 1845	IV.
4293	Echols, Josephus.	Propelling canal boats, &c.	Nov. 26, 1845	VII.
4330	Eddy, George W.	Wheels, car.	Dec. 31, 1845	X.
4337	Edwards, Charles S.	Potatoes, preserving.	Dec. 20, 1845	IV.
4320	Eldred, Allen.	Cultivators.	Dec. 20, 1845	I.
3947	Elgar, John.	Railroads.	Mar. 12, 1845	X.
4173	Elliott, James.	Exercising-machines.	Sept. 20, 1845	XX.
4070	Ellsworth, Erastus W.	Drawing, instruments for.	June 7, 1845	XVIII.
4296	Ellsworth, Erastus W.	Rams, water.	Dec. 6, 1845	XI.
4054	Ely, Theodore.	Wool, burring, and cleaning cotton, machinery for.	May 16, 1845	III.
4302	Ely, Theodore.	Gins, cotton, roller.	Dec. 11, 1845	III.
4181	Ericsson, John.	Propeller, serew.	Sept. 9, 1845	VII.
4317	Ericsson, John.	Engines, steam.	Dec. 20, 1845	VI.
3967	Erkson, Geirrett.	Propelling boats and other vessels.	Dec. 26, 1845	VII.
4114	Estes, Colman C.	Hemp-machines.	Mar. 14, 1845	III.
3921	Evans, Cadwallader.	Boilers, steam, preventing the explosion of.	July 24, 1845	VI.
4226	Evered, Joshua, assignor to Orrin W. Seely.	Water-wheels.	Feb. 24, 1845	XI.
4038	Fairechild, R. & S., (R. Fairechild, assignor to S. Fairechild).	Boot-crimps.	July 30, 1845	XI.
			May 10, 1845	XVI.

*Persons whose patents for inventions have expired.*

No.	Patentee.	Invention or discovery.	Date.	Class.
4242	Farnam, Joel.....	Potteryware, manufacture of.....	Oct. 25, 1845.....	XV.
4137	Ferrand, Jehiel T. ....	Stoves.....	Aug. 4, 1845.....	V.
4013	Finch, S. F., and James Wheeler.....	Lath-cutting machine.....	Aug. 16, 1845.....	XIV.
4089	Fitzgerald, Jesse.....	Grinding coffee, mills for.....	June 25, 1845.....	XIII.
4336	Fleming, Lorenzo D. ....	Supporters, abdominal.....	Dec. 31, 1845.....	XX.
4045	Foster, Ezekiel B. ....	Stencilling.....	May 13, 1845.....	XVIII.
3883	Frashure, Kasson.....	Buckles for harness.....	June 16, 1845.....	XVI.
3970	Frazier, Kasson.....	Buckles, harness.....	Mar. 26, 1845.....	XVI.
3969	Freleigh, Ferris.....	Mill-stones, mode of preventing, from heating.....	Mar. 26, 1845.....	XIII.
4292	Gallagher, Patriek.....	Plough-clevises.....	Nov. 26, 1845; antedated May 26, 1845.....	I.
3930	Gardiner, P. G.....	Presses, cotton and other.....	Feb. 28, 1845.....	XII.
3936	Gardiner, P. G.....	Hemp-breaker.....	Feb. 28, 1845.....	III.
3886	Gardner, James.....	Water-wheels.....	Jan. 16, 1845.....	XI.
4118	Genin, John N.....	Hats, ventilated.....	July 22, 1845.....	III.
3907	Gibson, David D., and Walker Cobbs.....	Brakes for locking and unlocking carriage-wheels.....	Feb. 12, 1845.....	X.
4235	Gilman, Samuel H.....	Forks, manufacture of.....	Oct. 16, 1845.....	II.
4099	Goodyear, Charles.....	India-rubber fabrics.....	July 5, 1845.....	IV.
4005	Goodyear, Nelson.....	India-rubber fabrics, manufacture of.....	April 23, 1845.....	IV.
4095	Goulding, William R.....	Truss-pads, double.....	July 5, 1845.....	XX.
4125	Grant, Royal C.....	Tide-mills.....	July 26, 1845.....	XI.
4688	Greenwood, J., J. Mercer, and J. Barnes.....	Potassa and soda, stannate of, preparing.....	Aug. 12, 1846; antedated July 8, 1845.....	IV.
4016	Griffith, Thomas F.....	Vessel, method of attaching a movable to a stationary keel of a.....	April 26, 1845.....	VII.
4046	Grimes, William C.....	Spark-arresters.....	May 13, 1845.....	VI.
4069	Grimes, William C.....	Spark-arresters.....	June 7, 1845; antedated March 1, 1845.....	VI.
4205	Grimes, William C.....	Spark-arresters.....	Sept. 23, 1845.....	VI.
4044	Gross, Henry N.....	Stoves, cooking.....	May 13, 1845.....	V.
4161	Guess, Solomon.....	Composition for removing from cloth, &c.....	Aug. 26, 1845.....	IV.
4101	Hagans, Harrison.....	Washing-machines.....	July 5, 1845.....	XVII.
3889	Hale, Luke.....	Horse-powers, connecting the parts of endless floors for.....	Jan. 16, 1845.....	XIII.
4236	Hall, William.....	Locks for banks and safes.....	Oct. 16, 1845.....	II.
4117	Hamann, Augustus.....	Chimney caps.....	July 22, 1845.....	V.
4052	Hard, David, B. W.....	Trusses.....	May 16, 1845.....	XX.
4104	Harc, Robert, (M. D.).....	Blow-pipes, hydro-oxygen.....	July 5, 1845.....	IV.
4014	Harivel, Charles.....	Liquids, machines for skimming.....	April 26, 1845.....	IV.
4174	Harrington, Daniel.....	Penholders.....	Sept. 2, 1845.....	XVIII.
4176	Harrington, Daniel.....	Galvanic instruments.....	Sept. 2, 1845.....	XX.
4258	Harrington, Daniel.....	"Inkstand," manner of constructing the.....	Nov. 18, 1845.....	XVIII.
4163	Harrington, David.....	Boot-lasting machines.....	Aug. 26, 1845.....	XVI.
4211	Harris, Frederick W.....	Sawing irregular shapes, machinery for.....	Sept. 27, 1845.....	XIV.
4170	Harrison, Almond.....	Cultivators.....	Sept. 2, 1845.....	I.
3971	Hart, Silas.....	Bee-hives.....	Mar. 26, 1845.....	I.
3953	Haw, John.....	Horse-power.....	Mar. 15, 1845.....	XIII.
3973	Hawkins, Joseph.....	Gridirons.....	Mar. 26, 1845.....	V.
4037	Haworth, Wade.....	Horse-collars, stuffing and stretching.....	May 7, 1845.....	XVI.
4058	Haywood, Benjamin.....	Coal-breaker.....	May 21, 1845.....	XXII.



10289	Heilmann, J., administrator of Joshua Heilmann, dec'd.	Fibrous material, combing	Nov. 29, 1853; antedated Dec. 17, 1845.	III.
4233	Hemming, Richard	Cars, railroad, connecting links for	Oct. 11, 1845	X.
3896	Hill, Increase S., and Joseph Dixon	Type-setting, cylindrical	Dec. 16, 1845	XVIII
3981	Hinkley, Holmes	Compositions, metallic, for bearings of machinery, &c.	Jan. 31, 1845	IV.
4080	Hizer, Henry	Wheels, driving, method of connecting the wheels of locomotive steam-engines to render them all.	April 1, 1845	X.
4307	Hood, Andrew	Clover-hulling machines	June 14, 1845	I.
4164	Hosmer, Horatio	Gates, fence, and gateways	Dec. 16, 1845	IX.
4065	Hosmer, Arnold	Washing-machines	Aug. 26, 1845	XVII.
4210	Horst, Charles	Carriage-bodies, hanging	June 2, 1845	X.
4204	Hovey, William	Æolian attachments, mode of adjusting the pitch of reeds for	Sept. 27, 1845	XVIII.
4081	Howd, Samuel B.	Tools, machinery for grinding	Sept. 23, 1845	II.
4324	Howe, John J.	Paddle-wheels, submerged	June 14, 1845	VII.
4111	Hubbell, Horatio	Wire, machinery for beating and cleaning	Dec. 26, 1845	II.
4227	Hunt, Joseph S. L.	Propellers, conical screw	July 14, 1845	VII.
4062	Hunt, Walter, assignor to A. T. Arrowsmith	Planing shingles, machinery for	Oct. 9, 1845	XIV.
4221	Hunt, Walter, assignor to A. T. Arrowsmith	Inkstand	May 29, 1845	XVIII.
4306	Hunt, Walter, assignor to George Arrowsmith	Inkstand	Oct. 7, 1845	XVIII.
3929	Huntington, John	Inkstand	Dec. 11, 1845	XVIII.
4152	Huntley, Hosea	Metallic cores for chilling cast-iron pipe-boxes for the hubs of carriage wheels, &c., mode of making	Feb. 24, 1845	II.
4096	Isaacs, N. P., and James Kaisbach	Stoves, cooking	Aug. 16, 1845	V.
4270	Isham, Henry	Ship's anchors	July 5, 1845	VII.
3928	Ives, Joseph	Lock for safes, &c	Nov. 12, 1845	II.
4140	Janes, Adrian	Clocks, propelling power for	Feb. 24, 1845	VIII.
4051	Jaques, Elihu H.	Furnaces, air-heating	Aug. 9, 1845	V.
4339	Jewett, Nathan B.	Horse-powers, portable	May 16, 1845	XIII.
4119	Johnson, Elias, and D. B. Cox	Reeds, musical	Dec. 31, 1845	XVIII.
4475	Johnson, Henry	Stoves	July 22, 1845	V.
4264	Johnston, Joseph	Mail-bags, way	April 25, 1846; antedated Dec. 9, 1845.	XVI.
3911	Jones, Elias	Smut machines	Nov. 8, 1845; antedated Sept. 9, 1845.	I.
6418	Jones, Henry	Bee-hives	Feb. 19, 1845	I.
4011	Jones, Henry C.	Bread-making, preparation of flour for	May 1, 1849; antedated Mar. 13, 1845.	XVII.
3984	Katusowski, Henry, and F. P. Weirzbicki	Lock for vaults, &c.	April 26, 1845	II.
4303	Kayser, Andrew	Axles, carriage, pipeboxes for	April 1, 1845	X.
4154	Keene, Charles	Stoves for fireplaces	Dec. 11, 1845	V.
5593	Keene, Charles	Lamps, lard	Aug. 20, 1845	V.
4196	Keith, Edwin	Gutta-percha, making boots, shoes, &c., of, combined with other fabrics	May 23, 1848	IV.
4121	Kimball, John T.	Brushes for cotton gins	Sept. 19, 1845	III.
4086	King, Thomas H.	Carriages	July 22, 1845	X.
3874	Kingsley, John L.	Refrigerators	June 20, 1845	XVIII.
4000	Kinsley, Rhodolphus	Printing-presses	Jan. 4, 1845	XVIII.
3917	Kneeland, J. C.	Lock and latch, combined	April 16, 1845	II.
3908	Knowlton, E. A.	Printing-presses	Feb. 20, 1845	XVIII.
3880	Laighton, William	Grinding corn and cobs, mills for	Feb. 12, 1845	XIII.
3992	Lambert, Thos. S.	Books, machine for backing	Jan. 10, 1845	XVIII.
4144	Lardner, D., and Jas. Davison	Baths, vapor	April 10, 1845	IV.
4168	Lamborn, Israel	Bee-hives	Aug. 9, 1845	IV.
555	Langdon, Barnabas	Planks, boards, and clapboards, machine for planing	Aug. 26, 1845	I.
556	Langdon, Barnabas	Shingles, machine for shaving	Jan. 9, 1838	XIV.
7351	Leclaire, E. J., and J. J. E. Barnell	Oxyd of zinc, manufacture of the	Jan. 9, 1838	XIV.
			May 7, 1850; antedated Dec. 15, 1845.	IV.



*Persons whose patents for inventions have expired.*

No.	Patentee.	Invention or discovery.	Date.	Class.
4375	Lect, Charles W	Stoves, parlor.	Feb. 10, 1846; antedated Sept. 9, 1845.	V.
4056	Leffel, James	Water-wheels	May 21, 1845	XI.
4158	Leffel, James.	Power, arrangement of wheels and shafts for communicating.	Aug. 20, 1845	XIII.
4100	Lehr, John F.	Saddles	July 5, 1845	XVI.
4198	Lewis, H. L. B.	Furnaces, portable hot-air	Sept. 19, 1845	V.
4207	Lewis, H. L. B.	Tables, caloric dining	Sept. 27, 1845	XVII.
4030	Lewis, Isaiah W. P.	Hydraulic structures, method of obtaining permanent foundations for	May 1, 1845	IX.
4066	Lillie, William	Belblows, double	June 2, 1845	XI.
4335	Lindsey, Anos	Bark, &c., mills for grinding	Dec. 26, 1845	XIII.
4285	Loper, R. F.	Propellers of steam vessels, mode of elevating and depressing	Nov. 26, 1845	VII.
4289	Loper, R. F.	Engines, steam.	Nov. 26, 1845	VI.
4033	Loudon, John, and Thos. Shaw	Hats, equalizing and polishing the nap or pile on the surfaces of.	May 7, 1845	III.
4159	Low, Francis S., and John S. Leak	Stoves, cooking	Aug. 20, 1845	V.
4913	Maecaud, Etienne	Stoves, for heating apartments	Dec. 28, 1846; antedated Oct. 16, 1845.	V.
4350	Macgregor, jr., James.	Lamps, camphene, wick-tubes for	Jan. 7, 1846; antedated Dec. 22, 1845.	V.
4326	Maclcan, James	Glass, pressing, in moulds	Dec. 26, 1845	V.
4297	Magoun, Joseph	Engines, fire	Dec. 6, 1845	XV.
4316	Marx, Ernest	Telescope, submarine	Dec. 20, 1845	XI.
3995	Mather, Sarah P.	Boiling flour, machinery	April 16, 1845	VIII.
4329	Mauck, C. Robert	Ships, &c., sails for	Dec. 26, 1845	XIII.
4305	Maul, James	Percussion primers, and gun-locks therefor	Dec. 11, 1845	VII.
4208	Maynard, Edward	Cotton-cleaners	Sept. 22, 1845; antedated Mar. 22, 1845.	XIX.
3912	McCarthy, Fones	Grinding grain, percussion-mill for reducing or	Feb. 12, 1845	I.
3978	McCarthy, Henry	Excavators, for deepening and widening channels for rivers, &c.	Feb. 24, 1845	XIII.
3895	McCormick, Cyrus H.	Reaping-machines	April 1, 1845	IX.
4151	McKinnon, Angus	Locks, door	Jan. 21, 1845	I.
4332	Mecay, John	Water-wheels	Aug. 16, 1845	II.
3994	Merrick, George, assignor to William White	Bagasse, drying	Dec. 26, 1845	XI.
4789	Michiels, George	Gas, manufacture of	April 10, 1845	IV.
4255	Mills, William, and Mahlon Hoar	Fracture apparatus	Oct. 3, 1846; antedated May 24, 1845.	IV.
4267	Miner, John, and Silas Merrick	Staves, machinery for dressing	Nov. 8, 1845	XX.
4178	Montgomery, James	Boilers, steam, safety apparatus for	Nov. 12, 1845	XIV.
3988	Montgomery, Richard	Horse-power	Sept. 2, 1845	VI.
4314	Moore, Harvey	Pressing and cutting tobacco	April 10, 1845	XIII.
4167	Moorhead, David C.	Galvanic rings, belts, &c	Dec. 16, 1845	XII.
3946	Morrison, John	Stoves	Aug. 26, 1845	XX.
4156	Mott, Jordan L.	Chairs, revolving	Mar. 12, 1845	V.
4247	Mott, Jordan L.	Stoves, coal	Aug. 20, 1845	VII.
4248	Mott, Jordan L.	Ranges, cooking	Nov. 1, 1845	V.
4250	Mussey, Thomas	Cart-bodies, mode of operating	Nov. 1, 1845	V.
4338	Myers, Samuel	Stoves, cooking	Dec. 31, 1845; antedated Aug. 9, 1845.	XVI.
3916	Newberry, James W	Shoulder-iron, shoemaker's	Feb. 20, 1845	XVI.
4323	Newton, Daniel	Tin-ware, &c., machinery for double-seaming	Dec. 20, 1845; antedated July 7, 1845.	II.
3954	Nield, James	Loom, power	Mar. 13, 1845	III.







*Persons whose patents for inventions have expired.*

No.	Patentee.	Invention or discovery.	Date.	Class.
3996	Ross, Joel H.	Baths, vapor	April 16, 1845	XX.
4166	Ross, Joel H.	Swing for exercising	Aug. 26, 1845	XX.
3938	Royer, Jacob	Cutting and grinding fodder, machines for	Mar. 12, 1845	I.
3891	Roys, R. D., and Newall French	Boring and mortising, machine for	Jan. 23, 1845	XIV.
3940	Rueckert, Louis	Piano-fortes	Mar. 12, 1845	XVIII.
4220	Russell, George O.	Knobs, door, manufacture of	Oct. 7, 1845	II.
4992	Russell, Thomas H.	Iron tubes, welding	May 6, 1847; antedated Aug. 14, 1845.	II.
4040	Rust, Samuel	Lamp-wicks	May 10, 1845; antedated April 4, 1845.	V.
3922	Sabbaton, Paul A.	Forge, fire, hot-blast bloomery	Feb. 24, 1845	II.
4153	Sabin, Harvey W.	Washing-machines	Aug. 16, 1845	XVII.
3972	Sanburn, A.	Bee-hives	Mar. 26, 1845	I.
4183	Sanford, William	Brick-presses	Sept. 9, 1845	XV.
3958	Saxton, Joseph	Printing-presses	Mar. 21, 1845	XVIII.
4035	Scherpf, George A.	Meats, curing	May 7, 1845	IV.
3963	Schirer, C. J., and T. W. Cross	Window-sashes	Mar. 21, 1845	IX.
4212	Schneider, M. & N.	Accordions, tuning reeds of	Sept. 27, 1845	XVIII.
4180	Scoville, Hiram H., and Eunice Avery, administratrix of William Avery, deceased, assignor to Scoville, H. H.	Rocks, machine for drilling	Sept. 9, 1845	IX.
3952	Scripture, Eliphalet S.	Oil-feeders	Mar. 15, 1845	V.
3979	Scripture, Eliphalet S.	Wheels, carriage, construction of	April 1, 1845	X.
4237	Seudder, Isaiah, assignor to M. J. Whiton	Bark-mills	Oct. 25, 1845; antedated Apr. 25, 1845.	XIII.
3920	Sechler, D. M.	Straw-cutters	Feb. 20, 1845	I.
3882	Sellers, George Eseol	Hammers, forge, manner of working	Jan. 10, 1845	II.
4029	Simple, James	Coaches, steam, adapted to the prairies	May 1, 1845	X.
4282	Senior, William F.	Piano-fortes, construction of bottoms for	Nov. 21, 1845	XVIII.
4036	Seymour, Pierpont	Sowing-machines, (grain, &c.)	May 7, 1845	I.
4132	Shaw, George W.	Bugles, keyed, manufacture of	Aug. 4, 1845	XVIII.
4112	Shearer, Samuel	Ploughs	July 14, 1845	I.
3965	Shecut, W. H., and H. H. Day	Plasters, adhesive	Mar. 26, 1845	IV.
4199	Sickles, Frederick E.	Cranks, by crank-pins, mode of connecting	Sept. 19, 1845	VI.
4202	Sickles, Frederick E.	Steam-chests, mode of connecting the steam cylinder with the	Sept. 19, 1845	VI.
4213	Simpson, Thomas D.	Truck-wheels, mode of removing	Sept. 30, 1845	VI.
4034	Singleton, William Y.	Hemp, &c., machine for breaking and cleaning	May 7, 1845	III.
4333	Singleton, William Y.	Cements, water-proof	Dec. 26, 1845	IV.
3977	Slingerland, Benjamin, assignor to Phenix Manufacturing Company	Looms, weaving	April 1, 1845	III.
3997	Stocum, Joseph	Presses, cotton	April 16, 1845	XII.
4219	Smith, Benjamin M.	Hemp and flax, machinery for breaking and dressing	Oct. 7, 1845	III.
4243	Smith, Ira, assignor to A. Gauntt	Bedstead fastening	Oct. 25, 1845	XVII.
3951	Smith, Jabez	Hulling cotton seed, machines for	Mar. 15, 1845	XIII.
4067	Smith, John Cutts	Baths, portable shower	June 2, 1855	XX.
4057	Snow, Cheney, and T. N. Saddler	Boot-crimps	May 21, 1845	XVI.
3993	Snyder, Simon	Tanning	April 10, 1845	XVI.
4194	Speakman, Thomas S., & Richard A. Stratton	Rocks or earth, apparatus for boring	Sept. 17, 1845	IX.
3901	Springstead, R. H.	Cultivators and seed planters	Feb. 12, 1845	I.



4055	Springsteen, John J.	Water-wheels	May 16, 1845	XI.
4107	Stafford, Daniel S.	Ditching ploughs	July 10, 1845	IX.
4238	Stanley, Henry	Rotary-top stoves	Oct. 25, 1845	V.
4157	Staunton, Nehemiah P.	Salt, manufacture of	Aug. 20, 1845	IV.
4130	Star, Thomas W.	Type, preparing matrices for, by the electrotyping process	Aug. 4, 1845	XVIII.
4283	Stilwell, Sylvanus B.	Garments, cutting	June 20, 1845	XXI.
4049	St. John, Milton W.	Wood, machinery for turning	May 13, 1845	XIV.
4033	Stone, Chester, and George S. Collins	Presses, self-acting, for cheese, &c.	May 29, 1845	XII.
3949	Stone, D. G.	Auger-handles, &c.	Mar. 19, 1845	XIV.
4142	Suits, Benjamin	Saddles	Aug. 9, 1845	XVI.
4518	Sullivan, John L.	Supporters, spinal	May 16, 1846; antedated Nov. 17, 1845.	XX.
4347	Sweet, Benjamin	Baths, medicated	Dec. 31, 1845	XX.
4048	Sweet, Samuel, jr.	Spark-arresters	May 13, 1845	VI.
4272	Suydam, Christopher	Bee-hives	Nov. 18, 1845	I.
4145	Tainter, William, and Harlow S. Orton	Bakers, reflecting	Aug. 9, 1845	V.
3931	Talbot, Samuel	Steam-valves	Feb. 28, 1845	VI.
3982	Talley, George R.	Shave, double operating turpentine	April 16, 1845	XIV.
7403	Taylor, James	Pile, preparation for rugs, &c.	May 28, 1850; antedated Oct. 10, 1845.	III.
4037	Taylor, Samuel, and A. R. Davis	Brush-blocks with bristles, machinery for filling	May 1, 1845	XVII.
4053	Taylor, W. H., and A. P. Norton	Vise, parallel bench	May 16, 1845	II.
3881	Tenney, Oliver	Cotton wadding, apparatus for drying the sizing on	Jan. 10, 1845	III.
4139	Terry, Eli	Cloeks, suspending the balance-wheel of	Aug. 9, 1845	VIII.
4012	Thompson, A. W.	Printing, electro-graphic	April 26, 1845	XVIII.
3976	Thorp, Gould	Stoves, cooking	Mar. 26, 1845	V.
4017	Throckmorton, R. R.	Planing, tonguing and grooving, rabbeting, beading planks and other lumber, machines for	May 1, 1845	XIV.
4271	Thurber, Charles	Writing-machines	Nov. 18, 1845	XVIII.
4276	Thyng, Levi B.	Car-bodies, hanging	Nov. 18, 1845; antedated May 17, 1845.	X.
4074	Timby, Theodore R.	Water-wheels	June 7, 1845	XI.
3878	Towne, I. H.	Engine-steam, vibrating method of adapting the, to the two crank shafts	Jan. 10, 1845	VI.
3934	Townsend, Edward S., assignor to Charles Durfee	Ropes, making, machinery for	Feb. 28, 1845	III.
4015	Townshend, William	Loom, hand, for weaving figured fabrics	April 26, 1845; antedated April 10, 1845.	III.
3906	Treadwell, Daniel	Cannon, method of making of wrought-iron, or wrought-iron and steel	Feb. 12, 1845	XIX.
4186	Trump, Joseph	Ploughs, hill-side	Sept. 9, 1845	I.
13278	Tufts, Otis	Ships, iron, constructing	July 17, 1855; antedated April 2, 1845.	VII.
4224	Tyson, Isaac, jr.	Potash, chromate of, manufacture of	Oct. 9, 1845	IV.
4018	Upham, George	Bee-hives, closing and opening the entrance to	May 1, 1845	I.
4244	Urney, Jesse	Grinding corn in the cob, cutting and	Oct. 25, 1845	XIII.
4209	Utley, Grey	Straw-cutters	Sept. 27, 1845	I.
4291	Utley, Grey	Washing-machines	Nov. 26, 1845	XVII.
4031	Utter, Samuel	Stoves	May 1, 1845	V.
3993	Varden, Robert B.	Hinges for fastening blinds, shutters, and doors	Feb. 12, 1845	II.
4143	Varnham, Arthur	Paper for notes, checks, &c., manufacture of	Aug. 9, 1845	III.
3942	Waite, John	Brick-presses	Mar. 12, 1845	XV.
4304	Walley, Samuel S.	Canals, combining railroads with	Dec. 11, 1845	IX.
4026	Walther, Friedrich	Pumps	May 1, 1845	XI.
4327	Ward, Allen	Tailor's measures	Dec. 26, 1845	XXI.
3944	Ward, Henry M., Samuel L. Selden, and E. Y. Kneeland, assignors to Robert M. Lowber.	Lead-pipes, method of tinning	Mar. 12, 1845	IV.
4115	Warren, John T., and Edmund Warren	Threshing-machines	July 14, 1845	I.
4109	Warren, Samuel R.	Piano-fortes	July 10, 1845	XVIII.

*Persons whose patents for inventions have expired.*

No.	Patentec.	Invention or discovery.	Date.	Class.
3956	Warren, Thomas E.	Paints, water-proof	Mar. 15, 1845	IV.
4230	Washburn, Thomas S.	Burring maehines.	Oct. 11, 1845	III.
3983	Webb, Benjamin.	Saw-mills, mode of setting logs on the carriages of.	April 1, 1845	XIV.
4298	Webb, C. L. H.	Stoves, portable	Dec. 6, 1845; antedated Aug. 14, 1845.	V.
3933	Webster, Joseph H.	Pumps	Feb. 28, 1845	XI.
4251	Weikart, Andrew.	Boring-maehines.	Nov. 21, 1845; antedated May 1, 1845.	XIV.
4092	West, Erastus C.	Harvesting-maehines.	June 25, 1845	I.
4087	Wheeler, Clark.	Bee-hives	June 20, 1845	I.
3966	Whelan, E.	Lamps, regulating the interior draught of.	Mar. 26, 1845	V.
4106	Whipple, Cullon.	Screws, machinery for cutting wood.	July 10, 1845	II.
3914	Whipple, Solomon.	Files, machine for cutting.	Feb. 19, 1845	II.
3909	White, Grosman.	Boot-erimps	Feb. 12, 1845	XVI.
4252	White, John.	Writing-desk and table combined.	Nov. 1, 1845; antedated July 18, 1845.	XVII.
3904	Wightman, Hugh.	Carding fibrous substances, machine for.	Feb. 12, 1845	III.
3897	Wilder, Aretus A.	Boring and cutting screws, machine for.	Jan. 31, 1845	XIV.
4042	Wilder, James M.	Meat-cutters.	May 10, 1845	XVII.
4256	Wildman, Russell.	Hatter's kettles	Nov. 8, 1845	V.
3964	Wiles, Thomas.	Horse-collars, maehines for stuffing.	Mar. 21, 1845	XVI.
3950	Willoughby, James D.	Wood, &c., maehines for turning.	Mar. 15, 1845	XIV.
4191	Wilson, James.	Grate, parlor.	Sept. 13, 1845	V.
3919	Wilson, Robert.	Stoves, cooking	Feb. 12, 1845	V.
4043	Winstow, John F., and I. Blanelhard	Spikes, hook or brad-headed, machine for making.	May 10, 1845	II.
3877	Wolff, Charles.	Stoves, cooking	Jan. 10, 1845	V.
3898	Woodcock, Banerott	Ploughs	Jan. 31, 1845	I.
3879	Woods, Enoeh	Planting-maehines	Jan. 10, 1845	I.
4216	Woodward, Ferdinand	Boring circular grooves, maehines for.	Sept. 30, 1845	I.
4076	Wright, William.	Engine, rotary	June 10, 1845	XIV.
4182	Wright, William.	Boilers, steam, preventing the explosion of.	Sept. 9, 1845	VI.
3923	Wright, William M.	Boilers, steam, preventing the explosion of.	Feb. 24, 1845	VI.
4165	Young, John.	Boot-erimps	Aug. 26, 1845	XVI.
4309	Young, William G., assignor to A. H. Reip.	Bathing apparatus	Dec. 16, 1845	XX.
3937	Zeigler, Jacob, assignor to Eekstein & Moor.	Marble, maehines for polishing.	Mar. 12, 1845	XV.



No.	Patentec.	Design.	Date.
454	Abbot, James G., and Archilus Lawrence.	Furnace, portable.	April 27, 1852.
503	Allen, W. A.	Camera-stand.	September 21, 1852.
595	Andrews, Orin W., assignor to Isaac Baekus and John Pitt Barstow.	Cooking-stove.	September 21, 1852.
475	Arnold, Dutee	Stove, cooking, the front and side plates of a	July 27, 1852.
487	Arnold, Dutee.	Stove, parlor.	August 17, 1852.
528	Arnold, Dutee	Stove, parlor.	November 30, 1852.
486	Beesley, Jacob, assignor to Richard Peterson	Stove, cooking.	August 10, 1852.
485	Beesley, Jacob and E. Delauey, assignors to Wm. P. Cresson.	Stove.	August 10, 1852.
446	Blaekmau, James, and Charles Skidmore.	Comb, ladies' hair.	February 17, 1852.
508	Bryant, Walter.	Table frame and legs.	October 5, 1852.
433	Burnham, Sanford	Stoves.	January 6, 1852.
439	Burgess, John, assignor to Geer, Chaffee & Richmond.	Stove, coal.	January 13, 1852.
450	Carpenter, Samuel M.	Stove, cooking.	March 30, 1852.
530	Chapin, Nathan, assignor to Nadlan Chapin and John F. Driggs	Window-blinds	November 30, 1852.
436	Conklin, J. Harvey, assignor to W. D. and F. Vandenburgh.	Stoves	January 6, 1852.
468	Conklin, J. H., assignor to R. R. Finch, sr., and R. R. Finch, jr	Stoves, cooking.	June 29, 1852.
545	Conklin, James H., assignor to Wm. P. Cresson.	Stove.	Feb. 1, 1853; antedated Dec. 12, 1852.
539	Dictz, Robert E.	Girandole.	December 28, 1852.
502	Dulley, James J., assignor to Johnson, Cox, & Fuller	Stove, parlor.	September 14, 1852.
477	Eberly, Samuel.	Stove, cooking.	August 13, 1852.
452	Gallagher, A. J., and J. J. Baker.	Stoves, cooking.	April 20, 1852; antedated Jan. 17, 1852.
467	Gibbs, S. W., assignor to North, Harrison, & Chase.	Stove, cooking.	June 22, 1852.
469	Green, Jeremiah D., assignor to Messrs. Morrison & Tibbetts	Stove, parlor.	July 6, 1852.
445	Harris, Courad, and Paul W. Zoiner	Stoves	February 10, 1852.
499	Harris, C., and P. W. Zoiner.	Stove, parlor.	September 14, 1852.
507	Hampton, Adam.	Grate-frame and summer-piece.	October 5, 1852.
434	Hebbard, Henry, and John Polhamus	Spoons.	January 6, 1852.
457	Herrick Thomas A., assignor to Lemuel M. Leonard.	Stoves, cook.	May 18, 1852.
492	House, Samuel A., assignor to Hiram House	Stove-plate, parlor.	August 31, 1852.
493	House, Samuel A., assignor to Hiram House.	Stove, parlor, top and front plates of a.	August 31, 1852.
494	House, Samuel A., assignor to Hiram House.	Stove-front, parlor	August 31, 1852.
553	Horton, Nicholas T	Railing, iron.	December 14, 1852.
456	Huntley, Hosca H., assignor to David T. Woodrow	Stove, cooking.	May 11, 1852.
514	Hutton, P. M.	Cradle, east-iron.	October 26, 1852.
440	Jackson, James L.	Mantle, grate-frame and summer-piece.	February 3, 1852.
441	Jackson, James L.	Grate-frame and summer-piece	February 3, 1852.
442	Jackson, James L.	Grate-frames.	February 3, 1852.
443	Jackson, James L.	Grate-frames.	February 3, 1852.
447	Jackson, James L.	Grate-frames and summer-piece	February 17, 1852.
481	Jackson, James L.	Grate-frame and fender.	August 10, 1852.
482	Jackson, James L.	Grate-frame and fender.	August 10, 1852.
483	Jackson, James L.	Grate-frame, summer-piece, and fender.	August 10, 1852.
509	Jackson, James L.	Grate-frame.	October 12, 1852.
535	Jewett, S. S., and F. H. Root.	Stove-plates	December 21, 1852.
536	Jewett, S. S., and F. H. Root.	Stove, cooking.	December 21, 1852.
504	Kilburi, Francis	Fence, wire.	September 21, 1852.

*Persons whose patents for designs have expired.*

No.	Patentee.	Design.	Date.
524	Knapp, Gilbert, and A. H. Neal.	Stove, coal	December 14, 1852.
521	Law, Thomas, assignor to Levi Chapman.	Pedestal and column	November 9, 1852.
448	Leffel, James.	Stoves	February 24, 1852.
478	Molony, Patrick	Water-cooler	August 3, 1852.
438	Paterson, James, assignor to James Albro	Floor-cloths	January 13, 1852.
474	Paul, Amos	Stove-plates, parlor	July 20, 1852.
489	Perry, John S., assignor to Jagger, Treadwell, & Perry	Stove, cooking	August 17, 1852.
490	Perry, John S., assignor to Jagger, Treadwell, & Perry	Stove, cooking	August 17, 1852.
538	Pearsall, W. L., and S. W.	Spittoon	December 21, 1852.
470	Pratt, Wm. F., and George W. Bosworth	Stove, cooking	July 13, 1852.
488	Pratt, Samuel F., assignor to Jagger, Treadwell, & Perry	Stove, six-plate	August 17, 1852.
516	Pratt, Joseph, assignor to Bowers, Pratt, & Co.	Stove, cooking	November 2, 1852.
526	Pratt, Joseph, assignor to Bowers, Pratt, & Co.	Stove, Franklin	November 16, 1852.
527	Pratt, Joseph, assignor to Bowers, Pratt, & Co.	Grate, parlor	November 16, 1852.
529	Pratt, Samuel F., assignor to Jagger, Treadwell, & Perry	Stove, Franklin	November 30, 1852.
520	Race, Washburn, assignor to H. C. Silsby, W. Race, and B. Holly	Stove, parlor	November 9, 1852.
459	Redheffer, William	Combs, ladies' hair	May 25, 1852.
455	Richmond, Apollos, assignor to A. C. Barstow & Co.	Stove, cooking	May 11, 1852.
473	Richmond, Apollos, assignor to A. C. Barstow & Co.	Grate, portable	July 13, 1852.
491	Ripley, Ezra, assignor to N. S. Vedder	Stove, parlor	August 31, 1852.
531	Ripley, Ezra, and N. S. Vedder, assignors to Samuel McClure	Stove, cook	December 7, 1852.
435	Savery, William	Stoves	January 6, 1852.
451	Savage, John J., assignor to A. Morrison and T. M. Tibbits	Stoves, cooking	April 13, 1852.
453	Sailor, Samuel H., assignor to North, Harrison, & Chase	Stoves, cooking	April 27, 1852.
522	Sailor, Samuel H., assignor to A. G. Abbott and A. Lawrence	Stove, parlor	November 9, 1852.
523	Sailor, Samuel H., assignor to A. G. Abbott and A. Lawrence	Stove, cannon	November 9, 1852.
524	Sailor, Samuel H., assignor to A. G. Abbott and A. Lawrence	Stove	November 9, 1852.
525	Sailor, Samuel H., assignor to A. G. Abbott and A. Lawrence	Stove-plates	November 9, 1852.
465	Sanderson, Wm. L., assignor to R. R. Finch, sr., and R. R. Finch, jr.	Stove, dining-room	June 22, 1852.
497	Sanderson, Wm. L., assignor to R. R. Finch, sr., and R. R. Finch, jr.	Stove, coal	September 7, 1852.
444	Shields, James	Combs, hair	February 3, 1852.
484	Shultz, Frederick, assignor to Wm. P. Cresson	Stove, cooking	August 10, 1852.
480	Smith, G., H. Brown, and Julius Holzer, assignors to North, Harrison, & Chase	Stove, cooking	August 3, 1852.
511	Smith, Elihu	Stove, cooking	October 19, 1852.
518	Snow, William M.	Stove-plates	November 2, 1852.
476	Stephenson, Peter	Medallion of Daniel Webster	July 27, 1852.
495	Stephenson, Peter	Medallion of General Scott	September 7, 1852.
496	Stephenson, Peter	Medallion of Franklin Pierce	September 7, 1852.
512	Taylor, Robert, and Robert D. Laurie	Forks, spoons, &c.	October 19, 1852.
461	Thomson, David, assignor to New Market Iron Foundry	Grate, portable	June 8, 1852.
506	Tuttle, Charles B.	Stove, cooking	October 5, 1852.
449	Vedder, N. S., and W. L. Sanderson, assignors to Warren, Sweetland, & Little	Stoves, parlor	February 24, 1852.
458	Vedder, N. S., and W. L. Sanderson, assignors to Peter I. Clute	Stove, cook	May 18, 1852.
501	Vedder, N. S.	Stove, cooking	September 14, 1852.
510	Vedder, N. S.	Stove, parlor	October 12, 1852.



519	Vedder, N. S.	Stove, cook.	November 2, 1852.
462	Vose, Samuel D.	Stove, parlor.	June 22, 1852.
463	Vose, Samuel D.	Stove, coal.	June 22, 1852.
464	Vose, Samuel D.	Stove, box.	June 22, 1852.
465	Vose, Samuel D.	Stove, parlor cook.	June 22, 1852.
471	Vose, Samuel D.	Stove, cooking.	July 13, 1852.
498	Vose, Samuel D.	Stove, cooking.	Sept. 14, 1852; antedated March 14, 1852.
500	Vose, Samuel D.	Stove, cook.	September 14, 1852.
437	Wager, James, David Pratt, and Volney Richmond	Stoves.	January 13, 1852.
515	Wager, James, V. Richmond, and H. Smith.	Stove, cooking.	October 26, 1852.
532	Wager, James, V. Richmond, and H. Smith	Stove, box.	December 14, 1852.
537	Wager, James, V. Richmond, and H. Smith.	Hearth-plate.	December 21, 1852.
513	Wardwell, Benjamin, and Ephraim R. Barstow.	Range, cooking.	October 19, 1852.
460	Waterman, Nathaniel.	Towel-stand.	May 25, 1852.
517	Wheeler, John W., and O. B. Latham.	Curb-pump.	November 2, 1852.
479	Wheeler, Russell, and Stephen A. Bailey.	Stove, cooking.	August 3, 1852.
472	Zeuner, Charles, assignor to M. Greenwood & Co.	Stand, hat and umbrella.	July 13, 1852.

ALPHABETICAL LIST OF PERSONS TO WHOM PATENTS FOR INVENTIONS OR DISCOVERIES, AND FOR DESIGNS, HAVE BEEN GRANTED DURING THE YEAR 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
26224	Abbott, Harry, assignor to self and Emerson Abbott.	North Huron, Ind.	Water-wheels, centrifugal.	Nov. 22, 1859.
25612	Abbott, James G., and A. Lawrence.	Philadelphia, Pa.	Stoves.	Oct. 4, 1859.
25795	Abbott, Samuel C.	Zanesville, Ohio.	Shots and shells, adaptation of wads to.	Oct. 11, 1859.
23995	Adams, A. W., et al. (See Moore, H. K., assignor.)	Talladega, Ala.	Presses, cotton.	May 17, 1859.
24915	Adams, Charles, et al. (See Wilton, Alfred B., assignor.)	Somerville, Mass.	Casting copper cylinders.	Aug. 2, 1859.
25375	Adams, Elisha H.	New York, N. Y.	Saddle-trees.	Sept. 13, 1859.
22477	Adams, Henry.	Brooklyn, N. Y.	Boiler-feeder, automatic.	Jan. 4, 1859.
25310	Adams, Henry B.	Brooklyn.	Lamps.	Sept. 6, 1859.
25310	Adams, Henry W.	Brooklyn.	Lamps.	Sept. 6, 1859.
25613	Adams, Isaac, et al. (See Phillips, Alfred S., assignor.)	Greensburg, Ind.	Planters, eorn.	Oct. 4, 1859.
25862	Adams, J. C.	Canton, Mass.	Hoes, wedding.	Oct. 18, 1859.
25929	Adams, James M., assignor to self and Alonzo Johnson.	Cleveland, Ohio.	Cannon.	Oct. 25, 1859.
25929	Adams, Joseph, assignor to self and B. Barker.	Cleveland, Ohio.	Cannon.	Oct. 25, 1859.
26403	Adams, L. J., et al. (See Hawse & Adams.)	Blanchester, Ohio.	Car-couplings.	Dec. 13, 1859.
26403	Adams, Luther.	Blanchester, Ohio.	Car-couplings.	Dec. 13, 1859.
24783	Adams, R. E., and O. H. Horton. (See Horton & Adams.)	Harrisburg, Pa.	Turnpike roads, &c., machine for breaking stones for.	July 12, 1859.
25311	Adams, Theodore.	Philadelphia, Pa.	Deceotions, apparatus for making.	Sept. 6, 1859.
26150	Adamson, William.	Roxbury, Mass.	Clock escapement.	Nov. 22, 1859.
26150	Addy, Charles J.	Roxbury, Mass.	Clock escapement.	Nov. 22, 1859.
26150	Adelmann, P., et al. (See Neubauer & Adelmann.)	Roxbury, Mass.	Clock escapement.	Nov. 22, 1859.
26150	Adam, S., et al. (See Scott, Henry M., assignor.)	Roxbury, Mass.	Clock escapement.	Nov. 22, 1859.
26150	Adriance, I. P., and A. A. Hotchkiss. (See Hotchkiss & Adriance.)	Roxbury, Mass.	Clock escapement.	Nov. 22, 1859.

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24914	Acerts, Paul Francis	London, England	Axle-boxes for lubricating railway rolling stock.	Aug. 2, 1859.
26331	Ager, Wilson, assignor to T. J. Wolf and P. J. Jordon.	Rohrsburg, Tenn.	Rice, machines for cleaning	Dec. 6, 1859.
25863	Agnew, B. L., assignor to G. P. Reed.	Indiana, Pa.	Cans, preserve	Oct. 18, 1859.
23996	Ahl, David	Newville, Pa.	Surgical splints	May 17, 1859.
22924	Aiken, E. C., <i>et al.</i> (See Cavanah, F. P., assignor.)	Nashua, N. H.	Bee-hives.	Feb. 15, 1859.
24916	Aiken, James Bradley	Manchester, N. H.	Knitting-machines	Aug. 2, 1859.
23815	Aitkin, W. B. (See Atkins & Aitkin.)	Brooklyn, N. Y.	White-lead, manufacture of	May 3, 1859.
23389	Aitkin, William B., and W. F. Warburton. (See Warburton & Aitkin.)	New York, N. Y.	Cork-machine	May 3, 1859.
24270	Albright, Samuel, and John H. Miller. (See Miller & Albright.)	Brooklyn, N. Y.	White-lead, manufacture of	May 3, 1859.
26075	Albro, James	Elizabeth, N. J.	Printing oil-cloths	June 7, 1859.
26005	Alden, Mrs. C.	Elizabeth, N. J.	Printing floor-cloths, method of.	Nov. 15, 1859.
25614	Alden, Charles	Cassadaga, N. Y.	Clothes, ironing, apparatus for.	Nov. 8, 1859.
22773	Alden, Manoah	New York, N. Y.	Evaporating, apparatus for.	Oct. 4, 1859.
33886	Alden, Milton	Philadelphia, Pa.	Fluids, apparatus for raising and forcing.	Feb. 1, 1859.
24084	Aldridge, Hiram	Auburn, N. Y.	Cultivators	May 10, 1859.
24529	Alexander, C. M. (See Willoughby, James D., assignor.)	Michigan City, Ind.	Separators, grain, shoe for.	May 24, 1859.
25157	Alexander, Edward. (See Rousseau, Auguste, assignor.)	New Albany, Ind.	Lamp-burners, vapor	June 28, 1859.
23000	Alexander, John, assignor to self and James Ritchie	Brooklyn, N. Y.	Moulding, patterns for	Aug. 16, 1859.
25615	Alexander, Thomas I.	Westerville, Ohio	Saws, reciprocating, method of operating.	Feb. 22, 1859.
22843	Alexander, W., and W. J. Van Horn. (See Van Horn & Alexander.)	Buffalo, N. Y.	Gauge, steam	Oct. 4, 1859.
22774	Allen, Albert J.	Philadelphia, Pa.	Rivets, bullets, &c., machine for making.	Feb. 8, 1859.
26206	Allen, Charles B.	Indianapolis, Ind.	Lamps, vapor, burners for	Feb. 1, 1859.
26152	Allen, Charles F.	Le Roy, N. Y.	Planters, corn	Nov. 8, 1859.
24528	Allen, E. C.	Boston, Mass.	Gauge, steam, combination	Nov. 22, 1859.
25616	Allen, E. G.	Providence, R. I.	Watch and locket cases, constructing rims and field-pieces for.	June 28, 1859.
23068	Allen, J. G., and P. Pomeroy. (See Pomeroy & Allen.)	Midville, Ga.	Planters, seed	Oct. 4, 1859.
25476	Allen, James, <i>et al.</i> (See Beggs & Allen.)	Worcester, Mass.	Tables, invalids'	Mar. 1, 1859.
24784	Allen, James N.	Pekin, Ill.	Planetarium	Sept. 20, 1859.
26151	Allen, John P.	Sleepy Creek, Va.	Washing-machine	July 19, 1859.
26553	Allen, John P.	Utica, N. Y.	Metal planing-machine	Nov. 22, 1859.
22612	Allen, Jonathan M.	Unionville, Conn.	Vise and saw-set	Dec. 27, 1859.
	Allen, Lemuel	New York, N. Y.	Potato-diggers	Jan. 18, 1859.
	Allen, Lewis			
	Allen, Luelus C., assignee. (See Ferguson, J. Henry, ass'r.)			
	Allen, Moses			
	Allen, Norman			
	Allen, R. L.			



26239	Allen, Reuben L.	Providence, R. I.	Sleeve-fastener	Nov. 29, 1859.
23336	Allen, T. F.	Dyersville, Iowa.	Car-trucks, railroad	Mar. 29, 1859.
23997	Allen, V. R.	St. Louis, Mo.	Stencil-brush	May 10, 1859.
25709	Allen, W. H., and A. J. Bentley. (See Bentley & Allen.)	New York, N. Y.	Rope-nippers	Oct. 11, 1859.
23538	Allen, W. H., and A. J. Bentley.	Dubuque, Iowa.	Composition for friction-matches	Jan. 11, 1859.
22539	Allen, William P.	New London, Conn.	Clothes, roller for expressing water from	Jan. 11, 1859.
25559	Allison, William C., assignor to self and John Murphey	Philadelphia, Pa.	Watering and sweeping railways, apparatus for	Sept. 6, 1859.
26066	Allison, William C., assignor to self and John Murphey	Philadelphia, Pa.	Cars, city railroad, mode of confining the seat of the driver on	Nov. 8, 1859.
24184	Alsop, George M.	Philadelphia, Pa.	Cars, railroad, air-springs for	May 31, 1859.
23421	Alsop, T., and I. B. Sawyer. (See Sawyer & Alsop.)	Nolensville, Tenn.	Lock, ring	Jan. 18, 1859.
26213	Alston, William J.	Phillipstown, Ill.	Raking and loading hay, machines for	Nov. 22, 1859.
26225	Alter, David, <i>et al.</i> (See Hill & Alter.)	Lewistown, Pa.	Fire-arm, breech-loading	July 12, 1859.
24774	Althouse, J. J., <i>et al.</i> (See Worthen & Althouse.)	New Orleans, La.	Evaporating-pans, apparatus for heating	Aug. 9, 1859.
24978	Alunair, Peter, assignor to self and M. M. Faxton.	Saugus, Mass.	Stairs, revolving	Aug. 9, 1859.
25076	Alvord, W. H., <i>et al.</i> (See Gray, Henry W., assignor.)	Saugus, Mass.	Press for printing cards and bill-heads, self-feeding	Mar. 29, 1859.
24978	Ames, H. O.			
25076	Ames, Martin P., <i>et al.</i> (See Wentworth & Ames.)			
23421	Ames, Nathan, assignor to self and Ward McLean.			
23421	Ames, Nathan, assignor to self and Nathaniel Evans, jr.			
23421	American Telegraph Company. (See Hughes, David E., assignor.)			
23421	American Telegraph Company. (See Phelps, George M., assignor.)			
23650	Amory, Jonathan.	West Roxbury, Mass.	Boiler-furnaces, steam	Apr. 5, 1859.
25477	Ancona, Astley C.	Reading, Pa.	Slide-valves for steam-engines	Sept. 20, 1859.
24185	Anderson, C. F.	Charlestown, N. H.	Planters, corn	May 31, 1859.
23614	Andres, S. R. & Samuel, and McD. Bucklin.	New York, N. Y.	Drying grain, malt, &c., apparatus for	Jan. 18, 1859.
23037	Andrews, A., and H. Kalbaeh	Bennville, Pa.	Water-wheel, horizontal	Aug. 30, 1859.
25266	Andrews, Abraham	Bennville, Pa.	Engines, rotary	Mar. 1, 1859.
23144	Andrews, Abraham	Bennville, Pa.	Water-wheel	Mar. 8, 1859.
23067	Andrews, C. M., and George Miller. (See Miller & Andrews.)	Norristown, Pa.	Brick-molds	Mar. 1, 1859.
24979	Andrews, Joel W.	Clinton, Mass.	Seeding-machines	Aug. 9, 1859.
24980	Andrews, John, (No. 1)	Clinton, Mass.	Seeding-machines	Aug. 9, 1859.
26319	Andrews, John, (No. 2)	Hecla Works, N. Y.	Fastener, blind	Nov. 29, 1859.
26240	Andrews, Oscar M., assignor to A. K. Seymour	Roscoe, Ill.	Washing-machine	Nov. 29, 1859.
23816	Andrews, Seth A.	Chicago, Ill.	Gauge, alarm water	May 3, 1859.
24780	Andrews, W. R., & John Oswald	New Orleans, La.	Wharves, piles, &c., mode of staying	July 12, 1859.
24780	Angamar, E. H.			
25478	Angell, Coy., & Noble. (See Noble, Coy., & Angell.)	New Lexington, Ohio.	Separators, grain	Sept. 20, 1859.
22691	Ankney, P. J., and Daniel McGreevy.	Cincinnati, Ohio.	Treatment of fatty acids	Jan. 25, 1859.
23844	Appenzeller, J. C.	Burlington, Vt.	Railroad safety-switch	Feb. 8, 1859.
23844	Appleton, Giles S.	Paris, France	Fuel, artificial, preparation of	Feb. 22, 1859.
23005	Appleton, Traey, &c. (See Bigelow, John K., assignor.)			
23005	Archerau, Henry Adolphe			
23005	Archibald, Charles D. (See Johnson, Job, assignor.)			
24174	Argood, Henry, and Stephen Ustiek, assignors to	Mansfield Township, N. J.	Clay-pipes, machines for making	May 24, 1859.
26464	John L. Macknight.	Philadelphia, Pa.	Apple parer, corer, and slicer	Dec. 20, 1859.
25617	Arnfield, John I.	Jamestown, N. C.	Boilers, steam, feed-water apparatus for	Oct. 4, 1859.
24271	Armitage, Thomas	Philadelphia, Pa.	Breakwater	June 7, 1859.
24271	Armour, D. Hillen	Columbia, Texas		

Patentees for inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24981	Armstrong, Francis	New Orleans, La	Cars, railroad, brakes for	Aug. 9, 1859.
22925	Armstrong, Joseph	Woburn, Mass	Hides and skins, treatment of	Feb. 15, 1859.
24363	Armstrong, Pleasant	Camden, Ala	Washing-machine	June 14, 1859.
23537	Arndt, I. Wallace	Green Bay, Wis	Added, machine for noting the sums of numbers	Apr. 12, 1859.
25168	Arnason, Peter	Newark, N. J.	Hat-bodies, machinery for forming	Aug. 23, 1859.
25936	Arnold, Edward R.	Providence, R. I.	Valves for steam-engines, cut-off	Nov. 1, 1859.
23998	Arnold, Edward R.	Providence, R. I.	Engines, steam, cut-off gear of	May 17, 1859.
23538	Arnold, William H.	Washington, D. C.	Fire-arms, projectile for	Apr. 12, 1859.
26076	Arnold, William H.	Washington, D. C.	Fire-arms, breech-loading	Nov. 15, 1859.
23435	Arthur, Pierce & Arthur. (See Hall, George N., assignor.)	Brooklyn, N. Y.	Fires in steam-vessels, arrangement for extinguishing	Apr. 5, 1859.
26007	Asker, F. E., et al. (See Hendry, Thomas C., assignor.)	London, England	Sugar refining	Nov. 8, 1859.
26330	Atherton, G. M.	Friendsville, Ill.	Boring, hub, and mortising machines	Dec. 6, 1859.
26391	Atkins, George W., and William B. Atkins, assignors to G. W. Atkins and J. B. Henry	Milton, Del.	Registering-machines	Dec. 6, 1859.
24515	Atkins, Solon R., and D. H. Hull, assignors to D. H. Hull.	Philadelphia, Pa.	Trace-fastener	June 21, 1859.
22775	Atkinson, Zachariah	Plantersville, Conn.	Press, cotton	Feb. 1, 1859.
23145	Atwater, J. B.	Richmond, Ga.	Car-couplings	Mar. 8, 1859.
22776	Atwater, J. B.	Berlin, Wis.	Car-couplings	Feb. 1, 1859.
23539	Atwood, J. E.	Mansfield Center, Conn.	Thread-gauging	Apr. 12, 1859.
23006	Atwood, Luther	Brooklyn, N. Y.	Distillation, apparatus for destructive	Feb. 22, 1859.
23337	Atwood, Luther.	Brooklyn, N. Y.	Distillation, apparatus for destructive	Mar. 29, 1859.
26465	Auehampaugh, Brothers. (See Stewart, Philemon, ass't.) Auehampaugh, Jacob J. & Levi. (See Blakeman, Elisha D., assignor.)	Trenton, Ohio	Pumps, cattle	Dec. 20, 1859.
23887	Auger, Joseph, et al. (See Planer, Louis.) Auger, Joseph, et al. (See Planer, Louis, assignor.)	Brighton, Iowa	Shingles, machine for sawing	May 10, 1859.
25553	Augustus, J. F. (See Dyar & Augustus.)	Altona, Ill.	Churn	Sept. 27, 1859.
25873	Aultman, C. & Co. (See Miller, Lewis & Jacob, assignors.)	Louisville, Ky.	Moulding-plows	Oct. 23, 1859.
25376	Austin, Abel	Cross River, N. Y.	Rails for railroads	Sept. 13, 1859.
25710	Avery, Benjamin F.	New York, N. Y.	Galvanic-battery	Oct. 11, 1859.
25479	Avery, Thomas C.	Beloit, Wis.	Mortising-machines	Sept. 20, 1859.
24272	Axe, William R.	Hope, N. J.	Washing-machine	June 7, 1859.
24273	Ayres, Daniel S. (See Godsoe, William, assignor.) Ayres, Isaac, et al.	Hartford, Conn.	Water, device for raising	June 7, 1859.



23845	Ayres, J. A.	Hartford, Conn.	Gates, method of opening and closing by weight of the carriage	Feb. 8, 1859.
23338	Aylesworth, Thomas D.	Illion, N. Y.	Hop-frams	Mar. 29, 1859.
25312	Aylesworth, Thomas D.	Illion, N. Y.	Harvesters, cutting-apparatus of	Sept. 6, 1859.
24691	Baare, Frederick, and Julius G. Garally, assignors to H. H. Day.	New York, N. Y.	Fabrics, manufacturing corrugated	July 5, 1859.
25796	Babbett, Ivory.	Auburn, N. Y.	Jacquard-machines	Oct. 18, 1859.
25874	Babcock, G. H.	Westerly, R. I.	Bronzing-machine	Oct. 25, 1859.
26241	Babcock, Nathan, <i>et al.</i> (See Cotterell, C. B., assignor)	Stuyvesant, N. Y.	Ranges, cooking	Nov. 29, 1859.
24692	Bacon, Francis W., assignor to Edward H. Ashcroft.	West Newton, Mass.	Boilers, steam, gauge-cocks for	July 5, 1859.
24709	Bacon, Steuben T.	Boston, Mass.	Locks	July 12, 1859.
24710	Bacon, Steuben T.	Boston, Mass.	Locks, bank and safe	July 12, 1859.
23146	Bader, D. D., and C. Barstow. (See Reynolds, George H., assignor.)	Boston, Mass.	Paper, register for sheets of	Mar. 8, 1859.
24224	Badger, D. D., and W. S. Sampson, assignors to D. D. Badger.	New York, N. Y.	Grain-bins	June 14, 1859.
22615	Bagnicki, Ernst.	New York, N. Y.	Syringing-apparatus	Jan. 18, 1859.
25711	Bailey, Augustus.	Gardiner, Me.	Wood, machine for bending	Oct. 11, 1859.
25083	Bailey, Gilbert L.	Portland, Me.	Leather, machine for punching holes in	Aug. 16, 1859.
26466	Bailey, John H.	Sand Ford, Ind.	Vehicle, locomotive-traction	Dec. 20, 1859.
22692	Bailey, J. E., <i>et al.</i> (See Shaw, Thomas, assignor.)	Troy, N. Y.	Valve for steam-engines	Jan. 25, 1859.
23436	Bailey, R.	New London, Conn.	Clothes, machine for wringing	April 5, 1859.
23147	Bailey, S. A.	Friendship, Va.	Wagon, dumping	Mar. 8, 1859.
24274	Bailey, Theodore	New Orleans, La.	Fire-arm, revolving	June 7, 1859.
24274	Bailey, Thomas	New Orleans, La.	Fire-arms, means for actuating movable parts of	June 14, 1859.
24437	Baird, J. M., and Levi F. Smith.	Whceling, Va., and Stonington, Conn.	Chair, reclining	Nov. 15, 1859.
26077	Baker, Grover, & Co. (See Grover, Baker, &c.)	Fredonia, N. Y.	Straw-cutters	May 31, 1859.
24186	Baker, David, <i>et al.</i> (See Dennisson, J. N., assignor.)	Cochvanton, Pa.	Bedstead-fastening	May 24, 1859.
24085	Baker, Ensign	Nepouset, Ill.	Gate, farm	Mar. 29, 1859.
23339	Baker, George W.	New Market, N. J.	Hoes, weeding	Oct. 4, 1859.
25619	Baker, George W.	New Market, N. J.	Tonguing and grooving machine	Sept. 6, 1859.
25313	Baker, H. H.	New Market, N. J.	Planing-machines, wood, arrangement of the feed-roller	Feb. 15, 1859.
22926	Baker, H. H.	Centerville, Ind.	Plough, mole	Oct. 4, 1859.
25618	Baker, Henry F.	Syracuse, N. Y.	Bridle-bitts	June 7, 1859.
24275	Baker, John B.	Mechanicsburgh, Ohio	Planters, seed	Mar. 1, 1859.
23069	Baker, John C.	Washington, D. C.	Window-blinds, rods of	Oct. 11, 1859.
25864	Baker, John G., assignor to self and Asa L. Carrier.	Wall Hill, Miss.	Planters, cotton-seed	Dec. 13, 1859.
26404	Baker, P. B.	Providence, R. I.	Printing, blankets for	Dec. 20, 1859.
26467	Baker, S. W.	Walpole, Ind.	Car-seats and couches	Jan. 25, 1859.
22693	Baker, W. M.	East Templeton, Mass.	Hoop-riving machine	Aug. 2, 1859.
24917	Baker, William	Chicago, Ill.	Locomotive-engines, variable exhaust of	May 17, 1859.
23999	Baker, William S. G.	Tamaqua, Pa.	Straw-cutters	Dec. 27, 1859.
26554	Baker, W. H., Daniel Deau, and B. L. Fetheroff	Tamaqua, Pa.	Movement, mechanical	Nov. 15, 1859.
26078	Baker, William H.	West Meriden, Conn.	Ramrod, adjustable wormer for	Mar. 15, 1859.
23223	Baldwin, B. S., and W. D. Herral. (See Herral & Baldwin.)			
	Baldwin, George E.			
	Baldwin, J., and L. Kimball. (See Buxton, L. W., ass'r.)			
	Baldwin, James C., <i>et al.</i> (See Schott & Baldwin.)			

## Patentees of inventions and designs, 1859.

No.	Name of patentec.	Residence.	Invention or discovery.	Date.
25712	Baldwin, James D.	Columbus, Ga	Paint-oil, composition of	Oct. 11, 1859.
25077	Baldwin, Josephus, <i>et al.</i> (See Kenny, George, assignor.)	Leroy, N. Y.	Lightning-rods, composition of	Aug. 9, 1859.
23540	Baldwin, L. S., and Lucius Parks, assignors to L. S. Baldwin.	Milwaukee, Wis.	Gas-regulators	April 12, 1859.
22928	Baldwin, Silas D.	Big Plain, Ohio.	Plough, mole	Feb. 15, 1859.
25797	Bales, Moses	Canton, Ohio.	Harvesters	Oct. 18, 1859.
22478	Ball, E.	Elmira, N. Y.	Umbrella-rings, manufacture of	Jan. 4, 1859.
24918	Ball, Jonathan.	Keene, N. H.	Mode of hanging brake-rubbers	Aug. 2, 1859.
24919	Ball, Thomas C.	New York, N. Y.	Show-case.	Aug. 2, 1859.
25713	Ballard, W. D.	Kansas City, Mo.	Furnaces, steam-boiler.	Oct. 11, 1859.
23937	Ballou, L. S., jr.	New York, N. Y.	Shirts	Nov. 1, 1859.
23888	Bamberg, Charles, and Roman Blaser.	Chicago, Ill.	Clay, machines for separating stones, &c., from	May 10, 1859.
26079	Bamberg, William C.	Washington, D. C.	Gauge for iron-axles	Nov. 15, 1859.
23694	Bamman, Phebe. (See Hyde, J. B., assignor.)	New York, N. Y.	Brick-machines	Jan. 25, 1859.
23992	Bancker, Gerard	Havancourt, France.	Cooling liquids, apparatus for	Nov. 1, 1859.
26555	Bandelot, Jean Louis, assignor to Henry Migeou.	San Francisco, Cal.	Quartz, machine for pulverizing	Dec. 27, 1859.
25784	Banham, William	Medford, Mass.	Barrels, &c., mode of manufacturing	Oct. 11, 1859.
26080	Banker, G. W., assignor to self and G. O. Carpenter	Buffalo, N. Y.	Ship-building	Nov. 15, 1859.
23224	Banta, Jacob W.	Brideseburgh, Pa	Fire-arm, breech-loading	Mar. 15, 1859.
26153	Barber, Jos., and P. C. Reinfried.	South Brinwick, N. J	Washing-machine	Nov. 22, 1859.
25875	Barber, Samuel.	Friendship, Va	Diteling-machine	Oct. 25, 1859.
22846	Baneroff, John W.	Ellsworth, Me	Sewing-machines	Feb. 8, 1859.
23541	Barker, Benjamin.	Lawrence, Mass.	Shuttle-operator	April 12, 1859.
22616	Barker, B., <i>et al.</i> (See Adams, Joseph, assignor.)	Baltimore, Md	Amalgamator	Jan. 18, 1859.
22847	Barker, James K.	Wayne, Ohio	Excavators, earth	Feb. 8, 1859.
23817	Barker, Jno., and Edward W.	Hartford, Conn	Faucet	May 3, 1859.
22540	Barker, Jos. P.	Weston, Mo.	Spring, door	Jan. 4, 1859.
23542	Barkley, James	New York, N. Y.	Dovetail joints, for wood, &c.	April 12, 1859.
25554	Barnard, Frederiek S.	Waterbury, Conn	Blower, rotary	Sept. 27, 1859.
24607	Barnard, Wm. B., and E. Jordon	New York, N. Y.	Caster, furniture.	July 5, 1859.
25939	Barnes, Demas S	Brooklyn, N. Y.	Telegraphic instruments against atmospheric electricity, method of protecting.	Nov. 1, 1859.
23652	Barnes, E. F.	Providence, R. I.	Burial-cases	April 19, 1859.
26154	Barstow, A. C.	Cleveland, Ohio.	Bee-hives	Nov. 22, 1859.
22927	Barstow, Caleb, and D. D. Badger. (See Reynolds, George H., assignor.)	New York, N. Y.	Hydrants	Feb. 15, 1859.
25940	Barstow, Trowbridge & Knapp. (See Knapp, A. H., assignor.)	Union, N. Y.	Packing flour in barrels, machinery for.	Nov. 1, 1859.
24000	Bartholomew, Eli.	New York, N. Y.	Sewing-machines	May 17, 1859.
23651	Bartholomew, Frederiek H.	New York, N. Y.	Motion, alternate circular, into direct circular motion, device for converting.	April 19, 1859.



23437	Bartlett, Abel H.	Spuyten Duyvil, N. Y.	Condensing-covers	April 5, 1859.
26536	Bartlett, Russell D.	Bangor, Me.	Veneering-machines	Dec. 27, 1859.
26074	Barrans, Joseph	Surrey, England	Locomotive, portable-traction	Nov. 8, 1859.
25602	Barrett, O. D., assignor to self and J. F. Keler	Cleveland, Ohio	Spring, door	Sept. 27, 1859.
25630	Barrett, O. D.	Cleveland, Ohio	Harrow, rotary	Oct. 4, 1859.
	Barrett, O. D., and E. S. Lamphear. (See Lamphear & Barrett.)			
25785	Barratt, Oliver D., assignor to self and S. E. Smith.	Cleveland, Ohio	Sewing-machines	Oct. 11, 1859.
24364	Barringer, H. V., and John Van. (See Van & Barringer.)	Fredericktown, Ohio	Printing addresses, &c., machine for	June 14, 1859.
24438	Barrington, John A.	Warren, R. I.	Gauging casks, instruments for	June 21, 1859.
24086	Barney, John K.	Shippensburg, Pa.	Smut-machines	May 24, 1859.
24087	Barnhart, E.	New York, N. Y.	Condensers, surface	May 24, 1859.
25798	Barnum, Daniel	New York, N. Y.	Engines, steam	Oct. 18, 1859.
24088	Barnum, Daniel, and S. G. Tyler	Jersey City, N. J.	Sewing-machines, hemming guides for	May 24, 1859.
25405	Barnum, Nelson	St. Louis, Mo.	Fastener, sash	Dec. 20, 1859.
25938	Barr, Washington, and John Pyne. (See Pyne & Barr.)	Milwaukee, Wis.	Car-couplings, railroad	Nov. 1, 1859.
25380	Barnes, Henry A.	Troy, N. Y.	Boilers, steam, feed-water apparatus for	Sept. 6, 1859.
25084	Barnes, William, assignor to Philo P. Stewart.	Buflalo, N. Y.	Sewing-machines	Aug. 16, 1859.
25876	Barnes, William T.	Buflalo, N. Y.	Sewing-machines	Oct. 23, 1859.
24920	Barnes, William T.	Buflalo, N. Y.	Oils, coal, apparatus for condensing	Aug. 2, 1859.
24921	Barnes, William T.	Buflalo, N. Y.	Oils, coal, apparatus for generating	Aug. 2, 1859.
24785	Barney, Jacob	Chicago, Ill.	Engines, steam, variable exhaust, device for	July 19, 1859.
25377	Bartlett, E. G. W., et al. (See Flanders, John Jewell.)	Romulus, N. Y.	Plough, ditching	Sept. 13, 1859.
26406	Bartram, A. R.	Redding, Conn.	Vehicles, running gear of	Dec. 13, 1859.
23740	Basnagie, Francis, assignor to Beverly Rubber Company.	Wenham, Mass.	Rubber, restoring waste vulcanized	April 19, 1859.
23805	Basnagie, Francis, assignor to Beverly Rubber Company.	Wenham, Mass.	Rubber, restoring waste	April 19, 1859.
23138	Bassett, Joel R., assignor to self and A. E. Bateman.	Cincinnati, Ohio	Bolts and rivets, making	Mar. 1, 1859.
24922	Bassett, Daniel	White Water, Wis.	Mills for crushing sugar-cane	Aug. 2, 1859.
22848	Bassett, Samuel K.	Galesbury, Ill.	Plough, steam	Feb. 8, 1859.
23340	Bassford, Abraham	New York, N. Y.	Billiard-tables, cushions for	Mar. 29, 1859.
23341	Bassford, Abraham	New York, N. Y.	Billiard-table, cushion-rail for	Mar. 29, 1859.
23889	Batchelder, Jacob	Salem, Mass.	Sole-cutting machines	May 10, 1859.
25621	Batchelder, William W.	New York, N. Y.	Burners, vapor, construction of	Oct. 4, 1859.
25799	Batchelder, William W.	New York, N. Y.	Lamp-burners, vapor, construction of	Oct. 18, 1859.
24711	Batchelor, Joseph M.	Foxcroft, Me.	Lamps	July 19, 1859.
23288	Batchelor, S. B.	Lowville, N. Y.	Scythe-snath	Mar. 22, 1859.
25941	Bate, R. L., and J. Caulkins.	Adrian, Mich.	Roaster, coffee	Nov. 1, 1859.
24089	Batson, J. W. (See Gatehell, Horatio P., assignor.)	Clarksville, Md.	Cultivators	May 24, 1859.
23653	Battel, Mellen	Albany, N. Y.	Furnace for heating tire	April 19, 1859.
25085	Battel, Mellen	Albany, N. Y.	Generators, steam	Aug. 16, 1859.
25877	Battel, Mellen	Albany, N. Y.	Coal-sifters	Oct. 23, 1859.
23070	Battin, Joseph	Newark, N. J.	Sawing, machine for cross-cut	Mar. 1, 1859.
24187	Bawvel, John A.	Powhatan C. H., Va.	Presses, tobacco	May 31, 1859.
24001	Baxter, E. O.	Foreston, Ill.	Seeding machines	May 17, 1859.
25314	Baxter, E. O.	Foreston, Ill.	Excavators, railroad	Sept. 6, 1859.
23213	Baxter, E. O., assignor to self, E. H. Riley, and W. T. Sweet.	Foreston, Ill.	Seeding-machines	Mar. 8, 1859.
23741	Baxter, Thomas, assignor to William H. Baxter	Petersburg, Va.	Presses, hydraulic	April 19, 1859.



*Patentees of inventions and designs, 1859.*

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25942	Bayley, G. W. R.	Brashear, La	Rails for railroads.	Nov. 1, 1859.
26343	Bayley, G. W. R.	Brashear, La	Spikes, hook-headed.	Dec. 6, 1859.
23654	Baylies, T. L.	Richmond, Ind	Anchor-tripper	April 19, 1859.
24786	Baylor, James	Canton, Ohio	Joints, universal.	July 19, 1859.
26155	Beach, Jerred	Freeport, Pa.	Saw-set	Nov. 22, 1859.
25800	Beach, John.	De Ruyter, N. Y.	Hoops, cheese.	Oct. 18, 1859.
24982	Beach, Moses S.	Brooklyn, N. Y.	Printing-presses, machinery to feed sheet of paper to	Aug. 9, 1859.
25699	Beach, Waldren, assignor to self and John L. Reese, jr.	Baltimore, Md.	Harvesters, corn	Oct. 4, 1859.
24839	Beachler, Jacob, assignor to self and J. F. Brickley	Anderson, Ind.	Railroad switches.	July 19, 1859.
25943	Beadle, Benjamin G.	Memphis, Tenn	Gins, cotton	Nov. 1, 1859.
23890	Bean, Curtis C. (See Albertson, Albert, assignor.)			
23890	Bean, John, and Benjamin Wright	Hudson, Mich	Straw-cutter	May 10, 1859.
24530	Bcan, Joshua C.	Grayville, Ill.	Seeding-machine.	June 28, 1859.
23148	Beard, David	Slippensburg, Pa.	Hubs and axles of vehicles, connecting	April 5, 1859.
24983	Beard, George W.	Canton, Miss.	Cultivators, cotton	Aug. 9, 1859.
26557	Beardslee, George W., (No. 1)	Flushing, N. Y.	Machine, magneto-electric	Dec. 27, 1859.
26558	Beardslee, George W., (No. 2)	Flushing, N. Y.	Machine, magneto-electric	Dec. 27, 1859.
23655	Beardsley, Abner M.	Lake City, Min.	Saws, machine for filing	April 19, 1859.
24984	Beardsley, F. F., and Seucca Pierce. (See Pierce & Beardsley.)			
24984	Bauchamp, Elijah P	Preston, Ga.	Planters, cotton-seed.	Aug. 9, 1859.
24985	Beaudreau, Laurent	Fond-du-Lac, Wis.	Shingle-machine.	Aug. 9, 1859.
24531	Beaumont, William	Paterson, N. J.	Gas-retorts	June 28, 1859.
24365	Beaumont, Victor	New York, N. Y.	Fluids, gauge for measuring the pressure of	June 14, 1859.
24532	Beck, Edward	Allentown, Pa.	Scroll-saws, contrivance by which the workman operates.	June 28, 1859.
22695	Beck, Jas., and S. & A. B. Keeley (See Keeley & Beck.)			
23543	Beckel, Joseph	New York, N. Y.	Stereoscopic pictures, apparatus for displaying.	Jan. 25, 1859.
23342	Beckers, Alexander.	New York, N. Y.	Stereoscopic cases.	April 12, 1859.
23438	Beckers, Alexander.	New York, N. Y.	Stereoscopes, &c., hinge for the reflectors of.	April 26, 1859.
26407	Beckers, Alexander.	New York, N. Y.	Stereoscopic pictures, apparatus for exhibiting.	April 5, 1859.
24855	Beckers, Alexander.	New York, N. Y.	Optical instruments, double-eye piece for	Dec. 13, 1859.
22617	Beckwith, I. F., and A. G. Gage.	New York, N. Y.	Stereoscopic instrument.	July 26, 1859.
24840	Bedell, Norman, assignor to Stephen P. Bedell.	South Alabama, N. Y.	Stove-planters.	Jan. 18, 1859.
24276	Bedlow, Henry	New York, N. Y.	Stove-pipes, elbows for	July 19, 1859.
22525	Bee, Benjamin F., assignor to self and James A. Woodbury.	Newport, R. I.	Chimney-cowl.	June 7, 1859.
23343	Beche, Hubbard	Harwick, Mass	Screw-propeller	Jan. 4, 1859.
25944	Beecher, T. G.	New Haven, Conn.	Slates, mode of preparing and mounting.	April 26, 1859.
23544	Beeler, A., and John B. Christian.	Bever Dam, N. Y.	Fence, farm	Nov. 1, 1859.
	Beeler, Abner, and J. B. Christian. (See Christian & Beeler.)	Mount Carroll, Ill.	Pump	April 12, 1859.
22541	Beers, Benjamin	New Fairfield, Conn.	Canteens	Jan. 11, 1859.
26242	Beers, B. B., and Lewis S. Hoyt. (See Hoyt & Beers.)			
26242	Beers, G. W.	Bridgeport, Conn	Hub-bands for wagon-wheels, making	Nov. 29, 1859.



23891	Beers, Sidney A.	Brooklyn, N. Y.	Railroads for streets.	May 10, 1859.
23150	Beers, William.	Milan, Ohio.	Ship-steering apparatus.	April 5, 1859.
23149	Beers, William.	Milan, Ohio.	Ships, rudder-posts, yokes for.	April 5, 1859.
23892	{ Beggs, Hamilton T, and James Allen.	Liberty, Va.	Brick-machines.	May 10, 1859.
23344	Behr, Edward.	Lynchburg, Va.	Skates, mode of fastening.	April 26, 1859.
23893	Behr, Edward.	New York, N. Y.	Skate-fastening.	May 10, 1859.
25993	Behr, Edward, and L. Froelich, assignor to Edward Behr.	New York, N. Y.	Skate-straps.	Nov. 1, 1859.
24175	Behrens, Henry J., assignor to Charles S. Pomeroy.	New York, N. Y.	Wrench.	May 24, 1859.
22849	Bebrens, Henry J.	New York, N. Y.	Billiard register.	Feb. 8, 1859.
23151	Beins, H. W.	New York, N. Y.	Rubber, treatment of vulcanized.	April 5, 1859.
24693	Beins, Henry William, assignor to New England Car Spring Company.	New York, N. Y.	Rubber, ear-spring vulcanized.	July 5, 1859.
23975	Belcher, G. G., assignor to self and Joseph S. Hill.	Worcester, Mass.	Knife, pruning.	May 10, 1859.
23639	Belfield, Henry, assignor to self and Justice Cox.	Philadelphia, Pa.	Bell, hanging.	April 12, 1859.
25555	Belknap, Elbridge G.	Philadelphia, Pa.	Stool, camp.	Sept. 27, 1859.
26468	Bell, A. J.	Greensburg, Ky.	Wrench.	Dec. 20, 1859.
23545	Bell, Francis H.	Washington, D. C.	Gun-lock, self-priming.	April 12, 1859.
26456	Bell, Henry, assignor to Fenton H. Bogar and Joseph W. Tydall.	Clinton, Ill.	Planters, seed.	Dec. 13, 1859.
24090	Bell, Samuel N. (See Brinkley, William, assignor.)	New York, N. Y.	Vessels, rig for.	May 24, 1859.
22618	Bell, Thomas.	Washington, D. C.	Fire-arms, self-primers for.	Jan. 18, 1859.
25236	Bellamy, W., et al. (See Dickenson & Bellamy.)	New York, N. Y.	Lozenge-machine.	Aug. 30, 1859.
26408	Belling, Elizabeth.	Mohawk, N. Y.	Composition for kindling fire.	Dec. 13, 1859.
22777	Bellinger, Charles F.	Seneca Falls, N. Y.	Pumps.	Feb. 1, 1859.
26457	Bellows, William, assignor to self and Charles W. Smith.	Cincinnati, Ohio.	Bone-black, revivifying.	Dec. 13, 1859.
23225	Bellows, Zebulon B.	Cortlandville, N. Y.	Chair-bottoms.	April 12, 1859.
23748	Belson, R. W.	Philadelphia, Pa.	Stoves.	April 26, 1859.
23749	Belson, R. W.	Philadelphia, Pa.	Stoves.	April 26, 1859.
26008	Bemis, Merrick.	Ashburnham, Mass.	Pendulum, compensating.	Nov. 8, 1859.
25714	Benckert, George F. and D. H.	Philadelphia, Pa.	Signal-bell.	Oct. 11, 1859.
23546	Benner, Jacob.	Allegheny, Pa.	Separators, grain.	April 12, 1859.
26141	Benner, Jacob.	Allegheny, Pa.	Smut-machines.	April 12, 1859.
23742	Bennett, Charles F., assignor to Julius H. Baker.	Warehouse Point, Conn.	Cloth, machinery for drying.	Nov. 15, 1859.
22479	Bennett, Richard, assignor to J. F. Milward.	Reditch, England.	Needle-wrappers.	April 19, 1859.
23440	Benson, Robert B.	New York, N. Y.	Mill, grinding.	Jan. 4, 1859.
22696	Benson, Robert B.	New York, N. Y.	Sails, reefing.	April 5, 1859.
23007	Benter, Henry.	Wetumpka, Ala.	Wind-wheels.	Jan. 25, 1859.
23071	Benthall, J. C.	Wheeling, Va.	Staves, machine for jointing.	Feb. 22, 1859.
23894	Bentley, A. J., and W. H. Allen. (See Allen & Bentley.)	Oakland, Texas.	Planters, seed.	Mar. 1, 1859.
24091	Bentley, A. J., and W. H. Allen. (See Allen & Bentley.)	New York, N. Y.	Ship's stop-block.	May 10, 1859.
24091	Benton, E. R.	Cleveland, Ohio.	Bed-bottom, spring.	May 24, 1859.
23548	Benzon, E. L. (See Lohage, Franz Anton, assignor.)	New York, N. Y.	Bread-cutter.	April 12, 1859.
22850	Berdan, Hiram.	Berrysburgh, Pa.	Daguerreotype, cases, monumental.	Feb. 8, 1859.
25086	Bergstresser, Jacob.	Lowell, Mass.	Clothes-rack.	Aug. 16, 1859.
26156	Berkley, Jonathan. (See Johnson, Hezekiah.)	Huntington, Ind.	Bridge, automatic canal.	Nov. 22, 1859.
	Berry, Theophilus D.			
	Berry, Walter W., et al. (See Smith, John W., assignor.)			
	Berry, D.			

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25480	Bertolet, Horae.	Reading, Pa.	Engines, steam	Sept. 20, 1859.
24854	Bessling, Henry.	New York, N. Y.	Sails, reefing	July 26, 1859.
25169	Betteley, Albert.	Boston, Mass.	Pulleys, slipper gear for	Aug. 23, 1859.
24188	Betteley, Albert.	Boston, Mass.	Hoisting goods in warehouses, &c., elevators for.	May 31, 1859.
23218	Betteley, Albert.	Boston, Mass.	Elevators	May 3, 1859.
24932	Betteley, Albert.	Boston, Mass.	Elevators for warehouses, &c.	Aug. 20, 1859.
26469	Betteley, Albert.	Boston, Mass.	Hoisting-machines.	Dec. 20, 1859.
24787	Bettes, W. H., and J. H. Parker	Kokono, Ind.	Boot-trees	July 19, 1859.
23345	Betts, Frederiek B.	Brownhelm, Ohio	Gates, by weight of vehicle, method of opening and closing.	Mar. 29, 1859.
24533	Betts, Henry	Cleveland, Ohio	Railroad cars or rails	June 28, 1859.
24986	Bettle, P.	London, England	Watch-cases	Aug. 9, 1859.
24788	Bewrimo, D. (See Henry, Levi J., assignor.)	Hainesville, Mo.	Bedstead, eord-pin.	July 19, 1859.
24712	Bever, John T.	Hainesville, Mo.	Pea-vines, devices for training.	July 12, 1859.
	Bever & Cook. (See Cook & Bever.)			
	Beverly Rubber Co. (Sec Basehnagel, Francis, assignor.)			
	Beverly Rubber Co. (Sec Hall, Hiram L., assignor.)			
24853	Biberthaler, John	New York, N. Y.	Bedstead, iron-folding	July 26, 1859.
26081	Bicknell, J. W. and W. D. Stover (See Stover & Bicknell.)	New York, N. Y.	Burr-cylinders	Nov. 15, 1859.
23008	Bicknell, Joseph G., et al. (Sec Hooton, Henry, assignor.)	Springfield, Mass.	Faucet, measuring	Feb. 22, 1859.
22697	Bidwell, James	Springfield, Mass.	Soda-water apparatus	Jan. 25, 1859.
25481	Bigelow, Edmund	Brighton, Mass.	Stencil, changeable	Sept. 20, 1859.
22914	Bigelow, H., et al. (See Smith & Bigelow.)	Waltham, Mass.	Watches, mechanism for stopping	Feb. 8, 1859.
25434	Bigelow, Jonathan	Boston, Mass.	Desk, fire-proof	June 28, 1859.
23439	Bill, Asa G.	Cuyaboga Falls, Ohio	Piston-packing, metallie.	April 5, 1859.
24987	Billingshurst, William	Rochester, N. Y.	Fishing-reel	Aug. 9, 1859.
24608	Billings, Benjamin	Macedon, N. Y.	Water-wheel	July 5, 1859.
24189	Billings, Joseph D.	Rutland, Vt.	Cars, freight	May 31, 1859.
24075	Billings, Orson, assignor to self and Morris Traver	La Grange, Ohio	Lock	May 24, 1859.
25170	Bingham, A.	Portland, Me.	Bed-bottom	Aug. 23, 1859.
25171	Bingham, L. F., and N. O. Pierce	Talladega, Fla.	Bed-bottom	Aug. 23, 1859.
23895	Binkley, William, assignor to Samuel N. Bell	Chicago, Ill.	Planters, corn	May 10, 1859.
25698	Bireh, Thomas, and Lewis Bradley	Manchester, N. H.	Knitting-machines	Oct. 4, 1859.
22543	Birdsell, John C.	Hartford, Conn.	Closet, water	Jan. 11, 1859.
26409	Birdsell, John C.	West Henrietta, N. Y.	Bolting and cleaning clover-seed, machine for.	Dec. 13, 1859.
24535	Bisbee, Cyrus C.	Port Jarvis, N. Y.	Hinge, spring	Aug. 28, 1859.
24924	Bishop, Charles E.	Rochester, N. Y.	Bed-bottom, spring	Aug. 2, 1859.
22929	Bishop, Daniel Edward	Brooklyn, N. Y.	Sails, reefing and furling	Feb. 15, 1859.
24713	Bishop, Lewis	New York, N. Y.	Railroad chairs	July 12, 1859.
22480	Bishop, Lewis	Talladega, Ala.	Saddles, elastic	Jan. 4, 1859.
24609	Bishop, Lewis	Talladega, Ala.	Harvesters, cotton	July 5, 1859.



26157	Bishop, Milton B.	Whitingham, Vt.	Washing-machine.	Nov. 22, 1859.
25482	Bishop, Peter A. (See Blaich & Bishop, assignors.)	Smithfield, R. I.	Thimbles, manufacture of.	Sept. 20, 1859.
25994	Bishop, Peter S.	Plainville, Conn.	Pots, tea and coffee.	Nov. 1, 1859.
25483	Bishop, Thomas, assignor to self and James H. Bishop.	Berlin, Wis.	Washing-machine.	Sept. 20, 1859.
25945	Bissell, Alpheus.	Muscataine, Iowa.	Shingle-machine, arrangement of devices in.	Nov. 1, 1859.
23977	Bissell, Israel M., <i>et al.</i> (See Paynter, Dan'l E., assignor.)	Boston, Mass.	Boot crimping-machine.	May 10, 1859.
23524	Bitzer, William H.	Philadelphia, Pa.	Engine, steam.	April 5, 1859.
25878	Black, James D., assignor to self and Ezekial Hallet, jr.	Elyria, Ohio.	Rudders, apparatus for operating.	Oct. 25, 1859.
23284	Black, James, assignor to Worl Brothers and George M. Worl, assignors to William S. Worl.	Elyria, Ohio.	Steering-wheel.	Mar. 15, 1859.
23152	Blaich, C. F. E.	Philadelphia, Pa.	Ruling-machines, attachment to.	Mar. 8, 1859.
26009	Blaich, C. F. E., and Peter A. Bishop, assignors to Peter A. Bishop.	Malugin Grove, Ill.	Steam as a motor, device for applying.	Nov. 8, 1859.
23750	Blair, J. B.	Waterbury, Conn.	Traps, animal.	April 26, 1859.
23819	Blair, Robert.	Waterbury, Conn.	Springs, door.	May 3, 1859.
24903	Blair, Zohar, and H. W. Shipley. (See Shipley & Blair.)	Albany, N. Y.	Saws, wood.	July 26, 1859.
23750	Blake, A. S.	Louisville, Ky.	Sewing-machines, hemming guides for.	Oct. 11, 1859.
23819	Blake, A. S.	Boston, Mass.	Gas-burners.	April 5, 1859.
24903	Blake, David, <i>et al.</i> (See Dodge, James, assignor.)	New Lebanon, N. Y.	Fly-trap.	Mar. 29, 1859.
23750	Blake, Eliza, executrix of Robert Blake, deceased, assignor to Blake & Son.	Greenfield Mills, Md.	Composts.	Aug. 9, 1859.
23819	Blake, R., and Lysander Button. (See Button & Blake.)	Whitingham, Vt.	Mallets, construction of.	Mar. 29, 1859.
24903	Blake, Robert, and L. Button. (See Button & Blake.)	Washington, D. C.	Stereotype plates, casting.	Feb. 22, 1859.
25715	Blake, S. E., and T. Johnston.	New York, N. Y.	Cement or mortar, composition.	Nov. 22, 1859.
23441	Blakeman, Elisha D., assignor to Jacob J. and Levi Auchampaugh.	Jeffersonville, Ohio.	Planters, seed.	Dec. 13, 1859.
24988	Blanchard, Edward.	Hartford, Conn.	Gongs, striking apparatus for.	Dec. 13, 1859.
23346	Blanchard, Lynnan W.	Philadelphia, Pa.	Umbrella-frames.	Jan. 18, 1859.
23009	Blanchard, William.	North Kingston, R. I.	Window-blinds, operating.	Oct. 18, 1859.
26158	Blaser, Roman, <i>et al.</i> (See Bamberg & Blaser.)	Indianapolis, Indiana.	Straw-cutters.	Sept. 13, 1859.
26410	Blaser, William.	Rochester, N. Y.	Vehicles, attaching thills to.	April 12, 1859.
26411	Bliss, Jeremy W.	Rochester, N. Y.	Legs, artificial.	April 19, 1859.
22682	Bliss, W. H., <i>et al.</i> (See Lavton & Bliss.)	Rochester, N. Y.	Legs, artificial.	May 17, 1859.
25801	Bliven, Daniel, and T. H. Pollock. (See Pollock & Bliven.)	Rochester, N. Y.	Legs, artificial.	Aug. 30, 1859.
25378	Bloom, Joseph, assignor to R. E. Rogers.	Fond-du-Lac, Wis.	Sawing shingles from the bolt, method of.	June 7, 1859.
25378	Bloomer, Charles G.	Green Point, N. Y.	Basin, water-closet.	Nov. 29, 1859.
23549	Blunk, Andrew F.	Jersey City, N. J.	Cranks, connecting rods applied to.	Oct. 11, 1859.
23656	Bly, Douglas.	Williamstown, N. J.	Bottles and jars, revolving plugs for manufacturing.	April 12, 1859.
24002	Bly, Douglas.	New York, N. Y.	Rings, finger.	Aug. 23, 1859.
25238	Bly, Douglas.			
24277	Boardman, N.			
26243	Boch, William, sr.			
25716	Bocklen, Reinhold.			
23640	Bodine, John F., assignor to self and W. H. Jock A. Bodine.			
	Bodley & Lane. (See Miles & Lane, assignors.)			
	Bogar, F. H., and J. W. Tidball. (See Bell, Henry, ass'r.)			
	Bogert Seba.			

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23879	Bomberger, C. C.	West Carlisle, Ohio.	Water, method of elevating	Oct. 25, 1859.
22481	Bomberger, M.	Hummelstown, Pa.	Corn-shellers	Jan. 4, 1859.
24851	Bond, Henry F.	Hudson, Wis.	Bread-slicer	July 12, 1859.
26244	Bond, Henry F.	Hudson, Wis.	Music, machine for registering	Nov. 29, 1859.
24258	Bond, Lester L., assignor to self and Giles B. Williams. Bond, Lester L., and George Colesworth. (See Carter, Charles W., assignor.)	Chicago, Ill.	Presses, self-acting	May 31, 1859.
24852	Bond, S. L.	Greenwood, S. C.	Tuyere	July 26, 1859.
26245	Bond, S. L.	Greenwood, S. C.	Boring-machine, hub	Nov. 29, 1859.
22851	Bonholtzer, H., and John Brubaker. (See Brubaker & Bonholtzer.) Bonwill, William G. A. Boon, William C., and George W. Pittman. (See Pittman & Boon.)	Dover, Del.	Dental operations, application of electricity in	Feb. 8, 1859.
25087	Booth, Ezekiel.	Troy, N. Y.	Sewing-machines	Aug. 16, 1859.
23153	Booth, J. L.	New York, N. Y.	Separators, grain	Mar. 8, 1859.
24714	Booth, James. (See Fitzgerald, R., assignor.)	Cuyahoga Falls, Ohio	Separators, grain	July 12, 1859.
25484	Booth, J. L.	Cuyahoga Falls, Ohio	Separators, grain	Sept. 20, 1859.
25717	Booton, John K.	Luray, Va.	Hemp, machine for breaking and cleaning	Oct. 11, 1859.
24715	Booton, J.	Middlebourne, Ohio	Traps, rat	July 12, 1859.
22619	Bordentown Machine Co. (See Molyneux, Jas., assignor.)	New York, N. Y.	Sofa-frame	Jan. 18, 1859.
23806	Born, Peter. Borren, K., assignor to Peter Schneider. Borowsky, M., and Ira Glynn. (See Glynn & Borowsky.)	New York, N. Y.	Bedstead-sofa	April 26, 1859.
23820	Ross, James	Philadelphia, Pa.	Watch-cases, manufacture of	May 3, 1859.
24366	Bottum, James M.	New York, N. Y.	Watch-springs, instruments for measuring the strength of	June 14, 1859.
24610	Botterill, Snowball	Westmoreland, N. Y.	Whiffletrees, hooks for	July 5, 1859.
25246	Boughton, James A.	Poughkeepsie, N. Y.	Hub-bands for wagon-wheels, making	Nov. 29, 1859.
25622	Bonnell, M., and I. I. Cole. Bourgnon, P. J., and F. Hersee. (See Hersee & Bourgnon.)	New York, N. Y.	Veneers, machine for cutting	Oct. 4, 1859.
25623	Bourne, Nathaniel.	Peosta, Iowa	Evaporating-apparatus, construction of	Oct. 4, 1859.
24367	Bourne, William Oland. Bourne, William Oland. (See Clark, Samuel, assignor.)	New York, N. Y.	Ore-separator	June 14, 1859.
26559	Bouton, James	Macon City, Mo	Seeding-machines	Dec. 27, 1859.
24611	Bowen, Henry W.	Providence, R. I.	Wind-engine	July 5, 1859.
24925	Bower, Abraham	Pekin, Ill.	Water, machine for raising	Aug. 2, 1859.
26082	Bowers, A., J. H. Griggs, and J. Wilson	Monmouth, Ill.	Plow, mole	Nov. 15, 1859.
22542	Bowers, A. J.	Richmond, Va.	Metal columns, cast, mode of securing together the sides of	Jan. 4, 1859.
23154	Bowman, Daniel	Tampico, Tenn.	Traps, fish	Mar. 8, 1859.
21003	Boyd, Amos H.	Saco, Maine	Sewing-machines	May 17, 1859.
25485	Boyd, J. H.	Baltimore, Md.	Saddle-trees, spring	Sept. 20, 1859.
24952	Boyd, John	Philadelphia, Pa.	Carding-engines	May 24, 1859.
25249	Boyd, John C.	Boston, Mass.	Elastic hose-tubing	Aug. 30, 1859.
24926	Boyd, Samuel	Brooklyn, N. Y.	Hoes, wrought-metal	Aug. 2, 1859.



26560	Boyd, Samuel.....	Brooklyn, N. Y.....	Hoes, manufacture of.....	Dec. 27, 1859.
25240	Boyd, William.....	New Orleans, La.....	Bales, cotton, iron-ties for.....	Aug. 30, 1859.
23347	Boyden, Pardon.....	Sandy Creek, N. Y.....	Carriage-tops.....	Mar. 29, 1859.
22698	Boyden, Seth.....	Newark, N. J.....	Hat-bodies, machinery for forming.....	Jan. 25, 1859.
25300	Boyden, Seth, assignor to self and H. H. Jaques.....	Newark, N. J.....	Hat-bodies, machinery for hardening.....	Aug. 30, 1859.
22915	Boyer, Michael, assignor to Chas. S. Rohner and Wm. Gunkel.....	Germanatown, Ohio.....	Seed-drills.....	Feb. 8, 1859.
22852	Boyer, W. L. and H. K., <i>et al.</i> (See Sailor, William, ass'or.).....	Albany, N. Y.....	Photography on wood.....	Feb. 8, 1859.
24004	Boyle, Chas. B.....	Roxbury, Mass.....	Beer, apparatus for cooling.....	May 17, 1859.
23285	Boyle, James.....	New York, N. Y.....	Sewing-machines.....	Mar. 15, 1859.
23226	Boynton, Edward S., assignor to Peter R. Roach.....	Canton, N. Y.....	Fire-arm, magazine.....	Mar. 15, 1859.
24368	Boynton, Paul.....	Newton Corner, Mass.....	Propeller, marine hand.....	June 14, 1859.
23657	Brackett, E. C.....	Abington, Ill.....	Washing-machine.....	April 19, 1859.
25158	Bradbury, Benjamin.....	Philadelphia, Pa.....	Vehicles, wheel, hanging the bodies of.....	Aug. 16, 1859.
23658	Bradfield, Chas., assignor to C. Stewart Bradfield.....	Lynn, Mass.....	Faucets.....	April 19, 1859.
26320	Bradford, Charles K.....	Paterson, N. J.....	Roving, can-bottom for.....	Nov. 29, 1859.
26470	Bradford, Charles K., and G. W. Parrot. (See Parrot & Bradford.).....	New York, N. Y.....	Bustles, ladies'.....	Nov. 22, 1859.
26320	Bradley, George, assignor to Jacob S. Rogers.....	New York, N. Y.....	Telegraphic-machine.....	Oct. 11, 1859.
26159	Bradley, J. W.....	New York, N. Y.....	Rakes, horse.....	Aug. 16, 1859.
25718	Bradley, L.....	Dumec, Ill.....	Tanning.....	June 7, 1859.
25988	Bradley, Lewis, and Thomas Birch. (See Birch & Bradley.).....	Cleveland, Ohio.....	Tanning.....	Aug. 30, 1859.
25988	Bradley, Maro.....	Cleveland, Ohio.....	Tanning.....	Sept. 6, 1859.
24278	Brainerd, John, and W. H. Burridge.....	Cleveland, Ohio.....	Sewing-machines, guider for.....	Dec. 27, 1859.
25241	Brainerd, John, and W. H. Burridge.....	Cleveland, Ohio.....	Carpet-stretcher.....	Feb. 15, 1859.
25315	Brainerd, J., and W. H. Burridge.....	Cleveland, Ohio.....	Valve.....	June 14, 1859.
26561	Bradshaw & Burnap. (See Burnap & Bradshaw.).....	New York, N. Y.....	Boilers, steam, arrangements for supplying air to the furnaces of, from the wheel-house of steamers.....	Dec. 20, 1859.
22930	Brady, Oliver G.....	Newark, N. J.....	Corks, tools for cutting.....	Nov. 15, 1859.
24369	Bragg, Isaac W.....	Pattersonville, La.....	Acid gas in the defecation of cane juice, mode of applying sulphurous.....	Dec. 6, 1859.
26470	Braunwell, Wm.....	Folkstone, England.....	Traction-engines, wheels of.....	Mar. 22, 1859.
26083	Brandt, Louis.....	Rochester, N. Y.....	Staves, machine for cutting.....	April 12, 1859.
26401	Brass, Adolphus.....	West Meriden, Conn.....	Window-sash fastener.....	Sept. 13, 1859.
26329	Brashear, R. B., deceased, by N. P. Brashear, executrix.....	New York, N. Y.....	Gas from wood, making.....	Sept. 6, 1859.
23289	Bray, William.....	San Francisco, Cal.....	Quartz-crushing machines.....	Aug. 30, 1859.
23550	Brayer, Michael.....	San Francisco, Cal.....	Amalgamators, gold.....	Aug. 30, 1859.
25379	Breekenridge, Elias K.....	Stamford, N. Y.....	Wrench.....	May 31, 1859.
25316	Breisach, Leopold Richard.....	Paris, France.....	Composition for ornamenting glass.....	Jan. 18, 1859.
25243	Brevoort, Henry.....	Clear Spring, Md.....	Corn-shellers.....	Dec. 20, 1859.
25242	Brevoort, Henry.....	Clear Spring, Md.....	Raker, horse.....	Jan. 4, 1859.
24190	Brewster, H., <i>et al.</i> (See Lawrence, James W., assignor.).....	New York, N. Y.....	Telegraph-cable, submarine.....	Mar. 22, 1859.
22620	Brewster, John W.....	Springfield, Mass.....	Wrench-screw.....	April 26, 1859.
26471	Brinchon, J. J. H.....	Sharon, Ohio.....	Tile-drain, apparatus for laying.....	Oct. 4, 1859.
26471	Brinkley, J. F., <i>et al.</i> (See Beachler, Jacob, assignor.).....	Michigan Bluffs, Cal.....	Amalgamating rifles.....	Mar. 1, 1859.
22526	Bridendolph, B.....			
23290	Bridges, Francis J.....			
23751	Bridwell, H. L., <i>et al.</i> (See Windall, Thomas, assignor.).....			
25624	Briggs, Albert D.....			
23072	Briggs, B. B.....			
23072	Briggs, J. S.....			

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25244	Briggs, Joseph W., <i>et al.</i> (See Cooper, S., assignor.)	Norristown, Pa.	Gun-lock.	Aug. 30, 1859.
23752	Briggs, R. D., <i>et al.</i> (See Crumbie & Briggs.)	Marlborough, Mass.	Thread, dishes for waxing.	April 26, 1859.
25802	Briggs, William	New Orleans, La.	Boiler, steam.	Oct. 11, 1859.
24093	Brigham, George A.	Batavia, N. Y.	Harvesting-machines.	May 24, 1859.
23896	Brinckerhoff, Cornelius R.	Upper Sandusky, Ohio.	Planters, corn.	May 10, 1859.
22931	Brinton, Joseph H.	West Chester, Pa.	Rollers, yielding feed, method of operating.	Feb. 15, 1859.
24716	Bristol, Charles B.	Naugatuck, Conn.	Flesh fork and skimmer, combination of.	July 12, 1859.
24439	Bristol, Richard C.	Chicago, Ill.	Valves for steam-engines, slide.	June 21, 1859.
26321	Broadmeadow, John P., assignor to self and Albert Eames.	Bridgeport, Conn.	Metal casting, moulding for.	Nov. 29, 1859.
23291	Britton, John W., <i>et al.</i> (See Laurence, Jos. W., ass't.)	Little Rock, Ark.	Bands for baling, metallic.	Mar. 22, 1859.
22699	Brodie, George	St. Louis, Mo.	Lounge.	Jan. 25, 1859.
26458	Bronson, J. G.	Cincinnati, Ohio.	Hydro-carbon vapor apparatus.	Dec. 13, 1859.
24850	Brooks, Asa.	Tolland, Conn.	Saw-mills, setting logs in.	July 26, 1859.
24094	Brooks, John T.	New Albany, Ind.	Boilers, steam, apparatus for heating feed-water of.	May 24, 1859.
26160	Brooks, L. B.	New York, N. Y.	Valves, steam.	Nov. 22, 1859.
24005	Brooks, Merritt S.	Chester, Conn.	Drill-stock.	May 17, 1859.
23434	Brooks, Myron D., and J. Platt. (See Platt & Brooks.)	Great Falls, N. H.	Saw-set.	Mar. 29, 1859.
26562	Brooks, Newton, <i>et al.</i> (See Quimby, E. T., assignor.)	Greenville, Ga.	Planters, cotton-seed.	Dec. 27, 1859.
26563	Brooks, Olive Ann, administratrix of Lebbeus Brooks, deceased.	Greenville, Ga.	Ploughs.	Dec. 27, 1859.
24370	Brooks, Rhodom M.	Havre de Grace, France.	Sails, reefing.	June 14, 1859.
25465	Brouard, Joseph Francis	Malone, N. Y.	Motion, converting rotary into reciprocating rectilinear.	Sept. 13, 1859.
23660	Broughton, Albert, assignor to self and A. Lindsay.	New York, N. Y.	Governors for steam-engines.	April 19, 1859.
26412	Broughton, John	New York, N. Y.	Mills, grinding.	Dec. 13, 1859.
25700	Broughton, John	Columbus, Ga.	Straw-cutters.	Oct. 4, 1859.
25173	Brown, A. D., assignor to Sallie C. Brown and others.	Boston, Mass.	Mills, grinding.	Aug. 23, 1859.
26636	Brown, A. H., <i>et al.</i> (See Quimby, Brown, and others.)	Millbury, Mass.	Spindles and fliers.	Dec. 27, 1859.
25299	Brown, Charles W.	Philadelphia, Pa.	Railways, turn-outs for.	Aug. 30, 1859.
23227	Brown, Cyriel E., assignor to self, J. Tenney, and J. Rhodes.	Newfane, N. Y.	Wood for felions, machine for bending.	Mar. 15, 1859.
26067	Brown, F. C., and D. P. Shaw. (See Shaw & Brown.)	Buffalo, N. Y.	Smoothering irons, handle for.	Nov. 8, 1859.
26473	Brown, Frank C., assignor to William Brown.	Chagrin Falls, Ohio.	Skirt-supporter.	Dec. 20, 1859.
23897	Brown, George A.	London, England.	Paper and paper-pulp, manufacture of.	May 10, 1859.
24927	Brown, Henry F.	Boston, Mass.	Pipe-tongs.	Aug. 2, 1859.
26544	Brown, J. D., <i>et al.</i> (See Marlow & Ralph, assignors.)	Boston, Mass.	Pipe-cutter.	Dec. 20, 1859.
24191	Brown, James R., assignor to self and J. Henry Norton.	Grand Ledge, Mich.	Metal, machine for punching.	May 31, 1859.
26267	Brown, James H.	Providence, R. I.	Chain, machines for making.	Nov. 29, 1859.
22853	Brown, John Calvin.	Indianapolis, Ind.	Laths from the block, machine for riving.	Feb. 8, 1859.
22853	Brown, John L.	Indianapolis, Ind.	Laths from the block, machine for riving.	Feb. 8, 1859.



23753	Brown, John L., and A. C. Greenleaf.....	Indianapolis, Ind.....	Mills, sugar.....	April 26, 1859.
23442	Brown, Mannevillette E. D.....	Utica, N. Y.....	Boat, life.....	April 5, 1859.
26268	Brown, Peter.....	Brooklyn, N. Y.....	Paint-cans.....	Nov. 29, 1859.
26413	Brown, Peter M.....	Carrollton, Ill.....	Fences, portable.....	Dec. 13, 1859.
23661	Brown, Peter G.....	Schenectady, N. Y.....	Lubricator.....	April 19, 1859.
	Brown, Richard T., and Charles W. Kennedy. (See Kennedy & Brown.)			
24371	Brown, Robert.....	New London, Conn.....	Projectile for killing whales.....	June 14, 1859.
24612	Brown, Robert.....	Strondburgh, Pa.....	Washing-machine.....	July 5, 1859.
26472	Brown, Robert D.....	Plattsburgh, N. Y.....	Wagon-brake.....	Dec. 20, 1859.
25485	Brown, Samuel W.....	Lowell, Mass.....	Steam-pressure, indicator or alarm.....	Sept. 20, 1859.
23073	Brown, T. D.....	Steubenville, Ohio.....	Harness, attachment for supporting driving-lines.....	Mar. 1, 1859.
23074	Brown, Thomas.....	Kenwood, N. Y.....	Mill-stones, tram-staffs for facing.....	Mar. 1, 1859.
26249	Brown, Thomas S.....	New York, N. Y.....	Crushers, quartz.....	Nov. 29, 1859.
22932	Brown, Thomas W.....	Boston, Mass.....	Skates.....	Feb. 15, 1859.
24516	Brown, William, assignor to self and Fountain G. Robertson.	Shelleyville, Ind.....	Bees, device for feeding.....	June 21, 1859.
22482	Brown, William H.....	Middletown, N. Y.....	Rakes, horse.....	Jan. 4, 1859.
25880	Brown, William Newton.....	New York, N. Y.....	Motion, mechanism for converting rotary into reciprocating.	Oct. 18, 1859.
23443	Brown, William R.....	Cleveland, Ohio.....	Pumps.....	April 5, 1859.
23380	Brown, Z. B., and M. C. Godard.....	Granby, Conn.....	Planters, seed.....	Sept. 13, 1859.
25089	Brown, John David.....	Cincinnati, Ohio.....	Furniture, cabinet.....	Aug. 16, 1859.
22621	Browne, Reuben R.....	Buffalo, N. Y.....	Lubricating compounds.....	Jan. 18, 1859.
26084	Brownell, Isaac A.....	Providence, R. I.....	Packing starch, &c., machine for.....	Nov. 15, 1859.
22483	Brownlich, A. C.....	Buffalo, N. Y.....	Harvesters.....	Jan. 4, 1859.
23075	Brownlich, Charles.....	Buffalo, N. Y.....	Harvesters.....	Mar. 1, 1859.
26250	Brubaker, John, and H. Donholtzer.....	Lancaster, Pa.....	Fire, tools for handling.....	Nov. 29, 1859.
	Bruce, Edwin, et al. (See Lewis, Nathan C., jr., assignor.)			
22544	Bruce, Duncan.....	Paspebiac, Canada.....	Manure, artificial.....	Jan. 11, 1859.
22933	Bruner, James D.....	Alton, Ill.....	Stoves.....	Feb. 15, 1859.
24279	Brunswick, John M.....	Cincinnati, Ohio.....	Billiard-tables, pocket-handle for.....	June 7, 1859.
23898	Bryan, C. M.....	Wright City, Mo.....	Ploughs.....	May 10, 1859.
22484	Bryant, Joel.....	Brooklyn, N. Y.....	Planters, seed.....	Jan. 4, 1859.
23444	Bryant, Joel.....	Brooklyn, N. Y.....	Hydrants.....	April 5, 1859.
25803	Bryant, William M.....	Washington, D. C.....	Smoking-tube.....	Oct. 18, 1859.
	Bryce, James G., et al. (See Jones, Josef, assignor.)			
22545	Buchanan, George.....	Hickory, Pa.....	Desks, school, and chair combined.....	Jan. 11, 1859.
25325	Buchanan, Robert C.....	United States army.....	Knapsack.....	Oct. 4, 1859.
24192	Bucher, Frederick.....	Columbia, Pa.....	Stoves.....	May 31, 1859.
26322	Buckingham, C. P.....	Mount Vernon, Ohio.....	Mills, grinding.....	Dec. 6, 1859.
25174	Buckingham, C. P.....	Mount Vernon, Ohio.....	Engines, steam, cut-off gear for.....	Aug. 23, 1859.
26474	Buckland, Joseph P.....	Chicopee Falls, Mass.....	Coal-sifters.....	Dec. 20, 1859.
24095	Buckley, Robert W.....	Grayville, Ill.....	Harrows.....	May 24, 1859.
24006	Buckley, John D., and S. F. Mosher.....	Schaghticoke, N. Y.....	Blasting rocks, plug for.....	May 17, 1859.
24928	Bucklin, Moses.....	Grafton, N. H.....	Draining-machine.....	Aug. 2, 1859.
	Bucklin, S., and McD., et al. (See Andres & Buckland.)			
25526	Buckwalter, J. A.....	Kimberton, Pa.....	Brick moulds.....	Oct. 4, 1859.
25946	Budlong, William G.....	Hartford, Conn.....	Sewing-machines.....	Nov. 1, 1859.
24176	Budlong, William G., assignor to H. W. Conklin and J. W. Corning.	Hartford, Conn.....	Carpet-sweeper.....	May 24, 1859.
	Buell, J. S.....	Buffalo, N. Y.....	Sewing-machines.....	Sept. 13, 1859.
25230	Buell, F. L., assignor to C. G. Keency.....	Manchester, Conn.....	Knitting-machines.....	Aug. 23, 1859.
22622	Bulgin, W. G.....	West Jersey, Ill.....	Seeding-machines.....	Jan. 18, 1859.
14789	Bull, William.....	New California, Wis.....	Presses, sugar-cane.....	July 19, 1859.

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
26085	Bullock, Joseph	Coloes, N. Y.	Knitting-machines	Nov. 15, 1859.
26226	Bullock, Joseph, and J. Hiller. (See Hiller & Bullock.)	Liberty, Ind.	Churn-dasher	Nov. 22, 1859.
25947	Bunting, Gillett, assignor to self and W. M. Jarrell.	Leavenworth, K. T.	Boots and shoes, sole for cutting	Nov. 1, 1859.
24536	Burdett, Samuel F., and Henry Still	Paris, Ky.	Ploughs	June 28, 1859.
24790	Burdine, L. E.	Chulahoma, Miss.	Sharpenet, cotton-gin	July 19, 1859.
22778	Burdine, A. H.	Brooklyn, N. Y.	Ovens	Feb. 1, 1859.
24440	Burdon, D. P.	Terre Haute, Ind.	Mills, sugar	June 21, 1859.
	Burger, John			
	Burger, George H., and George Taylor. (See Taylor & Burger.)			
23155	Burget, J. C.	Davenport Centre, N. Y.	Rakes, horse	Mar. 8, 1859
23754	Burgoyne, William W.	Washington, D. C.	Engines, steam	April 26, 1859.
26344	Burke, Charles G.	Utica, N. Y.	Melodeons	Dec. 6, 1859.
24791	Burke, Edmund, <i>et al.</i> (See Dodge, Simeon S., assignor.)			
26333	Burke, Peter N.	Buffalo, N. Y.	Stoves	July 19, 1859.
	Burke, P. N.	Buffalo, N. Y.	Boilers, steam.	Dec. 6, 1859.
23010	Bullock, J. D., & H. Kipple. (See Kipple & Bullock.)	Buffalo, N. Y.	Propellers for canals	Feb. 22, 1859.
22934	Burlingame, S. S.	Warwick, R. I.	Threading needles, instrument for	Feb. 15, 1859.
23214	Burnap, W. H., and John A. Bradshaw, assignors to W. H. Burnap	Lowell, Mass.	Electro-magnetic machines	Mar. 8, 1859.
25948	Burnell, Levi	West Meriden, Conn.	Water-meters	Nov. 1, 1859.
25175	Burnet, William	New York, N. Y.	Inkstand	Aug. 23, 1859.
	Burnet, William H., and James Perkins. (See Perkins & Burnet.)			
26251	Burnham, John P.	Rockford, Ill.	Harvesters	Nov. 29, 1859.
23011	Burnham, N. F.	Laurel Factory, Md.	Water-wheels	Feb. 22, 1859.
24096	Burnham, Washington	Essex, Mass.	Ox-yokes	May 24, 1859.
22779	Burnish, J., J. Talbot, and T. W. Yardley	Pottsville, Pa.	Iron, fluxes for puddling	Feb. 1, 1859.
24904	Burr, John, assignor to G. H. Fayman	Baltimore, Md.	Clothes-frame	July 26, 1859.
26910	Burr, Nelson	Batavia, Ill.	Corn-shellers	Nov. 8, 1859.
23899	Burrall, Elisha J.	Geneva, N. Y.	Sowing-fertilizers, machines for	May 10, 1859.
26545	Burridge, Thomas H., assignor to self and Thomas W. Ustick.	St. Louis, Mo.	Printing-presses	Dec. 23, 1859.
	Burridge, W. H., <i>et al.</i> (See Brainard & Burridge.)			
	Burris, U. B. (See Harrington & Burris.)			
24989	Burroughs, E.	Rochester, N. Y.	Paper, machines for cutting	Aug. 9, 1859.
25382	Burrows, Stephen	Whitewater, Wis.	Drills, seed	Sept. 13, 1859.
25090	Burt, Henry	Newark, N. J.	Door-fastener	Aug. 16, 1859.
22485	{ Burt, J., and W. W. Willard	Hartford, Conn. } Syracuse, N. Y. }	Spectacles, construction of.	Jan. 4, 1859.
25719	Burt, M., <i>et al.</i> (See Perry & Burt.)	Chicago, Ill.	Refrigerator	Oct. 11, 1859.
26475	Burtis, T. B.	Brooklyn, N. Y.	Fire-arm, breach-loading	Dec. 20, 1859.
	Burton, Bethel			



24441	Burton, William	Cazenovia, N. Y.	Seaming-machine, double.	June 21, 1859.
26086	Bushnell, George T.	Birmingham, Conn.	Martingale-ring.	Nov. 15, 1859.
25627	Bussell, Erastus T.	Covington, Ky.	Faucet, measuring.	Oct. 4, 1859.
24717	Butler, J. H., and P. G. Van Howton	Cohocton, N. Y.	Gates, farm, mode of operating.	July 12, 1859.
26087	Butler, John T.	Natchez, Miss.	Bales, cotton, fastening metal hoops on.	Nov. 15, 1859.
25881	Butler, Martin J.	Nashville, Tenn.	Cabins, floating safety.	Oct. 25, 1859.
26252	Butt, Zc.	Lincolnton, N. C.	Harness-yoke.	Nov. 29, 1859.
24613	Butter, Thomas B.	Norwalk, Conn.	Harvesting-machine.	July 5, 1859.
26142	Butter, John, assignor to James A. Saxton.	Buffalo, N. Y.	Harvesters.	Nov. 15, 1859.
22623	Butterfield, Abner L.	West Dummerston, Vt.	Wind-wheels.	Jan. 18, 1859.
24372	Butterfield, I. S., and Simcon Marshall.	Philadelphia, Pa.	Gun-lock, self-priming.	June 14, 1859.
24076	Butterfield, Tyrannus P., assignor to Abijah Taylor and R. Stephenson.	Indianapolis, Ind.	Planing-machine, hand.	May 17, 1859.
26088	Button, Lysander, and R. Blake.	Waterford, N. Y.	Fire-engines, &c., nozzles for.	Nov. 15, 1859.
25628	Button, Lysander, and Robert Blake.	Waterford, N. Y.	Carriage-bodies of fire-engines, supporting the	Oct. 4, 1859.
23525	Buxton, Levi W., assignor to Josephus Baldwin and L. Kimball.	Nashua, N. H.	Bedstead-fastening.	April 5, 1859.
25720	Buzby, John	Moorestown, N. J.	Grate-bars.	Oct. 11, 1859.
22486	Buzzell, David	Charlestown, Mass.	Chair, rocking.	Jan. 4, 1859.
24373	Caldwell, Roger S.	Andover, Ohio	Fence-posts, method of attaching the capping to.	June 14, 1859.
24718	Cain, Ansel	Holyoke, Mass.	Canes, walking.	July 12, 1859.
25291	Caldwell, William, and Benjamin B. Worden. (See Johnson, Danforth, assignor.)	Buffalo, N. Y.	Carriages, running-gear of.	Aug. 16, 1859.
24097	Calef, Joseph	Walcottsville, Conn.	Curtain-raek	May 26, 1859.
24280	Callahan, W., and W. Grant. (See De Frain, John, ass'r.)	Lowell, Mass.	Wool and ginning cotton, machine for burring.	June 7, 1859.
22935	Calvert, F. A., and Charles G. Sargent.	New York, N. Y.	Valves for steam-engines, cut-off.	Feb. 15, 1859.
25317	Calvert, George, et al. (See Wheeler, George C., assignor.)	Philadelphia, Pa.	Wheels, railroad.	Sept. 6, 1859.
25882	Camboie, J. A., and H. W. Mosher. (See Mosher & Camboie.)	New Haven, Conn.	Boat, surf, life.	Oct. 25, 1859.
24442	Cameron & Lindsey. (See Lindsey & Cameron.)	Fairfield, Iowa	Boiler.	June 21, 1859.
24442	Cameron, Adam Scott	Harrison, Ohio	Planters, corn.	June 28, 1859.
24537	Cameron, Archibald, and David Mathen.	Roxbury, Mass.	Boilers, steam.	Dec. 6, 1859.
26334	Cameron, George, and John H. Mears. (See Mears & Cameron.)	New Orleans, La.	Printing-press, job and card.	June 28, 1859.
24538	Camp, Mortimer M.	Rockville, Ind.	Adding-machine.	Aug. 9, 1859.
24990	Camp, O. S.	East Cambridge, Mass.	Burglars' alarm.	Mar. 8, 1859.
26334	Campbell, Alexander, William, and James.	East Cambridge, Mass.	Alarm, money-draw.	July 12, 1859.
24538	Campbell, B. F.	Elgin, Mass.	Churn.	Oct. 18, 1859.
24990	Campbell, James A.	Montreal, Can.	Saws, grinding and polishing.	Mar. 15, 1859.
24990	Campbell, John T.	Watertown, Pa.	Churn.	Sept. 13, 1859.
29215	Campbell, John T.	Indianapolis, Ind.	Cultivators, cotton.	Jan. 4, 1859.
24775	Campbell, Robert M., assignor to William G. Cronbie	New Albany, Ind.	Coffins, glass, construction of.	Oct. 25, 1859.
24775	Campbell, Robert M., assignor to self and Benjamin S. Wright.	Baltimore, Md.	Boot-jack.	Jan. 25, 1859.
25804	Campbell, S. N.	Burlington, N. J.	Stoves.	June 28, 1859.
23228	Campbell, Samuel S.	Burlington, N. J.	Wood, &c., to saw-dust or finer grains, method of reducing	July 5, 1859.
25383	Campbell, William	Grass Lake, Mich.	Potato-diggers.	Oct. 11, 1859.
22487	Cannaday, Calvin			
25583	Cannon, John R.			
22700	Causler, William W.			
24539	Cantelo, William I.			
24614	Cantelo, William I.			
25721	Capron, A. T., and D. S. Davis.			

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22488	Capron, Charles S., <i>et al.</i> (See Palmer, John S.)	Lynn, Mass.	Carpet-fan, sweeper.	Jan. 4, 1859.
24792	Carey, Augustus C.	New York, N. Y.	Metal, machines for planing.	July 19, 1859.
24098	Carhart, Jeremiah.	Collamer, N. Y.	Sewing-machines.	May 24, 1859.
26012	Carkhuft, R., and B. Chalfant.	Lewisburgh, Pa.	Valves, steam.	Nov. 8, 1859.
25176	Carl, J.	Grenada, Miss.	Mills, grinding.	Aug. 23, 1859.
22546	Carpenter, G. O., and G. W. Banker. (See Banker & Carpenter.)	Cincinnati, Ohio.	Saws, circular, device for setting laterally.	Jan. 11, 1859.
25556	Carpenter, J. D. C.	Lancaster, Ohio.	Planters, seed.	Sept. 27, 1859.
24443	Carpenter, Lewis Reese.	Cincinnati, Ohio.	Railway-clairs.	June 21, 1859.
25384	Carpenter, Marion.	Cincinnati, Ohio.	Extracts of fruits.	Sept. 13, 1859.
25722	Carpenter, Paul, and R. L. Mills. (See Mills & Carpenter)	Medford, Mass.	Valves of steam-engines, operating the.	Oct. 11, 1859.
26011	Carpenter, Rosanna.	Providence, R. I.	Table, shoe-making.	Nov. 8, 1859.
24193	Carpenter, Tisdale.	Battle Creek, Mich.	Pump-gearing.	May 31, 1859.
25092	Carpenter, Thomas.	Mattapoisett, Mass.	Closet, water.	Aug. 16, 1859.
23423	Carr, E. W., <i>et al.</i> (See Watson, Charles S., assignor.)	New York, N. Y.	Car-coupling.	Mar. 29, 1859.
24099	Carr, John P.	Springfield, Mass.	Bread-knife.	May 24, 1859.
26476	Carr, William S.	Marlborough, Conn.	Hold-backs.	Dec. 20, 1859.
23348	Carricr, Asa L., <i>et al.</i> (See Baker, John G.)	Sherburne, N. Y.	Plough, mole.	Mar. 29, 1859.
26335	Carrier, Cyrus and A. H. Crozier. (See Crozier & Carrier)	Avoca, N. Y.	Washing-machine.	Dec. 6, 1859.
23424	Carrier, James W., assignor to self and Abel B. Howe.	Franklin, Iowa.	Corn-sheller.	Mar. 29, 1859.
24793	Carrier, Joseph.	Westville, Ind.	Harvesters.	July 19, 1859.
26089	Carrington, Joel.	Green, N. Y.	Hydrants for filtration, construction of.	Oct. 18, 1859.
24794	Carter, Charles W., assignor to Lester L. Bond and George Coatsworth.	Cincinnati, Ohio.	Ore-washer.	Nov. 15, 1859.
24719	Carter, Heman.	Marietta, Pa.	Propeller, canal-boats.	July 19, 1859.
22701	Carter, John H.	Ithaca, N. Y.	Veicles, hanging the bodies of.	July 19, 1859.
22780	Carter, William L.	Lyons, N. Y.	Plough, mole.	Jan. 25, 1859.
25806	Carver, Co. E. (See Pratt, William F., assignor.)	Bloomington, Ill.	Washing-machine.	Feb. 1, 1859.
23755	Cartwright, Robert.	Liberty, Ind.	Gun-carriages, operating.	Oct. 18, 1859.
23881	Case, James H.	Lansingburgh, N. Y.	Governor for steam-engines, marine.	April 26, 1859.
22781	Case, Jarvis.	Georgetown, D. C.	Amalgamator.	May 3, 1859.
24615	Casterline, Ziba.	Pioneer Mills, N. C.	Metals, machine for polishing.	Feb. 1, 1859.
25723	Caswell, Asa L.	Louisville, Ky.	Road-scraper.	Nov. 22, 1859.
	Cathcart, James L.	Plattsburgh, N. Y.	Thread, machinery for trebling single strands of.	July 5, 1859.
	Caulkins, J., and R. L. Bate. (See Bate & Caulkins.)	Philadelphia, Pa.	Awnings.	Oct. 11, 1859.
	Cavanaugh, F. P., assignor to self and R. H. Northrop, W. A. McColloch, and E. E. Alkeu.	Providence, R. I.		
	Cave, Reuben.			
	Caward, George and David C.			
	Celerier, Michael.			
	Chace, Samuel.			
	Chalfant, B., and R. Carkhuft. (See Carkhuft & Chalfant.)			



23900	Chalmers, Thomas, <i>et al.</i> (See Gates, Fraser & Chalmers.)	West Roxbury, Mass.	Leather, machines for splitting.	May 10, 1859.
26477	Chamberlain, Dexter H.	Three Oaks, Mich.	Gate	Dec. 20, 1859.
23756	Chamberlain, S. W.	Olean, N. Y.	Harvesting-machines	April 26, 1859.
24100	Chamberlin, George and H.	Johnsontown, N. Y.	Stove-pipes	May 24, 1859.
23445	Chamberlin, M. C.	Philadelphia, Pa.	Paper-folding machines	April 5, 1859.
26090	Chambers, Cyrus, jr.	Philadelphia, Pa.	Paper, machines for folding.	Nov. 15, 1859.
24720	Chambers, Cyrus, jr.	New York, N. Y.	Skirt-supporters	July 12, 1859.
	Champagne, L., and H. Nichols. (See Nichols & Champagne.)			
24374	Champion, Thomas, and T. Motley.	Washington, D. C.	Sign-boards, &c., mode of fastening letters to.	June 14, 1859.
25949	Champlin, Robert H.	East Greenwich, R. I.	Washing-machine	Nov. 1, 1859.
25093	Chaney, H.	Perry, Ga.	Stones, machines for dressing.	Aug. 16, 1859.
	Chandler, C. H., <i>et al.</i> (See Hale & Chandler.)			
	Channing, W. F. (See Fanner, Moses G., assignor.)			
	Chapman, A. B. (See Sloan, William D., assignor.)			
26162	Chapman, A. J.	Bayou Goula, La.	Furnaces, Bagasse.	Nov. 22, 1859.
26253	Chapman, A. J.	Seipio, N. Y.	Vegetable-cutter	Nov. 29, 1859.
23076	Chapman, J. L.	Kimmunity, Ill.	Harvesters, corn	Mar. 1, 1859.
24444	Chapman, James W.	Trinity Springs, Ind.	Mills, sugar	June 21, 1859.
26478	Chapman, Mathew.	Greenfield, Mass.	Cutlery, attaching handles to.	Dec. 20, 1859.
23527	Chapman, Mathew, assignor to Russell Manufacturing Company.	Greenfield, Mass.	Cutlery, attaching handles to.	Jan. 4, 1859.
23821	Chapman, William Z. W.	New York, N. Y.	Carriages, &c., fastenings for curtains of.	May 3, 1859.
23349	Charlton, John.	Newark, N. J.	Skates, mode of fastening.	Mar. 29, 1859.
25995	Chase, D. G., assignor to George Parr.	Boston, Mass.	Laster, shank.	Nov. 1, 1859.
	Chase, John W., and J. A. Safford. (See Safford & Chase.)			
26013	Chase, Lucius C.	Boston, Mass.	Girth-buckles	Nov. 8, 1859.
23446	Cheek, E. C., <i>et al.</i> (See Purlier, Harlan & Cheek.)			
22854	Cheetham, William H., jr.	New York, N. Y.	Looms, power	April 5, 1859.
23822	Cheever, John H.	Boston, Mass.	Hose-pipes, rubber, manufacture of.	Feb. 8, 1859.
23703	Cheney, Chandler	Milford, Mass.	Skate-fastening	May 3, 1859.
22702	Cheney, Samuel.	Cleveland, Ohio.	Lamps	Jan. 25, 1859.
22855	Cheney, Seth.	Kiantone, N. Y.	Fence, field	Jan. 25, 1859.
23077	Chenoweth, George E.	Baltimore, Md.	Harvesters	Feb. 8, 1859.
26091	Chenoweth, George E.	Baltimore, Md.	Harvesters	Mar. 1, 1859.
24599	Cherey, Edmund B., assignor to self and Thomas W. Weathered.	New York, N. Y.	Furnaces	Nov. 15, 1859.
				June 28, 1859.
24721	Chesbro, Denison.	Syracuse, N. Y.	Telegraphing from railroad-cars while moving, method of.	June 7, 1859.
24795	Chesterman, William.	Centralia, Iowa.	Pots, coffee	June 14, 1859.
23058	Chichester, Lewis S., assignor to David L. Winteringham.	New York, N. Y.	Bottles, machinery for corking	Feb. 22, 1859.
26546	Chichester, Lewis S., assignor to H. G. Evans.	New York, N. Y.	Packers, cotton	Dec. 20, 1859.
22782	Childs, Willis L.	Piermont, N. Y.	Car-seats, railroad	Feb. 1, 1859.
22489	Chilson, Gardner	Boston, Mass.	Range, cooking	Jan. 4, 1859.
25487	Chittenden, Morgan	Danbury, Conn.	Fastener, sash	Sept. 20, 1859.
23447	Choate, W. C., and R. Dawes. (See Dawes & Choate.)			
24540	Christian, John B., and Abner Beeler.	Mount Carroll, Ill.	Pumps	Apr. 5, 1859.
	Christman, Thomas F.	Wilson, N. C.	Hoisting bricks, machine for	June 28, 1859.
	Christopher, J., <i>et al.</i> (See Stewart, Christopher & Forward.)			

*Patentees of inventions and designs, 1859.*

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23012	Chubb, Alouzo	Painesville, Ohio	Wood, machine for bending	Feb. 22, 1859.
26414	Chubbuck, Isaac T.	Roxbury, Mass.	Governors for steam-engines, fan	Dec. 13, 1859.
22704	Church, A. M.	Augusta, Ga.	Amalgamator	Jan. 25, 1859.
25245	Church, B. S.	Manhattanville, N. Y.	Water-meters	Aug. 30, 1859.
26914	Church, B. S.	Manhattanville, N. Y.	Water-meters	Nov. 8, 1859.
22624	Churchill, George	Hartford, Conn.	Belt-clasps	Jan. 18, 1859.
24194	Clackson, John	Mitford, Pa.	Joiner's clamp	May 31, 1859.
24281	Clapp, J. C.	Seneca Falls, N. Y.	Corn-huskers	June 7, 1859.
24516	Clareni, Charles	New York, N. Y.	Nail-machine, wrought	June 7, 1859.
	Clark, A. N. (See Williams, C. H., administratrix and assignor.)			
	Clark, A. N. (See Mathies, Robert H., assignor.)			
	Clark, Barton E., et al. (See Rosencrantz & Smith, assignors.)			
23059	Clark, Charles E., assignor to self and George W. Clark	Boston, Mass.	Bandages, catamenial	Feb. 22, 1859.
23823	Clark, D. W.	Bridgeport, Conn.	Sewing-machines	Mar. 29, 1859.
24282	Clark, D. W.	Bennington, Vt.	Composition for bricks, &c., enamel	June 7, 1859.
26336	Clark, Edwin	Windsor, Vt.	Sewing-machines	Dec. 6, 1859.
24195	Clark, E. P.	Holyoke, Mass.	Composition for pencils	May 31, 1859.
22490	Clark, E. M.	Lancaster, Pa.	Smut-machines	Jan. 4, 1859.
25629	Clark, G. A.	Farmington, Conn.	Fire-places	Oct. 4, 1859.
25246	Clark, H. S.	Wyandover, Pa.	Carriage-spring	Aug. 30, 1859.
24857	Clark, James M.	Philadelphia, Pa.	Bolting flour, apparatus for	July 26, 1859.
22625	Clark, John	Williamsburg, N. Y.	Window-blinds, mode of operating	Jan. 18, 1859.
24177	Clark, John G., assignor to self and Samuel W. Hatch	Augusta, Ga.	Alarm, burglar's	May 24, 1859.
24349	Clark, John G., assignor to self, D. G. Coffing, and Samuel W. Hatch	Augusta, Ga.	Alarm-pistol, burglar's	June 7, 1859.
25807	Clark, Leverett	Monticello, N. Y.	Hem-holder	Oct. 18, 1859.
25488	Clark, M. H.	Danville, Va.	Presses, hydraulic	Sept. 20, 1859.
25385	Clark, Richardson P.	Johnstown, N. Y.	Mill, hand, for grinding apples, &c.	Sept. 13, 1859.
25489	Clark, Richardson P.	Johnstown, N. Y.	Apple-parer	Sept. 20, 1859.
24600	Clark, Samuel, assignor to William Oland Bourne	New York, N. Y.	Motion to a sifting-apparatus, momentum mode of imparting	June 28, 1859.
24991	Clark, Walter	Palmyra, Ill.	Planters, seed	Aug. 9, 1859.
24722	Clark, William A.	Bethany, Conn.	Augers, device for fastening cutters of hollow	July 12, 1859.
23824	Clark, William N.	Chester, Conn.	Boats, water-cask, life	Mar. 29, 1859.
23078	Clarke, George H.	East Washington, N. H.	Bee-hives	Mar. 1, 1859.
24795	Clary, John	Dayton, Ohio	Vegetable-cutter	July 19, 1859.
25950	Clay, Edward C.	Malden, Mass.	Alarm, burglar, electro-magnetic	Nov. 1, 1859.
26015	Clay, George	New York, N. Y.	Gas-lights, packing for sliding	Nov. 8, 1859.
23662	Clay, George	New York, N. Y.	Lock	Apr. 19, 1859.
23292	Clayton, Barnes	Philadelphia, Pa.	Studs, &c., shirt, fastening for	Mar. 8, 1859.
23551	Clayton, Barnes	Philadelphia, Pa.	Studs, shirt, fastening for	Apr. 12, 1859.
25386	Clayton, Barnes	Philadelphia, Pa.	Studs, shirt, fastening for	Sept. 13, 1859.
23448	Clayton, Henry	Tamaqua, Pa.	Valve arrangements of steam-engines	Apr. 5, 1859.
23825	Clayton, Henry	Tamaqua, Pa.	Locomotive engine-houses, smoke-stack for	May 3, 1859.



25094	Clear, Abram H.	Providence, R. I.	Boilers, steam-pipe connections for	Aug. 16, 1859.
	Clemens & Miller. (See Miller & Clemens.)			
23079	Clemmons, William	Nicholasville, Ky.	Sewing-machine, hemming-guides for	Mar. 1, 1859.
24196	Clemson, William	East Woburn, Mass.	Saws, machine for grinding	May 31, 1859.
25318	Clewley, Charles W.	Providence, R. I.	Watch-rims, &c., machines for making	Sept. 6, 1859.
23156	Clifton, Henry	Buffalo, N. Y.	Trunks	Mar. 8, 1859.
25095	Clifton, Joseph H.	New Castle, Pa.	Belting, manufacture of machinery	Aug. 16, 1859.
25096	Clifton, Joseph H.	New Castle, Pa.	Belting for machinery	Aug. 16, 1859.
22705	Cline, John C.	Philadelphia, Pa.	Saws, reciprocating, method of hanging	Jan. 25, 1859.
25387	Clinger, P. S.	Conestoga Center, Pa.	Fences, wire	Sept. 13, 1859.
24197	Closs, Jacob	Decatur, Ind.	Churn	May 31, 1859.
24375	{ Clough, Isaac S., and Samuel R. Burrell	Brooklyn, N. Y.	Fly-trap	June 14, 1859.
	{ Clough, I. L. (See Roekwood, L. R., assignor.)	New York, N. Y.		
22936	Clow, Daniel	Buffalo, N. Y.	Harvesters	Feb. 15, 1859.
23332	Clow, L. E., assignor to S. H. Ransom & Co.	Albany, N. Y.	Stoves, pot-holes, covers for cooking	Mar. 22, 1859.
26092	Clow, Philip L.	Coboes, N. Y.	Churn	Nov. 15, 1859.
26254	Coates, William B.	Philadelphia, Pa.	Potato-parer	Nov. 29, 1859.
	Coatsworth, George, and L. L. Bond. (See Carter, Charles W., assignor.)			
26016	Cochran, J. W.	New York, N. Y.	Projectiles for rifled ordnance	Nov. 8, 1859.
26017	Cochran, J. W.	New York, N. Y.	Projectiles for rifled ordnance	Nov. 8, 1859.
26256	Cochran, J. W.	New York, N. Y.	Fire-arms, breech-loading and other	Nov. 29, 1859.
25951	Cochran, J. W.	New York, N. Y.	Ordnance, projectiles for	Nov. 1, 1859.
26337	Cochran, J. W.	New York, N. Y.	Projectiles for rifled-ordnance	Dec. 6, 1859.
23826	Coe, John, and William B. Sniffer	Stratford, Conn.	Skate-fastening	May 3, 1859.
24425	Coffin, John E., assignor to A. F. Gerrish	Portland, Me.	Books, machines for shaping the backs of	June 14, 1859.
	Coffin, John E., and G. H. Sanborn. (See Sanborn & Coffin.)			
24283	Coffin, S. C.	Middletown, Pa.	Shingles, method of jointing	June 7, 1859.
22937	Cogswell, Henry	Greenwich, N. Y.	Hames	Feb. 15, 1859.
24992	Cogswell, W., and C. A. Mathewson	Ottowa, Ill.	Harvester, corn	Aug. 9, 1859.
26338	Cogswell, William & Ira, jr.	Ottowa, Ill.	Harvesters	Dec. 6, 1859.
	Colborn & Patterson. (See Patterson & Colborn.)			
23449	Colborn, Levi H.	Baltimore, Md.	Rice-polishing	Apr. 5, 1859.
23552	Colborn, Levi H.	Baltimore, Md.	Harvesters	April 12, 1859.
22767	Colby, Daniel C., assignor to self and Daniel W. Rawson	Keene, N. H.	Clothes-frame	Jan. 25, 1859.
25808	Cole, B. R.	Geneva, N. Y.	Gates, method of opening and elosing	Oct. 18, 1859.
26255	Cole, Seth L.	Burlington, Vt.	Gas-burners	Nov. 29, 1859.
22938	Cole, Benjamin	Brooklyn, N. Y.	Pen-holder	Feb. 15, 1859.
23976	Cole, I. I., and M. Bonnell. (See Bonnell & Cole.)	Philadelphia, Pa.	Horse shoe-machine	May 10, 1859.
22491	Collen, John B., assignor to self and P. Tearsley	New York, N. Y.	Billiard-cue tips	Jan. 4, 1859.
23350	Collender, Hugh W.	New York, N. Y.	Billiard-table cushions	Mar. 29, 1859.
	Collier, Russell W., and W. B. Fay. (See Fay & Collier.)			
25388	Collier, T. T., and H. W. S.	Lavernia, Texas.	Planters, cotton-seed	Sept. 13, 1859.
25097	Collins, Edward K.	Chili, N. Y.	Clover-bolts	Aug. 16, 1859.
25557	Collins, E. S., and T. N. Read	Aspinwall, Va.	Pressing, machine for preparing tobacco for	Sept. 27, 1859.
	Collins, F. S., et al. (See Hotehkiss & Bennett, assignors.)			
	Collins, Isaac, et al. (See Wilcoxson, D. J., assignor.)			
26339	Collins, James P.	Troy, N. Y.	Water-wheel	Dec. 6, 1859.
25884	Collins, M. H.	Chelsea, Mass.	Bolting flour, &c., machines for	Oct. 25, 1859.
25630	Collins, P. E.	Mobile, Ala.	Gins, cotton	Oct. 4, 1859.

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23229	Coleman, I. L.	Vincennes, Ind.	Boilers, steam, apparatus for regulating the supply of water to.	Mar. 15, 1859.
23553	Colman, J. M.	Milwaukee, Wis.	Valve, variable cut-off for steam-engines	April 12, 1859.
22625	Colson, Nelson, et al. (See King, Wm. H., assignor.)	Hartford, Conn.	Gun-stocks with pistols, mode of coupling	Jan. 18, 1859.
22627	Colt, Samuel	Hartford, Conn.	Gun-stocks	Jan. 18, 1859.
23230	Colt, Samuel	Hartford, Conn.	Cartridges, packing	Mar. 15, 1859.
24101	Colton, Albert B.	Athens, Ga.	Horse-power machines	May 24, 1859.
22706	Colton, Francis	Brooklyn, N. Y.	Bedstead, portable	Jan. 25, 1859.
22629	Colton, G. D.	Galesburgh, Ill.	Ploughs	Jan. 18, 1859.
25995	Colville, John, assignor to self and T. L. Colville	Wilmington, N. C.	Saws, circular, method of adjusting	Nov. 1, 1859.
24284	Colvin, Enoch	Poultney, Vt.	Knitting-machine	June 7, 1859.
25389	Colvin, Henry W.	Falmouth, Ky.	Fire-arm, sight for	Sept. 13, 1859.
25724	Colvin, James S.	Allegheny, Pa.	Gasket for steam and other joints	Oct. 11, 1859.
23901	Colvin, Robert I.	Lancaster, Pa.	Carriage-shafts, convertible	May 10, 1859.
23425	Couler, Henry B., assignor to self and Joseph S. Levis	Temperanceville, Pa.	Iron, machine for rolling	Mar. 29, 1859.
23827	Coutins, P. B.	San Francisco, Cal.	Bomb-lance	May 3, 1859.
26018	Constock, D. W.	Chicago, Ill.	Railroad-gate	Nov. 8, 1859.
26415	Conant, Hezekiah	Willimantic, Ct.	Thread on spools, machines for winding	Dec. 13, 1859.
	Cone, Alfred M., et al. (See Parsons & Cone.)			
	Conklin, H. M., and J. W. Corning. (See Budlong, Win. G., assignor.)			
24985	Conlan, David	New York, N. Y.	Billiard-tables, light-shade for	June 7, 1859.
23351	Connel, James M.	Newark, Ohio	Telegraph cable, submarine	Mar. 29, 1859.
22628	Connel, James M.	Newark, Ohio	Boot-blackening apparatus	Jan. 18, 1859.
23450	Conover, Jacob A.	New York, N. Y.	Engines, steam	April 5, 1859.
24445	Conover, C. G.	Jefferson, Wis.	Shingle-machine	June 21, 1859.
26019	Converse, W. F.	Harrison, Ohio	Car-springs, railroad	Nov. 8, 1859.
23451	Cook, A. M., and A. B. Vant. (See Vant & Cook.)	Hillsborough, N. H.	Shoe-peg machines	April 5, 1859.
24723	Cook, Caleb	New Haven, Conn.	Basket, fruit	July 12, 1859.
25390	Cook, David	Paris, Ill.	Harrows, rotary	Sept. 13, 1859.
26564	Cook, G. W., and S. P. Snyder. (See Snyder & Cook.)	New Haven, Conn.	Carriages, top-props for	Dec. 27, 1859.
24617	Cook, George, and H. I. Kimball	Haynesville, Mo.	Ploughs	July 5, 1859.
25544	Cook, Isaac, and John T. Bever	Baltimore, Md.	Boilers, steam, try-cock for	Sept. 20, 1859.
23743	Cook, John F., assignor to self and George F. Page.	Washington, D. C.	Engines, holding keys for strap connections for	April 19, 1859.
	Cook, J. W., et al. (See Selser, George, assignor.)			
	Cook, Truman, assignor to A. Thomas Smith			
	Cooke, Benjamin F., et al. (See Mayall, Thos. J., assignor.)			
22598	Cooke, Benjamin F., et al. (See Whipple, Jas. A., assignor.)	Middletown, Conn.	Webbing, manufacturing	Jan. 4, 1859.
26322	Cooke, James C., assignor to Russell Manufacturing Co.	Hartford, Conn.	Soldering, holding knife-handles for	Nov. 29, 1859.
	Cookey, Almon, assignor to E. W. Sperry, J. H. Ashmead, E. Hurlbert, and Henry E. Robbins.			
26323	Cookey, Almon, assignor to E. W. Sperry, J. H. Ashmead, E. Hurlbert, and Henry E. Robbins.	Hartford, Conn.	Soldering, holding knife-handles for	Nov. 29, 1859.
24993	Coonley, James P.	Farmington, Mich.	Planters, corn	Aug. 9, 1859.



23298	Coons, Matthias P.	Brooklyn, N. Y.	Gas, apparatus for generating.	May 3, 1859.
26163	Coons, Matthias P.	Brooklyn, N. Y.	Gas, illuminating, apparatus for generating.	Nov. 22, 1859.
25631	Cooper, Garret.	Jersey City, N. J.	Bolt, tray.	Oct. 4, 1859.
26257	Cooper, George.	Coneord, N. H.	Range, cooking.	Nov. 29, 1859.
26340	Cooper, John.	Mount Vernon, Ohio.	Mills, sugar, oiling boxes of vertical.	Dec. 6, 1859.
23157	Cooper, John, and H. T. Douglas. (See Douglas & Cooper.)	Philadelphia, Pa.	Sewing-machines.	Mar. 8, 1859.
26020	Cooper, John H.	Gratis, Ohio.	Churn-dasher.	Nov. 8, 1859.
24077	Cooper, N. B.	Windsor, Conn.	Window-sash supporter.	May 17, 1859.
26068	Cooper, Sumner, assignor to self and Thomas Denham, and Joseph W. Briggs.			
26068	Cooper, W. E., assignor to Charles D. Gibson.	Dunkirk, N. Y.	Car-springs, railroad.	Nov. 8, 1859.
23663	Cooper, William E.	Dunkirk, N. Y.	Car-brake, railroad.	April 19, 1859.
23902	Cope, N., and W. Hodgson.	Cincinnati, Ohio.	Valves, butterfly.	May 10, 1859.
23352	Cope, Samuel.	Eaterprize, Ill.	Presses, cheese.	Mar. 29, 1859.
25952	Cope, Nathan.	Cincinnati, Ohio.	Valves, steam-engines, slide.	Nov. 1, 1859.
25490	Corbett, V. P.	Washington, D. C.	Cans, preserve, stoppers for.	Sept. 20, 1859.
23353	Corduan, Joseph.	Brooklyn, N. Y.	Bells, &c., house, apparatus for sounding.	Mar. 29, 1859.
24618	Corey, Alexander, et al. (See Gates, Joseph R., assignor.)	Providence, R. I.	Engines, steam.	July 5, 1859.
26093	Corliss, George H.	New York, N. Y.	Churn, rotary.	Nov. 15, 1859.
22939	Cornell, Aaron L.	New York, N. Y.	Floors, fire-proof.	Feb. 15, 1859.
22547	Cornell, John B.	New York, N. Y.	Safes, burglar-proof.	June 11, 1859.
26479	Cornell, John B.	New York, N. Y.	Vault-lights, construction of.	Dec. 20, 1859.
26417	Cornell, John B.	New York, N. Y.	Sash-weight.	Dec. 13, 1859.
25491	Cornish, George B.	New York, N. Y.	Sails, apparatus for reefing.	Sept. 20, 1859.
26480	Corrman, F., and W. Fridley. (See Fridley & Corrman.)	Carlinville, Ill.	Valves, steam.	Dec. 20, 1859.
26341	Corr, C. W.	Buffalo, N. Y.	Skate-fastenings.	Dec. 6, 1859.
23536	Costello, Thomas P.	Washington, D. C.	Signals, night, pyrotechnic.	April 5, 1859.
24078	Coston, B. Franklin, deceased, Martha J. Coston, administratrix.	Westerly, R. I.	Planing-machines, feeding-device for.	May 17, 1859.
24198	Coston, Martha J. (See Lilliendahl, Gustavus A., assignor.)	Frederica, Del.	Crushers, corn.	May 31, 1859.
22783	Cotting, D. G., et al. (See Clark, John G., assignor.)	Troy, N. Y.	Water-wheel.	Feb. 1, 1859.
22856	Cottrell, C. B., assignor to self and Nathan Babeock.	New York, N. Y.	Pots, coffee.	Feb. 8, 1859.
24199	Cottrell, C. B., and C. Potter, jr. (See Potter & Cottrell.)	New York, N. Y.	Gas-regulators.	May 31, 1859.
24200	Couch, John O., and H. S. North. (See North & Couch.)	New York, N. Y.	Hydro-carbon vapor-apparatus.	May 31, 1859.
24198	Coursey, T. B.	Indianapolis, Ind.	Register for railroad ears.	Dec. 27, 1859.
22783	Coutie, William.	Keene, N. H.	Variating wood, method of.	Feb. 1, 1859.
22856	Covell, E. Hall.	Edgefield, S. C.	Carriage-seat, spring-back.	Oct. 11, 1859.
24199	Covell, E. Hall.	Danbury, Conn.	Hat-bodies, machinery for hardening.	May 17, 1859.
24200	Covell, E. Hall.	Jersey City, N. J.	Corks, machine for polishing.	July 19, 1859.
26565	Covington, S. F., et al. (See Hoffner, P., assignor.)	New York, N. Y.	Stoves, cooking.	May 3, 1859.
22784	Covington, Samuel F.	Philadelphia, Pa.	Rubber into filreads, India, machine for cutting.	June 14, 1859.
22784	Cowee, Joel, jr.	Malden, Mass.	Plough, drain, mole of.	Aug. 16, 1859.
25725	Cowells, Norman, and A. Hulburt.	Lafayette, Ind.	Mangle.	Nov. 22, 1859.
24007	Cowperthwait, George E.	Brooklyn, N. Y.		
24841	{ Cox, Henry F., and A. Miller, assignors to Henry F. Cox.			
23829	Cox, Joseph.			
24426	Cox, Joseph W., assignor to H. H. Day.			
25098	Cox, Justice, et al. (See Belfield, Henry, assignor.)			
26227	Cox, Thomas S.			
	Coxell, James T., assignor to self and E. Jones.			
	Coy, Noble, & Angell. (See Noble, Coy, & Angell.)			

## Patentees of inventions and designs, 1859.

No.	Name of patentec.	Residence.	Invention or discovery.	Date.
23354	Crabill, H. F., and J. Whiteside. (See Whiteside & Crabill.)	Newport, Ky.	Pile-driver	Mar. 29, 1859.
24541	Craig, Waldo P.	Marshall, Mich.	Planters, seed	June 28, 1859.
26164	Crandall, Benjamin P.	New York, N. Y.	Sleds, children's	Nov. 22, 1859.
25178	Crandell, C. U. and J. H., and H. N. Hawkins	Cameron, Ill.	Plough, mole	Aug. 23, 1859.
24008	Crandall, Jesse A.	New York, N. Y.	Rocking-toy	May 17, 1859.
26165	Crane, Aaron D., et al. (See Miller, L. B., assignor.)	Dorchester, Mass.	Locomotive-engines	Nov. 22, 1859.
26166	Crane, Edward	Dorchester, Mass.	Cars, railroad	Nov. 22, 1859.
26021	Crane, Edward	Boston, Mass.	Boiler, steam	Nov. 8, 1859.
26022	Crane, Edward	Boston, Mass.	Car-wheels, railroad	Nov. 8, 1859.
25179	Crane, Elliott H.	Burr Oak, Mich.	Trap, rat	Aug. 23, 1859.
26566	Crane, Isaac R.	Warsaw, Mo.	Ditching-machine	Dec. 27, 1859.
25099	Crane, J. H.	Charlestown, Mass.	Carpet-sweeper	Aug. 16, 1859.
24376	Crane, Thomas	Fort Atkinson, Wis.	Press, sugar-cane	June 14, 1859.
24286	Crane, Thomas	Fort Atkinson, Wis.	Rakes	June 7, 1859.
25809	Creager, Jonathan	Cincinnati, Ohio	Sawing beveled curves, maclines for	Oct. 18, 1859.
23452	Creamer, Jacob, and Thomas W. Ricards	London, Ohio	Plough, mole	April 5, 1859.
22707	{ Crehore, Isaac N., and Francis Stiles, jr } Cressman, G. W., and M. Kceley. (See Kceley & Cressman.)	Boston, Mass. Leicester, Mass.	Paper-rag engines	Jan. 25, 1859.
23903	Cresson, Walter. (See McNeice, Wm., assignor.)	Evansville, Ind.	Separators, grain	May 10, 1859.
25247	Criswell, J., et al. (See Quinbey, Brown, and others.)	Leesburg, Va.	Washing-machine	Aug. 30, 1859.
25558	Crist, James B.	Boston, Mass.	Welts, machine for splitting	Sept. 27, 1859.
23355	Crisey, F. J.	Grafton, Ohio	Sawing-machine	Mar. 29, 1859.
22708	Critcherson, J., and E. S. Moulton	Deposit, N. Y.	Railroad-chairs	June 25, 1859.
24377	Crittendon, Wm. H.	Lawrence, Mass.	Paper manufacturing	June 14, 1859.
23453	Crockett, D. W.	Poughkeepsie, N. Y.	Pump	April 5, 1859.
25930	Crocker, Samuel S., and George E. Marshall. Crombie, Wm. G. (See Campbell, Robert M., assignor.)	Auburn, N. Y.	Stoves, cooking, mode of feeding fuel to the fire-boxes of.	Oct. 25, 1859.
25023	Crompton, George, et al. (See Forbush & Crompton.)	Auburn, N. Y.	Clothes-dryer	Nov. 8, 1859.
25284	Cronk, James E.	Fredonia, N. Y.	Valve for steam-engines	Aug. 30, 1859.
23286	Cronk, M. C., assignor to self and Wm. Boynton, jr., and Albert H. Goss.	Fredonia, N. Y.	Saws, method of hanging reciprocating	Mar. 15, 1859.
25885	Crosby, Addison	New Haven, Conn.	Sewing-machines	Oct. 18, 1859.
25623	Crosby, Chauncey O.	New York, N. Y.	Saws, reciprocating, manner of hanging	Oct. 4, 1859.
26417	Crosby, Pearson	Newark, N. J.	Wiring blind-rods, machine for	Dec. 13, 1859.
24378	Crosby, Thomas R.	Ellington, Conn.	Looms	June 14, 1859.
25953	Crossley, Charles	Rockville, Conn.	Printing-blocks, electrotype	Nov. 1, 1859.
24069	Crossley, Thomas	Peoria, Ill.	Fire, machine for upsetting	May 17, 1859.



24010	Crowell, C. L., and Robert Smith. (See Massey, William, assignor.)	Chelsea, Mass.	Spinning-machines, drawing thread for	May 17, 1859.
25391	Crowell, James E.	Palmira, N. Y.	Pots, coffee	Sept. 13, 1859.
26418	Crowell, Solomon, jr.	New York, N. Y.	Needle-wrappers	Dec. 13, 1859.
23356	Crowley, R.	Oswego, N. Y.	Stave-machines, chopping-block for	Mar. 29, 1859.
23630	Crozier, A. H., and Cyrus Carrier	Brooklyn, N. Y.	Engines, steam, variable cut-off for	May 3, 1859.
25559	Crumble, A., and R. D. Briggs	Hellam, Pa.	Harvesters	Sept. 27, 1859.
23554	Crumling, Tobias	Silver Spring, Tenn.	Planters, cotton-seed	April 12, 1859.
24102	Crutcher, J. P.	Peoria, Ill.	Bench, joiner's	May 24, 1859.
24694	Cryer, John E.	Shelburne Falls, Mass.	Table and clothes-dryer	July 5, 1855.
22492	Culver, E., assignor to self and R. N. Fife	Seranton, Pa.	Hoi-ting and dumping coal, apparatus for	Jan. 4, 1859.
25810	Culver, W. B.	Boston, Mass.	Boilers, steam, try-cock for	Oct. 18, 1859.
25886	Cummings, James	Boston, Mass.	Drilling-machines	Oct. 25, 1859.
25955	Cummings, James	Boston, Mass.	Engines, steam	Nov. 1, 1859.
23158	Cummings, Allan	New York, N. Y.	Sifters, ash	Mar. 8, 1859.
26167	Cummings, D. M.	Enfield, N. H.	Harrow-teeth	Nov. 22, 1859.
23831	Cunningham, Edward & W. M. B.	Powhatan, C. H., Va.	Press, tobacco	May 3, 1859.
22630	Cunningham, Jesse	Marshall, Mo.	Cultivators	Jan. 18, 1859.
24994	Currier, B. T.	Bath, Me.	Harvesters, corn	Aug. 9, 1859.
23013	Currier, Thomas W.	Lawrence, Mass.	Furniture, triangular, stand for	Feb. 22, 1859.
25811	Curry, William P.	Vincennes, Ind.	Boilers, steam, feed-water apparatus for	Oct. 18, 1859.
25812	Curtis, Andrew J.	Frankfort, Me.	Gates, field, operating	Oct. 18, 1859.
22709	Curtiss, Daniel S.	Madison, Wis.	Fence, field	Oct. 25, 1859.
22940	Curtis, Frederiek	Saugus Center, Mass.	Fire-arm, breech-loading	Jan. 25, 1859.
25550	Curtis, George S.	Chicago, Ill.	Harvesters, reels for	Feb. 15, 1859.
26342	Curtis, H. (See Everts, John A., assignor.)			Sept. 27, 1859.
26342	Cushing, E. G.	Dryden, N. Y.	Water-wheels, horizontal	Dec. 6, 1859.
23454	Cushman, Ephraim & John R.	Amherst, Mass.	Leather, manufacturing artificial	Apr. 5, 1859.
22631	Cushman, William M. C.	Albany, N. Y.	Railroad-chairs	Jan. 18, 1859.
22785	Cushman, William M. C.	Albany, N. Y.	Rails, ear, splice for	Feb. 1, 1859.
24856	Custer, Edwin C.	Evansburgh, Pa.	Cherries, stoning, machine for	July 26, 1859.
25561	Custer, J. D.	Norristown, Pa.	Harvesters	Sept. 27, 1859.
24350	Custer, J. D., assignor to self and J. M. Roberts	Norristown, Pa.	Clay, machines for tempering	June 7, 1859.
26419	Cutler, Jonathan	Chicopee, Mass.	Clasps, machine for making	Dec. 13, 1859.
25887	Cypers, R. C. (See Nash, Jefferson, assignor.)	Milledgeville, Ga.	Washing-machine	Oct. 25, 1859.
25813	Dabbs, B. L. H. (See Good, Jonathan, assignor.)	Ashley, Ohio	Evaporating-apparatus, construction of	Oct. 18, 1859.
22857	Dagne, J. B.	Williamsburg, N. Y.	Bung-valve	Feb. 8, 1859.
24379	Dahis, Florain	Birmingham, Mich.	Drain-tile machine	June 14, 1859.
26569	Dailey, O. A., et al. (See Skagle, G. W., assignor.)	Durand, Ill.	Loek	Dec. 27, 1859.
22548	Dana, E. A., et al. (See Schenkl, John W., assignor.)	Jamestown, N. Y.	Dental-plates, lathe-attachment for finishing	Jan. 11, 1859.
23293	Dana, G. W., et al. (See Moore, H. K., assignor.)	Jamestown, N. Y.	Dental-swages, adjustable	Mar. 29, 1859.
23555	Danforth, Elijah H.	Middletown, Conn.	Trusses, hernial	Apr. 12, 1859.
26570	Danforth, Elijah H.	Milford, Mass.	Cloth-holder in needle-work	Dec. 27, 1859.
24446	Danforth, Henry	Woodstock, Vt.	Straw-cutters	June 21, 1859.
23664	Danforth, Charles, assignor.	Almeca, Mich.	Journal-boxes	Apr. 19, 1859.
22549	Daniels, Newell	Toledo, Ohio	Soda-water apparatus	Jan. 11, 1859.
	Daniels, Reuben			
	Daniels, Rienza			
	Daniels, Thomas			



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
26571	Danner, John.....	Canton, Ohio.....	Cars, railroad, sleeping-chairs for.....	Dec. 27, 1859.
25814	Danner, John, assignor to J. M. Jay.....	Canton, Ohio.....	Cars, sleeping.....	Oct. 18, 1859.
26069	Danner, John, assignor to J. M. Jay.....	Canton, Ohio.....	Cars, sleeping.....	Nov. 8, 1859.
26143	Darker, William, jr., assignor to J. B. Thompson.....	West Philadelphia, Pa.....	Steel-wire, tempering.....	Nov. 15, 1859.
26230	Darker, Wm., jr., assignor to self and J. B. Thompson.....	Philadelphia, Pa.....	Steam as a motor to city railroad-cars, mode of applying.....	Nov. 22, 1859.
23333	Davenport, Joseph, assignor to self and C. M. Russell.....	Massillon, Ohio.....	Cars, iron, railroad.....	Mar. 22, 1829.
26258	Davey, P.....	Fronton, Ohio.....	Buttons.....	Nov. 29, 1859.
24995	David, V. R. (See Freeland, Parley, F., assignor.).....	Batesville, Ark.....	Bales, &c., cotton, hoop-fastenings for.....	Aug. 9, 1859.
23904	Davidson, Edward.....	Batesville, Ark.....	Ploughs.....	May 10, 1859.
26094	Davidson, Hunter.....	United States Navy.....	Boats, ships', apparatus for working.....	Nov. 15, 1859.
23758	Davidson, M. O.....	New York, N. Y.....	Railroad rails, mode of connecting and supporting.....	Apr. 26, 1859.
25633	Davies, Joshua & S. A.....	Muskegon, Mich.....	Bread and vegetable slicer.....	Oct. 4, 1859.
22710	Davis, Abbot R.....	East Cambridge, Mass.....	Corn-huskers.....	Jan. 25, 1859.
	Davis, A. R., and Albert S. Hall. (See Gale, Charles A., assignor.).....			
22941	Davis, Augustus B.....	Philadelphia, Pa.....	Car-springs, railroad.....	Feb. 15, 1859.
25865	Davis, Barron, assignor to Osborn & Vincent.....	Brooklyn, N. Y.....	Bustles.....	Oct. 18, 1859.
25726	Davis, Biram C.....	Binghamton, N. Y.....	Wiring blind-rods, hand-machine for.....	Oct. 11, 1859.
24542	Davis, C. B.....	Lawrenceburgh, Tenn.....	Sowing fertilizers in drills, machine for.....	June 28, 1859.
24735	Davis, E., deceased, by Darwin A. Greene, administrator.....	New York, N. Y.....	Wood, fire, machine for splitting.....	June 7, 1859.
23357	Davis, F. M.....	Footville, Wis.....	Seeding-machines.....	Mar. 29, 1859.
24103	Davis, Georg N., et al. (See Mayall, Thos. J., assignor.).....	Bethlehem, Conn.....	Carpet-sweeper.....	May 24, 1859.
25392	Davis, Henry.....	Baltimore, Md.....	Cars, railroad, brakes for.....	Sept. 13, 1859.
24380	Davis, Horace B.....	Lexington, Ky.....	Horse-rake.....	June 14, 1859.
24724	Davis, J. J. (See Lyon, James, assignor.).....			
24724	Davis, John.....	New Bedford, Mass.....	Railway-bars, mode of connecting the ends of.....	June 14, 1859.
26168	Davis, John & Ebenezer.....	Matildaville, Pa.....	Launching flat-boats.....	Nov. 22, 1859.
24725	Davis, Perry.....	Providence, R. I.....	Buggy-boats, wheels for.....	June 14, 1859.
25319	Davis, R. W. & Daniel.....	Yellow Springs, Ohio.....	Printing the addresses on newspapers, machine for.....	Sept. 6, 1859.
24104	Davis, William.....	Middleburg, Md.....	Hominy-machines.....	May 24, 1859.
24797	Davis, William H.....	Washington, D. C.....	Pumps, double-acting.....	June 14, 1859.
25634	Davis, William H.....	Taunton, Mass.....	Fastener, blind.....	Oct. 4, 1859.
25562	Davison, J. S.....	Cranberry, N. J.....	Telegraph-cables.....	Sept. 27, 1859.
23014	Davol, W. C.....	Fall River, Mass.....	Vegetable-cutter.....	Feb. 22, 1859.
24798	Daves, John G., and H. Gushee. (See Gushee & Daves.).....	Washington, D. C.....	Stoves.....	June 14, 1859.
24011	Daves, Rufus, and W. C. Choate.....	Washington, Tenn.....	Soap.....	May 17, 1859.
23159	Daves, William.....	Jacksonville, Ill.....	Cultivators.....	Mar. 8, 1859.
	Dawson, C. H.....			
	Day, Horacé H. (See Barre & Garely, assignors.).....			
	Day, Horace H. (See Drummoud, John W., assignor.).....			
	Day, Horace H. (See Cox, Joseph W., assignor.).....			
25180	Day, Horace H.....	New York, N. Y.....	Cloth, manufacture of ribbed elastic.....	Aug. 23, 1859.
25249	Day, Horace H.....	New York, N. Y.....	Elastic-cloth.....	Aug. 30, 1859.



24105	Day, James M., and E. H. A. Oakley.	Aiken, S. C.	Roofing, composition for	May 24, 1859.
23231	Dean, Alexander	Jerusalem, N. Y.	Grinding apples	Mar. 15, 1859.
23954	Dean, Bradford	Clayville, N. Y.	Meat-slicer	Nov. 1, 1859.
24012	Dean, Daniel, <i>et al.</i> (See Baker, Dean, & Fetheroff.)	Glenn's Falls, N. Y.	Tuyere	May 17, 1859.
23759	De Bruier, Thomas F.	Rockport, Ind.	Press, cotton	April 26, 1859.
25320	De Bronac, Jean Justin Albert, and Augustin Joseph Mar-tial Deherrypon.	Paris, France.	Treating metallic ores with spongy iron	Sept. 6, 1859.
24106	De Camp, M.	South Bend, Ind.	Mill-stone bush	May 24, 1859.
23393	Decker & Gardner. (See Gardner, Eleazer S., assignor.)	New York, N. Y.	Piano-forte actions.	Sept. 13, 1859.
24201	Decker, David.	Seranton, Pa.	Car-truck, railroad.	May 31, 1859.
25503	Decker, Thompson W. (See Miller & Decker.)	Reidsville, Ga.	Stave-machine	Sept. 27, 1859.
22942	Decker, James, assignor to self and A. P. McRea.	New York, N. Y.	Last, shoe	Feb. 15, 1859.
25100	Deeekens, John C. F.	New York, N. Y.	Cars, &c., railroad, India-rubber springs for	Aug. 16, 1859.
22997	De Forst, Thomas B.	Philadelphia, Pa.	Mill, corn and eob	Feb. 15, 1859.
25892	De Frain, John, assignor to W. Callahan and W. Grant.	New York, N. Y.	Fan, automatic	Oct. 25, 1859.
22611	Degener, F. O., <i>et al.</i> (See Gordon & Degener.)	New York, N. Y.	Printing-presses	Jan. 11, 1859.
24546	Degener, Frederick O.	Sebecetady, N. Y.	Roofs, &c., connecting boards for	June 28, 1859.
23015	De Golyer, William T.	Green Island, N. Y.	Boot-jack	Feb. 22, 1859.
22332	Degraw, Henry N.	York, Pa.	Railroads, preventing collisions on	Mar. 8, 1859.
23160	Deherrypon, A. J. M., <i>et al.</i> (See De Bronac, J. J. A.)	Brooklyn, N. Y.	Lamps	Mar. 8, 1859.
23832	Dehuff, Abram	Brooklyn, N. Y.	Lamps	May 3, 1859.
22632	Deilm, John R., and J. Snell. (See Snell & Deilm.)	Newington, Ct.	Rakes, horse	Jan. 18, 1859.
23160	Deitz, Michael A.	Boston, Mass.	Lock, prison	Sept. 13, 1859.
23832	Deitz, M. A.	Altona, Ill.	Seeding-machines	Dec. 13, 1859.
22632	Deming, D. B. (See Parce, J. Y., assignor.)	Altona, Ill.	Cultivators	May 17, 1859.
25394	Demorest, William J., and E. A. L. Roberts. (See Roberts & Demorest.)	Richmond, Ind.	Mill, sugar-cane	Jan. 25, 1859.
26420	Denham, Thomas, <i>et al.</i> (See Cooper, S., assignor.)	Waltham, Mass.	Watches, method of securing the cylindrical balance-springs to.	Jan. 11, 1859.
24013	Denio, Sylvanus A.	Guilford, Vt.	Felloes, tool for finishing	Dec. 6, 1859.
22711	Dennis, Clayton, and Richard Garsed. (See Garsed & Dennis.)	Newark, N. J.	Condensers, steam.	Feb. 8, 1859.
22550	Dennis, Oliver H.	Middletown, N. Y.	Can, milk	June 14, 1859.
26392	Dennis, Oliver H.	South Haven, Mich.	Saving-staves, machine for	Sept. 6, 1859.
22916	Dennisson, Charles H., assignor to A. Miller.	Jamestown, N. Y.	Stave-jointing machine	Nov. 1, 1859.
24381	Dennisson, J. N., assignor to self, T. W. Lawrence, Joseph Dennisson, and David Baker.	New York, N. Y.	Umbrella-fastenings	Feb. 15, 1859.
25321	Denniston, E. R.	Plaquemine, La.	Furnaces, Bagasse	Sept. 6, 1859.
25956	Derby, John K.	Plaquemine, La.	Evaporating cane-juice, steam-pans for	Nov. 8, 1859.
22943	De Saxe, Charles	Washington, D. C.	Sawing-machine, scroll	Aug. 30, 1859.
25322	Desobry, Charles A.	Reading, Pa.	Instrument for ascertaining the distance between itself and the target without chaining.	June 14, 1859.
26024	Desobry, Charles A.	Philadelphia, Pa.		Mar. 22, 1859.
23250	De Vaughan, Samuel			
24382	Devlan, Patrick S.			
23294	De Villeroi, Brutus			

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23016	Dewalt, Bennevill, and Charles E. Schrader	Reading, Pa.	Meat-cutter	Feb. 22, 1859.
23005	Dewey, Hiram T.	Sandusky, Ohio	Fence-post	May 10, 1859.
24996	De Wolfe, Alva Goodrich	Seymour, Conn.	Guns, moulding, vulcanized.	Aug. 9, 1859.
23233	Dexter, Samuel F.	Clayville, N. Y.	Wells, buckets, hanging	Mar. 15, 1859.
23074	De Yampert, T. G.	Shohola, Pa.	Ploughs	May 10, 1859.
23080	De Zeng, Henry L.	Geneva, N. Y.	Sausage-stuffer	Mar. 1, 1859.
25635	Diek, Robert	Buffalo, N. Y.	Periodicals, accountant labels for	Oct. 4, 1859.
23233	Diekason, L. J., and John Frazec	Georgetown, Ohio	Spoke-machine	Jan. 18, 1859.
22493	Diekerman, George H.	Boston, Mass.	Band-boxes	Jan. 4, 1859.
26345	Diekerson, Jacob	Sacramento, Cal.	Wind-mills	Dec. 6, 1859.
24543	Dickinson, Aurelius	Claremont, N. H.	Gas, apparatus for purifying	June 28, 1859.
22786	Dickinson, C. G.	Poughkeepsie, N. Y.	Harvesters	Feb. 1, 1859.
23455	Dickinson, Charles, and William Bellamy	Newark, N. J.	Piteher, ice	April 5, 1859.
24997	Dickinson, Charles S.	Cleveland, Ohio	Gun, centrifugal	Aug. 9, 1859.
26346	Dickinson, Charles W.	New York, N. Y.	Sewing-machines	Dec. 6, 1859.
	Dickinson, P. P., and F. F. Wagner. (See Wagner & Dickinson.)			
26259	Dickson, A. A.	Anderson, S. C.	Ploughs	Nov. 30, 1859.
24544	Dieffenbach, George	New York, N. Y.	Teeth, artificial bases for	June 28, 1859.
24545	Dieffenbach, George	New York, N. Y.	Teeth, artificial, process for coloring	June 28, 1859.
23957	Dieffenbach, George	New York, N. Y.	Rubber, method of making a hard compound of	Nov. 1, 1859.
26447	Dierker, Eberhard H., et al. (See Sloan, John, assignor.)	New Haven, Conn.	Wagons, shifting-tops for	Dec. 20, 1859.
26447	Dikeman, Homer M., assignor to Ira Dikeman & Son			
26447	Dillworth, J., et al. (See Hendry, Thomas C., assignor.)			
23181	Dimock, Lucius	Hebron, Ct.	Thread, machine for winding	Aug. 23, 1859.
24998	Dirks, Rudolph	Philadelphia, Pa.	Cars, sleeping, seats for	Aug. 9, 1859.
23182	Ditto, Joseph, and Henry Van Bergen	New York, N. Y.	Roofing, cement, composition for	Aug. 23, 1859.
23604	Dixon, Francis, assignor to self and Moses Sweetser	Lynn, Mass.	Cigar-wrapper, manufacture of	Sept. 27, 1859.
23634	Double, Richard, and M. A. Stair	Richmond, Ind.	Printers-rules, machine for making	Jan. 18, 1859.
25183	Dobyns, Thomas J. (See Silvy, Joseph C., assignor.)			
25309	Dodd, B., et al. (See Lyon, William, assignor.)			
23833	Dodge, Daniel	Keesville, N. Y.	Nail-machines	Aug. 23, 1859.
22787	Dodge, Daniel	Keesville, N. Y.	Nail-machines	Aug. 30, 1859.
24842	Dodge, P. F.	West Cambridge, Mass.	Lock, for piano-forte	May 3, 1859.
23978	Dodge, Porter	Francistown, N. H.	Stoves	Feb. 1, 1859.
25395	Dodge, Levi, assignor to self and Dodge & Blake	Waterford, N. Y.	Dies for shaping articles in metal	July 19, 1859.
26095	Dodge, Simeon, S., assignor to self and Edmund Burke	Sunapee, N. H.	Plane, hand	May 10, 1859.
23017	Dodge, Simeon, jr., and B. Potter, jr.	Marblehead, Mass.	Boots and shoes, heels for	Sept. 13, 1859.
23081	Doherty, M.	Washington, D. C.	Mowing-machines	Nov. 15, 1859.
26572	Dole, L. A.	Boston, Mass.	Crieket-bats	Feb. 22, 1859.
26573	Domenech, Francisco	Salem, Ohio	Washing-machine	Mar. 1, 1859.
26144	Doolittle, John H., assignor to Wallace & Sons	Salem, Ohio	Washing-machine	Dec. 27, 1859.
26144		Ponce, Island of Puerto Rico	Clarifying cane-juice	Dec. 27, 1859.
26144		Ansonia, Ct.	Skirts, hoop, making clasps for	Nov. 15, 1859.



23556	Dorsey, Edward L.	Greenwood, Ind.	Churn	April 12, 1859.
24619	Dorr, R. M.	Hawannee, Ill.	Gates, method of opening and closing farm.	July 5, 1859.
23906	Doss, William C.	Lavaca, Texas	Cultivators.	May 10, 1859.
23295	Doster, Herman A.	Bethlehem, Pa.	Corn-huskers	Mar. 22, 1859.
26169	Doty, Harrison.	Cardington, Ohio.	Furnace, apparatus for supplying saw-dust to	Nov. 22, 1859.
25492	Doty, M. L., and J. Thompson. (See Thompson & Doty.)	Cardington, Ohio.	Saw-mills, device for steadying logs in	Sept. 20, 1859.
25000	Dougherty, Andrew.	Brooklyn, N. Y.	Printing-presses.	Aug. 9, 1859.
25727	Dougherty, E.	Cedarville, Ohio.	Wheelwright machine	Oct. 11, 1859.
23396	Dougherty, Egerton, Woods & Co. (See Murrill, James H., assignor.)	Macon, Ga.	Railroad, switch-stand for.	Sept. 13, 1859.
25101	Dougherty, Thomas.	Macon, Ga.	Switches for railroads.	Aug. 16, 1859.
24278	Dougherty, Thomas.	Macon, Ga.	Lock.	June 7, 1859.
22858	Dougherty, Samuel H., <i>et al.</i> (See Draper, Jas., assignor.)	Appleton, Wis.	Washing-machine.	Feb. 8, 1859.
23649	Douglas, Beriah.	Middletown, Conn.	Pumps.	April 12, 1859.
24107	Douglas, Benj., and Benj. Douglas, admu'r of Wm. Douglas	Hebron, Conn.	Chimney-caps	May 24, 1859.
26170	Douglas, Charles.	Hebron, Conn.	Jacks, wagon.	Nov. 22, 1859.
25323	Douglas, Charles.	Zanesville, Ohio.	Evaporating apparatus, portable.	Sept. 6, 1859.
24108	Douglas, Hugh T., and John Cooper.	Mount Vernon, Ohio.		
26481	Douglas, H. T., and H. A. Lincoln. (See Lincoln & Douglas.)	New York, N. Y.	Gas-meters, dry.	May 24, 1859.
24014	Douglas, William.	Paris, France.	Grain, apparatus for preserving.	Dec. 20, 1859.
24015	Down, Samuel.	Goshen, Ind.	Straw-cutters.	May 17, 1859.
25493	Downs & Co. (See Goffee, Augustus J., and Demus.)	Boston, Mass.	Lamps.	May 17, 1859.
23557	Doyere, Louis M. F.	Cincinnati, Ohio.	Lamps.	Sept. 20, 1859.
23482	Drake, A. S., H. Jones, and N. W. Langley. (See Langley, Drake, & Jones.)	Newton, N. J.	Vehicles, guide-attachment for.	April 12, 1859.
25701	Drake, J. B.	Newton, N. J.	Wagon, stone-loading.	Dec. 20, 1859.
22635	Drake, John L.	New York, N. Y.	Skeleton-skirts.	Oct. 4, 1859.
23834	Drake, Nathaniel.	Greenfield, Mass.	File-handles	Jan. 18, 1859.
25728	Draper, James, assignor to self and Samuel H. Doughty.	New York, N. Y.	Piano-fortes	May 3, 1859.
22712	Draper, William W.	Cumberland, Md.	Hinge-shutter.	Oct. 11, 1859.
24260	Driggs, Spencer B.	Huron, N. Y.	Fences, field, construction of posts for.	Jan. 25, 1859.
22494	Drott, H. F.	New York, N. Y.	Cloth, machines for measuring.	May 31, 1859.
23558	Drown, John.	Schenectady, N. Y.	Cultivators.	Jan. 4, 1859.
23324	Drummond, John W., assignor to H. H. Day.	Schenectady, N. Y.	Seeding-machine	Apr. 12, 1859.
23760	Drummond, John W., <i>et al.</i> (See Rundlett & Drummond.)	Newburgh, N. Y.	Roofing cement	Sept. 6, 1859.
22551	Duane, John B.	Philadelphia, Pa.	Jewelry, strung-pearls, mode of connecting.	Apr. 26, 1859.
25102	Duane, John B.	St. Martinsville, La.	Lewis, for attaching tackles to blocks of stone.	Jan. 11, 1859.
23397	Dubois, M. D.	St. Martinsville, La.	Whiffletrees, self-releasing.	Aug. 16, 1859.
23398	Dubosq, Henry.	St. Martinsville, La.	Vehicles, attaching thills to	Aug. 16, 1859.
25399	Duehamp, Eugene.	St. Martinsville, La.	Faucet	Sept. 13, 1859.
25494	Duehamp, Eugene.	St. Martinsville, La.	Filter	Sept. 13, 1859.
26574	Duehamp, Eugene.	St. Martinsville, La.	Heating water, apparatus for	Sept. 13, 1859.
		St. Martinsville, La.	Derrick	Sept. 20, 1859.
		St. Martinsville, La.	Sugar-juices, apparatus for evaporating.	Dec. 27, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentec.	Residence.	Invention or discovery.	Date.
25959	Duckworth, C.	Hartford, Conn.	Locks	Nov. 1, 1859.
22713	Dudgeon, Richard.	New York, N. Y.	Press, hydraulic	Jan. 25, 1859.
22788	Dudley, John Q. (See Marsh, Alfred.)	New York, N. Y.	Envelope-machine	Feb. 1, 1859.
26260	Duff, James B., and Thomas W. Keating.	Somerset, Ohio	Register for watchmen, detective	Nov. 29, 1859.
25950	Duffey, Patrick H.	McHenry, Ill.	Harvesters	Nov. 1, 1859.
22998	Duffield, I. A.	Richmond, Ind.	Washing-machine	Feb. 15, 1859.
24547	Dugdale, Thomas A., assignor to William M. Reed.	Cincinnati, Ohio	Furnaces	June 28, 1859.
26393	Duhme, John H.	Waterbury, Conn.	Ladle and fork	Dec. 6, 1859.
22859	Dumont, J. J., et al. (See Gates, Joseph R., assignor.)	Big Rock, Ill.	Cultivators	Feb. 8, 1859.
24427	Dunbar, W. B., assignor to self and George H. Seymour.	Pawtucket, R. I.	Boring blind-slats, machine for spacing and	June 14, 1859.
24858	Dunham, Daniel, assignor to D. D. Sweet, James Bromely, and E. W. French.	Boston, Mass.	Heating-apparatus, steam	July 26, 1859.
25729	Dunklee, B. W., and W. B. Moore	Boston, Mass.	Furnaces	Oct. 11, 1859.
25893	Dunklee, B. Wells	Boston, Mass.	Stoves, furnaces, &c., valve for	Oct. 25, 1859.
23907	Dunklee, B. Wells	Boston, Mass.	Furnaces for heating buildings	May 10, 1859.
23865	Dunklee, B. Wells	Boston, Mass.	Range, cooking	Apr. 19, 1859.
24289	Dunning, William B.	Geneva, N. Y.	Railroad-chairs	June 7, 1859.
22789	Duryea, Wright	Glencove, N. Y.	Starch, apparatus for manufacture	Feb. 1, 1859.
24288	Du Pré, Daniel, assignor to Louis Du Pré	Raleigh, N. C.	Pump, chain	June 7, 1859.
24202	Durant, Edward J.	Lebanon, N. H.	Lever, hand	May 31, 1859.
24016	Durfee, Daniel Ingham	Croton, Ohio	Evaporating saccharine juices, apparatus for	May 17, 1859.
25361	Durfee, Delectus, assignor to self, L. A. Lyon, and H. P. Tylet.	Fort Seneca, Ohio	Power to machinery, mode of applying	Sept. 6, 1859.
22768	Durgin, Charles A., et al. (See Earl, Thos. A., assignor.)	Holyoke, Mass	Fibrous materials, drawing frames for	Jan. 25, 1859.
26171	Durgin, Silas C., assignor to self and Ammon R. Durgin.	Hartford, Wis	Grain-binders	Nov. 22, 1859.
23761	Durkee, C. H.	Detroit, Mich.	Boilers, steam, low-water alarm for	April 26, 1859.
22999	Dustin, Selah	Brooklyn, N. Y.	Pail	Feb. 15, 1859.
26483	Dutcher, J. J., assignor to Noah Mosher	Philadelphia, Pa.	Boxes, anti-friction	Dec. 20, 1859.
23559	Dutton, Joseph L., sen	Philadelphia, Pa.	Limbs, artificial	April 12, 1859.
25325	Duval, Richard H.	Big Spring, Ky	Boots	Sept. 6, 1859.
24970	Dwyer, Lewis	New York, N. Y.	Lint, surgeon's	Aug. 2, 1859.
25362	Dwyer, Robert D., assignor to A. B. & D. Sands	Medford, Mass.	Illuminating fluid, compound	Sept. 6, 1859.
23882	{ Dyar, Nathan A., and J. F. Augustus, assignor to Joseph C. Tucker	Boston, Mass.	Roofing, cements for	May 3, 1859.
26575	Dyar, Nathan A., assignor to self and Rufus Kendrick	Medford, Mass.	Bed-bottom	Dec. 27, 1859.
26347	Dye, A. M.	Clinton, Ill.	Carding-engines	Dec. 6, 1859.
25961	Dyer, Owens, Lane, & Co. (See Lane, Clark, assignor.)	Fulton, S. C.	Fly-trap	Nov. 1, 1859.
25001	Dyson, Jephtha	Kalamazoo, Mich.	Bolt-heads, die for swaging	Aug. 9, 1859.
24447	Eames, Aaron	Bridgeport, Conn.	Clover, machines for hulling	June 21, 1859.
24203	Eames, Albert	Hanover, Pa.	Cultivators	May 31, 1859.
	Eames, Albert, et al. (See Broadmeadow, John P., assignor.)	Fairfield, Ky		



23456	Easterly, James.....	Albany, N. Y. ....	Grate-bars.....	April 5, 1859.
	Eaton, A. K., and Henry W. Joslin. (See Joslin & Eaton.)	New York, N. Y. ....	Rubber, vulcanizing.....	July 5, 1859.
24695	Eaton, A. K., assignor by mesne assignments to Joslin India Rubber Company.	New York, N. Y. ....	Rubber, compounds, vulcanized.....	Nov. 22, 1859.
26172	Eaton, Asabel K.....	New York, N. Y. ....	Shoe-horns.....	Jan. 25, 1859.
22714	Eaton, Daniel E.....	Cincinnati, Ohio.....	Bedsteads.....	Sept. 27, 1859.
25563	Eaton, Eben.....	North Attleborough, Mass.....	Bustles.....	Oct. 11, 1859.
25786	Earl, Thomas A., assignor to self and Charles A. Durgin.....	Cold Water, Miss.....	Cotton-scrapers.....	Nov. 15, 1859.
26096	Earnhart, Miles.....	New York, N. Y. ....	Crushing and mixing sugar, machinery for.....	May 31, 1859.
24204	Ebeling, Frederick.....	Lancaster, Pa. ....	Harvesters.....	Oct. 18, 1859.
25815	Ebner, John, and F. Lenthy.....	Garden Valley, Cal.....	Amalgamator.....	Dec. 27, 1859.
26576	Eddleblute, Lucius.....	Philadelphia, Pa.....	Pots, coffee.....	Sept. 20, 1859.
25495	Eddy, Oliver T.....	Boston, Mass.....	Pumps.....	Nov. 8, 1859.
26025	Edson, Jacob.....	Boston, Mass.....	Carpet-sweeper.....	Aug. 16, 1859.
25104	Edson, Jacob.....	Boston, Mass.....	Carpet-sweeper.....	April 5, 1859.
23526	Edson, Jacob, assignor to self and H. F. Gardner.....	Philadelphia, Pa.....	Shoe-heels, machine for cutting and finishing.....	Sept. 6, 1859.
25326	Edson, William F.....	Suspension Bridge, N. Y.....	Mills, spice and coffee.....	Mar. 1, 1859.
23082	Edwards, Charles R.....	Tecumseh, Mich.....	Folding wool, machine for.....	Mar. 15, 1859.
23234	Edwards, Randolph D. M.....	Mansfield, Ohio.....	Writing-fluid.....	Aug. 23, 1859.
25184	Eells, Seth W.....			
	Egerton, Dougherty, Woods, & Co. (See Murrill, James H., assignor.)			
23083	Eggleston, C. and D. E.....	Beloit, Wis.....	Seeding-machines.....	Mar. 1, 1859.
24448	Ehrenfeld, Henry.....	New York, N. Y. ....	Motion, device for converting reciprocating into alternate circular.....	June 21, 1859.
26261	Ehrenfeld, Henry.....	New York, N. Y. ....	Motion, machine for converting reciprocating into intermittent rotary.....	Nov. 29, 1859.
25078	Eickemeyer, R., assignor to self and E. Underhill.....	Yonkers, N. Y. ....	Sewing-machines.....	Aug. 9, 1859.
22715	Eikenberry, Lewis.....	Easton, Pa.....	Fences, iron.....	Jan. 25, 1859.
23908	Eikenberry, Lewis.....	Easton, Pa.....	Fences, method of compensating for expansion and contraction of metallic.....	May 10, 1859.
22495	Einbans, John W.....	New York, N. Y. ....	Time-keepers, escapement for.....	Jan. 4, 1859.
24109	Eisenbrandt, Christian H.....	Baltimore, Md.....	Car-couplings, railroad.....	May 24, 1859.
24383	Eisenbrandt, Christian H.....	Baltimore, Md.....	Attachments to locomotive engines for removing objects from the track.....	June 14, 1859.
25816	Eldrid, D., et al. (See Markham & Eldrid.)	Monmouth, Ill.....	Ploughs.....	Oct. 18, 1859.
26173	Eldrid, David.....	Lancaster, Pa.....	Cabbage-cutting machine.....	Nov. 22, 1859.
24620	Ellery, Epes E. and Joseph F. (See Hyde, Lyman, assignor.)	New York, N. Y. ....	Paints, water-proof.....	July 5, 1859.
22716	Elliot, W. H.....	Plattsburg, N. Y. ....	Coffee-pots.....	Jan. 25, 1859.
23836	Elliot, W. H.....	Plattsburg, N. Y. ....	Electrotype-plates, mode of forming curved.....	May 3, 1859.
23236	Elliot, W. H.....	Plattsburg, N. Y. ....	Printing-surfaces, mode of obtaining curved.....	Mar. 15, 1859.
26174	Elliott, E. N.....	Port Gibson, Miss.....	Presses, cotton.....	Nov. 22, 1859.
23835	Elliott, James W.....	Prattville, Ala.....	Saws, gin, machine for filing.....	May 3, 1859.
23909	Elliott, Stephen.....	Richmond, Ind.....	Straw-cutters.....	May 10, 1859.
23235	Elliott, Stephen.....	Washington, Ind.....	Planters, corn.....	Mar. 15, 1859.
23667	Ellis, Jonah.....	Warrington, England.....	Quarrying stone, &c., machine for.....	April 19, 1859.
24726	Ellis, Willard C., and John N. White.....	Springfield, Mass.....	Fire-arm, revolving.....	July 12, 1859.
26394	Ellis, Thomas, assignor to self and W. A. & A. D. Ellis.....	Philadelphia, Pa.....	Casting boxes for wheel-hubs.....	Dec. 6, 1859.
23762	Ellis, Willard C.....	Springfield, Mass.....	Fire-arm, breech-loading.....	April 26, 1859.
23910	Ellison, Andrew.....	Boston, Mass.....	Smoothing-iron.....	May 10, 1859.
25185	Ells, Edgar S., assignor to C. G. Keeney.....	Troy, N. Y. ....	Knitting-machines.....	Aug. 23, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25079	Elmer, Asahel, assignor to Nathan Elmer and R. M. Prichard.	Shabbona Grove, Ill.	Capstan or crab, portable	Aug. 9, 1859.
25105	Elmer, Asahel, assignor to Nathan Elmer and Reuben M. Prichard.	Shabbona Grove, Ill.	Plough, mole	Aug. 16, 1859.
22944	Elson, Martin D.	Howardsville, Va.	Tobacco, mode of squeezing and straightening.	Feb. 15, 1859.
25997	Elwell, William, assignor to self and N. O. Mitchell.	Gardener, Me.	Trap, fly	Nov. 1, 1859.
23358	Emerson, James E.	Sacramento, Cal.	Pick-handle	Mar. 29, 1859.
23237	Emerson, R., et al. (See Travis, Nathan C., assignor.)	Rockford, Ill.	Mills, sugar.	Mar. 15, 1859.
23238	Emerson, Ralph, jr.	Rockford, Ill.	Pressure, method of extracting and assorting vegetable juices by.	Mar. 15, 1859.
24449	Emery, A. H.	New York, N. Y.	Presses, cheese	June 21, 1859.
24450	Emery, A. H.	New York, N. Y.	Sash-fastener	June 21, 1859.
25817	Emery, Gilmore, and A. C. Wilson	Newfield, Me.	Ploughs	Oct. 18, 1859.
24621	Emery, H. C.	Lincoln, Ohio	Mills for crushing cane.	July 5, 1859.
25888	Emery, Horace L.	Albany, N. Y.	Harvesters	Oct. 25, 1859.
26176	Enlaw, A. J., and E. Riehmond	Grand Haven, Mich.	Saw-mills	Nov. 22, 1859.
25002	Enswiler, J. P.	Knight's Town, Ind.	Sewing-machines	Aug. 9, 1859.
23161	Endriss, A. F.	New York, N. Y.	Paper, machines for registering and folding.	Mar. 8, 1859.
26175	{ Engelhard, George A., and Rudolph F. H. Havenann.	New York, N. Y.	Caoutchouc and allied gums, compounds of.	Nov. 29, 1859.
24110	Engren, John A.	Brooklyn, N. Y.	Lightning-rods, device for securing.	May 24, 1859.
22717	England, Lewis C.	Owego, N. Y.	Tanning.	Jan. 25, 1859.
24727	England, Lewis C.	Owego, N. Y.	Tanning, apparatus for	July 12, 1859.
23239	Epstein, Henry	New York, N. Y.	Watch-chains, &c.	Mar. 15, 1859.
25106	Erb, Jacob B., and Anthoni Iske. (See Iske & Erb.)	Philadelphia, Pa.	White-lead apparatus	Aug. 16, 1859.
24971	Erdman, D. R.	York, Pa.	Bending plough-handles	Aug. 2, 1859.
22636	Erickson, G. A., et al. (See Falk, Johnson, & Erickson.)	Pattersonville, La.	Bathing apparatus.	Jan. 18, 1859.
26577	Ernst, John G., assignor to self and S. R. Slaymaker.	Cincinnati, Ohio	Bedstead	Dec. 27, 1859.
25186	Espaeh, Seraphin.	Newport, R. I.	Syringes, elastic bulb	Aug. 23, 1859.
24205	Essex, James J.	North Bennington, Vt.	Fibrous substances, machines for drying.	May 31, 1859.
23911	Essex, Jeremiah	Moultrie, Ohio	Hay, machines for loading	May 10, 1859.
22860	Essick, Samuel V.	Plainfield, Ill.	Cultivators	Feb. 8, 1859.
23666	Essington, George.	White Water, Wis.	Harvesting-machines.	April 19, 1859.
23668	Esterly, George	New York, N. Y.	Engines, steam, water-cooler for	April 19, 1859.
25889	Eunson, Robert G.	Pittsburg, Pa.	Planters, seed	Oct. 25, 1859.
25889	Evans, George M.			
23018	Evans, H. G. (See Clichester, Lewis S., assignor.)	New Haven, Conn.	Springs, machine for bending and setting.	Feb. 22, 1859.
23018	Evans, Hampton W., and G. T. Parry. (See Parry & Evans.)			
24451	Evans, John.	Watkins, N. Y.	Pails, attachment of handles to tin	June 21, 1859.
24079	Evans, Nathaniel, jr., et al. (See Ames, Nathan, assignor.)	Chicago, Ill.	Sawing staves from the bolt, machine for	May 17, 1859.
23807	Evarts, Thomas	Chicago, Ill.	Valves, steam	April 26, 1859.
25998	Everts, Henry H., assignor to self and Phineas E. Merrihew.	West Meriden, Conn.	Metal pulleys, cast.	Nov. 1, 1859.
25998	Everts, Henry H., assignor to self and Phineas E. Merrihew.			
25998	Everts, John A., assignor to H. Curtis			



23359	Everitt, Elisha E.	Philadelphia, Pa.	Bedstead-fastening	Mar. 29, 1859.
23296	Ewing, Martin B., <i>et al.</i> (See Rowe, James, assignor.)	South Hadley, Mass.	Weather-strips	Mar. 22, 1859.
23019	Faber, John L., <i>st.</i>	Anaqua, Tex.	Pump	Feb. 22, 1859.
23162	Fagan, James L.	Anaqua, Tex.	Pump, rotary	Mar. 8, 1859.
25962	Fairbanks, Thaddeus	St. Johnsbury, Vt.	Scales for railroad, &c., platform	Nov. 1, 1859.
26484	Fairbanks, Thaddeus	St. Johnsbury, Vt.	Scales, platform	Dec. 20, 1859.
26026	Fairbanks, Thaddeus	St. Johnsbury, Vt.	Scales, platform	Dec. 20, 1859.
22861	Falconer, R. I., and C. G. Page. (See Page and Falconer.)	Baltimore, Md.	Furnace for smelting iron	Feb. 8, 1859.
25251	Fales, Squire M.	Altona, Ill.	Harvesters	Aug. 30, 1859.
22552	Falk, J. A., A. Johnson, and G. A. Erickson	Memphis, Tenn.	Earth, endless conveyance for removing	Jan. 11, 1859.
26421	Falkeman, M., <i>et al.</i> (See Pollak, Morris, assignor.)	Logansport, Ind.	Wagon, stone-loading	Dec. 13, 1859.
26097	Fancher, David S.	Salem, Mass.	Telegraphic machines	Nov. 15, 1859.
25496	Farley, Joseph C., <i>et al.</i> (See Hall, E. B., assignor.)	Salem, Mass.	Electro-magnetic steam-boiler gauge	Sept. 20, 1859.
25003	Farmer, Moses G.	Salem, Mass.	Windlasses	Aug. 19, 1859.
23060	Farmer, Moses G.	Salem, Mass.	Electro-magnetic fire-alarm apparatus	Feb. 22, 1859.
23217	Farmer, Moses G., and Wm. F. Channing, assignors to Wm. F. Channing.	Salem, Mass.	Electro-magnetic fire-alarm apparatus	Mar. 8, 1859.
22553	Farmer, Moses G., assignor to Win. F. Channing	Salem, Mass.	Electro-magnetic fire-alarm apparatus	Jan. 11, 1859.
22602	Farmer, Moses G., assignor to Wm. F. Channing	Salem, Mass.	Electro-magnetic apparatus for setting water-engines in motion	Jan. 11, 1859.
23883	Farmer, Moses G., assignor to Wm. F. Channing	Salem, Mass.	Mechanism for operating signal-whistles by electro-magnetism, steam, or air	May 3, 1859.
22862	Farnham, Daniel P.	Johnstown Center, Wis.	Pumps, cattle	Feb. 8, 1859.
25004	Farr, Chester N.	Philadelphia, Pa.	Sewing-machines	Aug. 9, 1859.
22790	Farrall, R. F., <i>et al.</i> (See Nicholai, John L., assignor.)	Brewer, Me.	Bricks, machine for turning or edging	Feb. 1, 1859.
25931	Farrington, Charles O.	Lowell, Mass.	Stoves	Oct. 25, 1859.
25400	Fasig, John	West Salem, Ohio	Mop-head	Sept. 13, 1859.
22791	Fasoldt, Charles	Rome, N. Y.	Time-keepers, escapement for	Feb. 1, 1859.
25401	Fasnacht, Jacob	New Milltown, Pa.	Harness	Sept. 13, 1859.
25497	Faught, L. R.	Atlanta, Ga.	Horse-power machines	Sept. 20, 1859.
26422	Fawkes, J. W.	Christiana, Pa.	Ploughs, steam	Dec. 13, 1859.
25890	Faxon, M. M., <i>et al.</i> (See Altmair, Peter, assignor.)	New York, N. Y.	Pots, coffee	Oct. 25, 1859.
24290	Fay, H. B.	Baltimore, Md.	Hydrants	June 7, 1859.
23457	Fay, James	Upton, Mass.	Boot-trees	April 5, 1859.
24999	Fay, Winthrop B., and Russell W. Collier.	Palmira, Mo.	Hemp-brakes	Aug. 9, 1859.
23458	Fayman, George H. (See Burr, John, assignor.)	New York, N. Y.	Billiard-table	April 5, 1859.
25402	Fee, William R.	Cincinnati, Ohio.	Presses, hydraulic, oil	Sept. 13, 1859.
	Fell & Wyeheoff. (See Wyeheoff & Fell.)			
24548	Ferguson, Henry J., assignor to self and Lueius C. Allen	Baltimore, Md.	Cartridges	June 28, 1859.
24861	Ferguson, George H., and S.	Malden Bridge, N. Y.	Printing-presses, feeding paper to	July 26, 1859.
23360	Ferguson, Thomas T.	New York, N. Y.	Tanning hides and skins	Mar. 29, 1859.
26262	Ferry, William M., jr.	Ferrysburgh, Mich.	Saw-mill carriage, journal-box for	Nov. 29, 1859.
	Ferry, William M., jr., <i>et al.</i> (See Fuller, O. F., assignor.)			
	Fetheroff, B. L., <i>et al.</i> (See Baker, Dean, & Fetheroff.)			

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25187	Fickett, Albert	Rochester, N. Y.	Belt-fastening	Aug. 23, 1859.
26228	Fickett, H. E., and John W. Summers, assignors to H. E. Fickett.	Glenn's Falls, N. Y.	Bed-bottom	Nov. 22, 1859.
24799	Field, Benjamin F.	Shoboygan Falls, Wis.	Cultivators, rotary.	July 19, 1859.
22496	Field, George B.	St. Louis, Mo.	Spading-machines	Jan. 4, 1859.
24800	Field, James D.	Davenport, Iowa	Stoves	July 19, 1859.
23912	Field, John L.	Syracuse, N. Y.	Wood in bending, method of strapping.	May 10, 1859.
22792	Field, Samuel T.	Worcester, Mass.	Wooden-troughs, machine for manufacturing.	Feb. 1, 1859.
24291	Field, William	Providence, R. I.	Horse-power machine	June 7, 1859.
23245	Fiestler, John W.	Winchester, Ohio	Churn	Feb. 15, 1859.
23560	Fife, R. N., et al. (See Culver, E., assignor.)	Media, Pa.	Lubricating, oil-cans for	April 12, 1859.
25891	Fildes, Thomas	New York, N. Y.	Studs and sleeve-fasteners	Oct. 25, 1859.
25498	Finkle, Milton, et al. (See Lee, James, assignor.)	Oswego, N. Y.	Crozing-knives, method of operating.	Sept. 20, 1859.
26486	Finlay, L., and W. H. Worth. (See Worth & Finlay.)	Phillipsburgh, N. J.	Pipe-moulding.	Dec. 20, 1859.
24905	Finn, Felix A.	New York, N. Y.	Piano-fortes	July 26, 1859.
23913	Finn, George	Mauckport, Ind.	Planters, seed	May 10, 1859.
26263	Firth, John, and John Ingham	Alliance, Ohio	Cars, railroad, hand	Nov. 29, 1859.
24860	Fischer, John W., assignor to self and Charles S. Fischer.	Alliance, Ohio	Harvesters	July 26, 1859.
22863	Fisher, D. S.	Beaver Dam, Wis.	Mortising-chisel	Feb. 8, 1859.
23297	Fisher, Henry	Seneca Falls, N. Y.	Filters	Mar. 22, 1859.
23459	Fisher, J. B.	New York, N. Y.	Water-wheels	April 5, 1859.
23240	Fitch, John	Worcester, Mass.	Planing-machines, method of operating feed-rollers for.	Mar. 15, 1859.
23763	Fitch, Josiah P.	Worcester, Mass.	Planing wood, method of adjusting the knives of rotary cut-ter-heads for.	April 26, 1859.
25005	Fitts, Benaiah	Worcester, Mass.	Governor-valves	Aug. 9, 1859.
23641	Fitts, Benaiah	Somerset, Mich.	Grain, machines for cleaning	April 12, 1859.
23298	Fitts, R. B.	Philadelphia, Pa.	Mills, coffee.	Mar. 22, 1859.
22529	Fitts, R. B., et al. (See Pratt, E. L., assignor.)	New Ipswich, N. H.	Wood, method of bending.	Jan. 4, 1859.
23669	Fitts, Robert, assignor to C. & G. C. Winchester.	New York, N. Y.	Fireman's ladder	April 19, 1859.
24728	Fitzgerald, Daniel	New York, N. Y.	Fireman's ladder	July 12, 1859.
26395	Fitzgerald, E., and D. Penman. (See Penman & Fitzgerald.)	Newark, N. J.	Hat-bodies, machines for forming.	Dec. 6, 1859.
25327	Fitzgerald, Richard, assignor to James Booth	Frederick, Md.	Reaping-machines, automatic-rakes for.	Sept. 6, 1859.
24549	Fitzhugh, Benjamin G., and McClintock Young, jr.	Frederick, Md.	Harvesting-machines.	June 28, 1859.
25999	Flanders, Benjamin G.	Manchester, N. H.	Pumps, rotary.	Nov. 1, 1859.
	Flanders, John Jewell, assignor to self and E. G. W. Bartlett.			



24550	Flanders, Moses B.	Parishville, N. Y.	Grain-cradles	June 28, 1859.
24622	Flemming, James S., <i>et al.</i> (See Platter, Peter, assignor.) Fleury, A. L.	Baltimore, Md.	Lamps	July 5, 1859.
25159	Fletcher & Wilson. (See Wilson & Fletcher.)	Cincinnati, Ohio.	Furnaces with hot air, apparatus for supplying.	Aug. 16, 1859.
23460	Fletcher, Calvin, assignor to Addison C. Fletcher.	Newport, N. H.	Clothes-frame	April 5, 1859.
26578	Fletcher, Hiram M.	Rahway, N. J.	Carriages, extensio-n-seats for.	Dec. 27, 1859.
26423	Flowers, Francis J.	Charleston, S. C.	Gas-meters	Dec. 13, 1859.
25540	Fogarty, Thomas B.	Cincinnati, Ohio.	Photographic printing-press.	Sept. 20, 1859.
24551	Fontayne, Charles	Philadelphia, Pa.	Gas-purifiers	June 28, 1859.
25564	Fountain, Peter	Danbury, Conn.	Coloring woolen-hats, mode of.	Sept. 27, 1859.
26424	Foot, G. D.	Jerico, Vt.	Water-wheels, horizontal	Dec. 13, 1859.
24292	Forbes, Hugh, <i>et al.</i> (See Johnston & Forbcs.)	Newport, Ky.	Rope, machinery for opening old	June 7, 1859.
22718	Forbis, E., and H. W. Roland. (See Roland & Forbis, assignors.)	New Albany, Ind.	Threshing-machines	Jan. 25, 1859.
23561	Ford, Addison M., and Charles W. Warner	Wabash, Ind.	Drills, grain	April 12, 1859.
25636	Ford, Archibald	New York, N. Y.	Excavating mud, &c., borer for	Oct. 4, 1859.
24019	Ford, J. B. A. Sullivan, and A. Gregg	Collinsville, Conn.	Water-wheels	May 17, 1859.
22946	Ford, O. C. and I. O.	Concord, N. H.	Cultivator-teeth	Feb. 15, 1859.
24601	Ford, William P. and Theodore H.	Navarre, Ohio.	Seeding-machine	June 28, 1859.
25107	Foreman, Daniel, assignor to self, G. W. Swearingen, and Jonathan Penoyer.	Paris, France	Fabrics	Aug. 16, 1859.
26027	Forot, Alexander	Norfolk, Va.	Fastener, sash	Nov. 8, 1859.
22719	Forrest, John M.	Meriden, Conn.	Sewing-machine.	Jan. 25, 1859.
25963	Forstrick, H., <i>et al.</i> (See Hock, Lewis, assignor.)	Meriden, Conn.	Sewing-machine.	Nov. 1, 1859.
22638	Forward, Christopher, & Stewart. (See Stewart, Christopher, & Forward.)	New York, N. Y.	Railroad cars on railways, machines for moving	Jan. 18, 1859.
24081	Fosket, William A., and Elliot Savage	New York, N. Y.	Engines, steam, variable cut-off, gear for	July 19, 1859.
24384	Fosket, William A., and Elliot Savage	New York, N. Y.	Railroad, operating switches on	June 14, 1859.
22947	Foster, A., and H. Brown	Eldridge's Hill, N. J.	Wrench	Feb. 15, 1859.
23562	Foster, Anbrose, and Noah Sutton	Shelburne Falls, Mass	Trunks, covers for travelling	April 12, 1859.
25188	Foster, Charles	Hartford, Conn.	Chair, easy	Aug. 23, 1859.
25425	Foster, Daniel P.	Hartford, Conn.	Axles or shafts	Dec. 13, 1859.
22637	Foster, Elbridge	Brooklyn, N. Y.	Yokes, ox	Jan. 18, 1859.
24729	Foster, Elbridge	Montgomery, Ala.	Hanging pictures, looking-glasses, &c., method of.	July 12, 1859.
23020	Foster, George	Cliester, Conn.	Screw-tops	Dec. 20, 1859.
24020	Foster, James D.	New York, N. Y.	Clothes-rack	Feb. 22, 1859.
22793	Foster, Van Wyck, and T. Holmes. (See Sheplurd, William, jr., assignor.)	Marilla, N. Y.	Straw-cutters	May 17, 1859.
25403	Foster, William and Robert	Athens, Pa.	Cracker-machine	Feb. 1, 1859.
22720	Foster, Winfield S.	Lansingburg, N. Y.	Cultivators	Sept. 13, 1859.
25252	Fouché, L. J. (See Wright & Fouché.)	Hopewell, Ohio.	Churn-dash	Sept. 13, 1859.
24504	Fox, A. W.	Congress, Ohio	Mills, smut	Jan. 25, 1859.
22720	Fox, Joseph	Cleveland, Ohio	Vapor apparatus, ophthalmic	Aug. 30, 1859.
25404	France, Daniel K.	Ischna, N. Y.		
22720	Frank, Carl			
22720	Frank, Theodore F.			
22720	Frary, James D., <i>et al.</i> (See Turnbull, Andrew, assignor.)			
22720	Fraser, D. R., <i>et al.</i> (See Gates, Fraser, & Chalmers.)			

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22639	Fraser, J.	Rochester, N. Y.	Vegetable-cutters	Jan. 18, 1859.
26488	Frazee, John. (See Dickason & Frazee.)	Hartford, Conn.	Belt-fastenings.	Dec. 20, 1859.
22794	Frazier, William	Allegheny, Pa.	Valves, slide, of steam-engines	Feb. 1, 1859.
25006	Freeland, James, and Robert H. Leeky.	Newark, Ill.	Cultivators	Aug. 9, 1859.
24111	Freeland, Parley F., assignor to V. R. David	Fond-du-Lac, Wis.	Shingle-machines, device for clamping the bolts in circular sawing.	May 24, 1859.
23764	Freeman, Truman, jr.	Providence, R. I.	Pumps, rotary	April 26, 1859.
23021	Frceto, James H.	Wheaton, Ill.	Pots, coffee	Feb. 22, 1859.
23914	French, J. H.	Syracuse, N. Y.	Harrowes	May 10, 1859.
25500	French, John M., & Co. (See Stiles, David L., assignor.)	Angel, Cal.	Furnace and apparatus for treating pyritous ores	Sept. 20, 1859.
24623	Fretz, John	Montville, Ohio	Carriage-wheels, machine for finishing the exterior of rims of	July 5, 1859.
24802	Fretz, Reuben	New York, N. Y.	Locks for safes, &c.	July 19, 1859.
22721	Freutel, August	Johnstown, Pa.	Planters, corn	June 21, 1859.
22721	Frey, C., et al. (See Roester & Frey.)	Newberry, Pa.	Horse-powers	Jan. 25, 1859.
24293	Frezinghousen, P. H., and James G. Heilman	Baltimore, Md.	Cars, mode of starting city railroad	June 7, 1859.
25894	Frezet, John	Carlisle, Pa.	Cans, preserve	Oct. 25, 1859.
24017	Frick, George B., et al. (See Powell, John B., assignor.)	Cincinnati, Ohio	Boilers, steam, water-indicator for	May 17, 1859.
24018	Frick, George P.	Middletown, Conn.	Nut-crackers	May 17, 1859.
25565	Fridley, William, and Frederiek Coruman	Johnstown, Pa.	Rolling-mills	Sept. 27, 1859.
24859	Frisbie, John L.	Waterbury, Conn.	Door-fastener	July 19, 1859.
25098	Fritz, John and George	Amenia, N. Y.	Can, milk	Nov. 15, 1859.
25108	Froelich, L. (See Behr & Froelich.)	Richmond, Ind.	Sawing-machine	Aug. 16, 1859.
25253	Frost, Charles	Cincinnati, Ohio	Faucets	Aug. 30, 1859.
24696	Frost, William	Lamonte, Mich.	Brakes, railroad	July 5, 1859.
26348	Fuller, Albert	Dresden, Ohio	Corn-cribs	Dec. 6, 1859.
24206	Fuller, O. F., assignor to self and William M. Ferry, jr.	Worcester, Mass.	Looms, for weaving plaids, &c.	May 31, 1859.
23163	Fulton, William, and J. T. Vankirk. (See Vankirk & Fulton.)	New York, N. Y.	Balloons	Mar. 8, 1859.
25964	Furbee, A. B.	New York, N. Y.	Mills for crushing and pulverizing quartz, &c.	Nov. 1, 1859.
24453	Furbush, M. A., and George Crompton	Nashua, N. H.	Tire, roll for forming	June 21, 1859.
23765	Gage, A. G., et al. (See Beckurth & Gage.)	West Falls, N. Y.	Washing-machine	Apr. 26, 1859.
26004	Gage, James P.	Boston, Mass.	Clothes-dryer	Nov. 1, 1859.
26028	Gage, James P.	Washington, D. C.	Gas, manufacture of	Nov. 8, 1859.
26030	Gage, John H.	Washington, D. C.	Gas, manufacture of	Nov. 8, 1859.
24552	Gail, Lockwood & John H.	Philadelphia, Pa.	Propeller, reciprocating	June 28, 1859.
24552	Gale, Charles A., assignor to Albert S. Hall and A. R. Davis	Philadelphia, Pa.	Propeller, reciprocating	June 28, 1859.
23361	Gale, Leonard D.	Northeast Center, N. Y.	Boots and shoes, machines for pegging	Mar. 29, 1859.
24696	Gale, Leonard D.	Northeast Center, N. Y.	Boots and shoes, machines for pegging	Mar. 29, 1859.



24730	Gallahue, M. J., and W. H. Gladding.	Savannah, Ga.	Fire-arm, breech-loading.	July 12, 1859.
24929	Galley, John F.	New York, N. Y.	Table, ironing.	Aug. 2, 1859.
25189	Gamble, James F.	Concord, Pa.	Sawing-machines, method of feeding the saw to the stuff in.	Aug. 23, 1859.
26379	Garbonati, Henry	Brooklyn, N. Y.	Fork, earving.	Dec. 27, 1859.
23670	Gardner, Perry G.	New York, N. Y.	Castings, steel, moulds for.	Apr. 19, 1859.
23766	Gardner, Perry G.	New York, N. Y.	Cars and earriages, springs railroad.	Apr. 26, 1859.
22864	Gardner, Perry G.	New York, N. Y.	Steel, east, manufacture of.	Feb. 8, 1859.
22865	Gardner, Perry G.	New York, N. Y.	Steel, east, manufacturing tools for.	Feb. 8, 1859.
23436	Gardner, Eleazor, assignor to Gardner & Deeker.	New York, N. Y.	Pieture-frames, machine for preparing mouldings for.	Mar. 29, 1859.
22722	Gardner, F. J.	Washington, N. C.	Chair and lounge, combined.	Jan. 25, 1859.
23022	Gardner, George W.	Troy, N. Y.	Moulding covers of cook-stoves.	Feb. 22, 1859.
23837	Gardner, Joseph W.	Shelburne Falls, Mass.	Cutlery, handle for.	May 3, 1859.
23795	Gardner, Joseph W.	Shelburne Falls, Mass.	Cutlery, table, handles for.	Feb. 1, 1859.
25328	Gardner, Thomas G.	Mount Pulaski, Ill.	Boilers, steam, collector for.	Sept. 6, 1859.
	Gareilly & Baare, assignor to H. H. Day. (See Baare & Gareilly.)			
22866	Garland, John C.	Chicago, Ill.	Fastenings, mail-bag.	Feb. 8, 1859.
24803	Garlinghouse, C. B. & G. B.	Allensville, Ind.	Harvesters.	July 19, 1859.
23164	Garrett, Charles C.	Spring Hill.	Planters, cotton-seed.	Mar. 8, 1859.
24112	Garrett, Edward.	New Orleans, La.	Bales, cotton, ties for.	May 24, 1859.
25190	Garrison, Stacey A.	Union, N. Y.	Hub-reamer.	Aug. 23, 1859.
24930	Garside, Richard, and Clayton Deun.	Philadelphia, Pa.	Yarn, machinery for warping.	Sept. 30, 1859.
25501	Garside, Thomas B.	Danville, Iowa.	Fences, board.	Aug. 2, 1859.
24731	Gasser, Joseph.	Toledo, Ohio.	Clothes-frame.	July 12, 1859.
26229	Gatehell, Horatio P., assignor to E. J. Bates.	Ravenna, Ohio.	Pots, coffee.	Nov. 22, 1859.
26177	Gately, Dennis C.	Newton, Conn.	Rubber-beltng.	Nov. 22, 1859.
26178	Gately, Dennis C.	Newton, Conn.	Rubber-beltng, making.	Nov. 22, 1859.
26264	Gately, Dennis C.	Newton, Conn.	Rubber beltng, India, manufacture of.	Nov. 29, 1859.
26265	Gately, Dennis C.	Newton, Conn.	Rubber-beltng, manufacture of.	Nov. 29, 1859.
26489	Gately, Dennis C.	Newton, Conn.	Caoutchou-beltng, manufacture of.	Dec. 20, 1859.
26580	Gately, Dennis C.	Newton, Conn.	Rubber beltng, India, manufacture of.	Dec. 27, 1859.
22603	Gates, Joseph R., assignor to self and Alexander Corey.	Indianapolis, Ind.	Scales, automatic grain.	Jan. 11, 1859.
24697	Gates, Jos. R., ass'r to self, J. J. Dumont, and E. F. Sinker.	Indianapolis, Ind.	Mills, sugar.	July 5, 1859.
24624	Gates, P. W., et al. (Hedges, Wheeler, assignor.)	Chicago, Ill.	Engines, steam, cut-off gear for.	July 5, 1859.
23165	Gates, P. W., D. R. Fraser, and Thomas Chalmers.	St. Louis, Mo.	Valves of steam-engines, puppet, method of operating.	Mar. 8, 1859.
24113	Gatly, Samuel, and Amos Howe.	Terrysville, Conn.	Loek, trunk.	May 24, 1859.
23241	Gaylord, E. L.	New York, N. Y.	Fire-arm, self-priming.	Mar. 15, 1859.
22867	Gedney, George W. B.	New York, N. Y.	Spading-machines, rotary.	Feb. 8, 1859.
24207	Geer, George.	Uniontown, Ill.	Washing-machine.	May 31, 1859.
25895	Geer, W. C.	Rockville, Conn.	Flock, machine for cleaning and opening.	Oct. 25, 1859.
24114	Geiger, Elisha.	Lancaster, Pa.	Rakes, horse.	May 24, 1859.
23671	Geisse, P. F.	Wellsville, Ohio.	Castings, ovens for eoolng.	Apr. 19, 1859.
24294	Geisse, Philip F., et al. (See Putnam, A. & J. H., ass'ts.)	New York, N. Y.	Pianos, legs for.	June 7, 1859.
25109	Gelin, Felix & Charles.	Allegheny, Pa.	Distilling coal-oils, retorts for.	June 21, 1859.
24931	Genth, Frederiek Augustus.	Philadelphia, Pa.	Aeid, manufacture of phosphoric.	Aug. 2, 1859.
26099	Germain, Rollin.	Buffalo, N. Y.	Ships and other navigable vessels, construction of.	Nov. 15, 1859.
22640	Gerrerd, Hugh.	Sparta, Ill.	Pump, cattle.	July 12, 1859.
22723	Gerrish, A. T. (See Coffin, John E., assignor.)	Brooklyn, N. Y.	Lanterns.	Jan. 25, 1859.
25637	Gersten, Conrad.	Lancaster, Pa.	Stoves, cooking.	Oct. 4, 1859.
23299	Getz, Peter.	Allegheny City, Pa.	Mill, machinery, fly-wheels for rolling.	Mar. 15, 1859.



## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22796	Ghornley, Thomas, <i>et al.</i> (See Nichols, Warren, assignor.)	Rochester, N. Y.	Spermatic rings.	Feb. 1, 1859.
24295	Gibbons, Dwight.	Flemington, N. J.	Stages, &c., money-boxes for.	June 7, 1859.
23672	Gibson, Charles D. (See Cooper, W. E., assignor.)	New York, N. Y.	Trunks, mode of attaching casters to.	Apr. 19, 1859.
22868	Giffing, Isaac H.	Winthrop, Me.	Skirt-loops.	Feb. 8, 1859.
23673	Gilbert, James C.	Winthrop, Me.	Carts, ox, yoke-ring attachment for the pole of.	Apr. 19, 1859.
23915	Gilbert, James C.	Sullivan Springs, Texas.	Planters, corn.	May 10, 1859.
26100	Giles, James, and C. B. Thompkins.	Eaton, N. Y.	Smoothing walks, &c., cylinders for.	Nov. 15, 1859.
24866	Gillilan, James.	Hartford, Conn.	Valve for water-closets.	July 26, 1859.
24932	Gillilan, James.	Hartford, Conn.	Gas-burners.	Aug. 2, 1859.
24867	Gill, H. B.	Ogden, N. Y.	Mill-stones, machines for dressing.	June 14, 1859.
24867	Gill, Richard, and S. W. Grier.	Altona, Pa.	Locomotive-engines, furnaces of.	July 26, 1859.
23166	Gill, W. Y.	Henderson, Ky.	Gauge, steam.	Mar. 8, 1859.
22497	Gillau, Micah.	Alba, Pa.	Washing-machine.	Jan. 4, 1859.
23362	Gillespie, James.	Freeport, Pa.	Distilling coal-oils, revolving retorts for.	Mar. 29, 1859.
26581	Gilliard, Henry.	Mt. Hope, Wis.	Cultivators.	Dec. 27, 1859.
23363	Gilliland, Francis.	Port Jackson, N. Y.	Stoves.	Mar. 29, 1859.
26149	Gilman, L. D., <i>et al.</i> (See Starbuck & Gilman.)	Charlottesville, Va.	Type setters and distributors.	Nov. 15, 1859.
23461	Gilmer, John B., deceased, Thomas W. Gilmer, administr'r.	Bath, Me.	Motion, mechanism for obtaining rotary motion from reciprocating rectilinear.	Apr. 5, 1859.
22948	Gilmour, George.	Chelsea, Mass.	Cables, &c., telegraph-shackle for.	Feb. 15, 1859.
23674	Gilmore, Othniel.	Raynham, Mass.	Boots and shoes, machines for smoothing soles of.	April 19, 1859.
25254	Gilmore, Quincy A.	New York, N. Y.	Cutting and screening bituminous limestone or asphalt, machine for.	Aug. 30, 1859.
25405	Gilpatrick, C. L.	Saco, Me.	Churn.	Sept. 13, 1859.
23563	Gilroy, Washington L.	Philadelphia, Pa.	Roasters, coffee.	Apr. 12, 1859.
24554	Gingrich, Christian, and J. R.	Annaville, Pa.	Harrows, rotary.	June 28, 1859.
25502	Gissenger, Samuel.	Allegheny, Pa.	Churn.	Sept. 20, 1859.
	Gladding, William H., and M. J. Gallager. (See Gallager & Gladding.)			
23675	Gladwin, Porter A.	Pawtucket, Mass.	Window-sash, attaching cords to.	Apr. 19, 1859.
24865	Glassborow, Charles.	Philadelphia, Pa.	Piano-fortes.	July 26, 1859.
23243	Glassgow, William H.	New York, N. Y.	Packing, barrel.	Mar. 15, 1859.
23242	Gleason, Elias B.	Boston, Mass.	Letter and envelope, combined.	Mar. 15, 1859.
23218	Gleason, R., jr., assignor to R. Gleason & Sons.	Dorchester, Mass.	Caster, table.	Mar. 8, 1859.
23838	Gleason, Thomas C.	Rochester, N. Y.	Grain, machine for cleaning.	May 3, 1859.
24115	Glosser, Henry.	New York, N. Y.	Stereoscopic pictures, cases for.	May 24, 1859.
24296	Glover, David.	Cass Township, Pa.	Coal-shafts, safety-cage for.	July 5, 1859.
24732	Glover, Robert, and G. W. Richardson. (See Richardson & Glover.)	Minersville, Pa.	Car, dumping.	July 19, 1859.



25787	Glover, Robert, <i>et al.</i> (See Richardson & Glover.)	San Francisco, Cal.....	Composition for preparing gold and silver ores for amalgamation.	Oct. 11, 1859.
24625	Glover, Robert, and G. W. Richardson. (See Richardson & Glover, assignors to themselves <i>et al.</i> )	Placerville, Cal.....	Billiard-eyes, true, machines for cutting ends of.....	July 5, 1859.
24733	Gluyas, William, assignor to self and William H. O'Neill.	Grand Rapids, Mich.....	Shingle-machine.....	July 12, 1859.
24351	Glynn, Ira, and M. Borovsky.....	Manchester, Mass.....	Steering-apparatus.....	June 7, 1859.
22869	Goddard, M. C., and Z. B. Brown. (See Brown and Goddard.)	Albany, N. Y.....	Padlocks.....	Feb. 8, 1859.
29231	Godfrey, Freeman.....	Cohoes, N. Y.....	Knitting-machines.....	Nov. 22, 1859.
24386	Goodsoe, William, assignor to self and Isaac Ayers.....	Warren, R. I.....	Hay, machines for making.....	June 14, 1859.
25255	Goeway, J. A.....	Mobile, Ala.....	Sewing-machines, cord-guides for.....	Aug. 30, 1859.
24456	Goffe, Augustus J., and Dennis, assignors to Downs & Co.	Cornwall, Conn.....	Heating-buildings, apparatus for.....	June 21, 1859.
25007	Goff, Thomas J.....	New York, N. Y.....	Paper, &c., apparatus for folding or wrapping.....	Aug. 9, 1859.
23061	Golay, A.....	Philadelphia, Pa.....	Car-seats and couches.....	Feb. 22, 1859.
26490	Gold, Samuel F.....	Centralia, Ill.....	Excavator, steam.....	Dec. 20, 1859.
25191	Gomez, Edwin.....	Clinton, Mass.....	Paper-bags, machine for making.....	Aug. 23, 1859.
24734	Good, Jonathan, assignor to R. R. H. Dabbs.....	Clinton, Mass.....	Paper-bags, machine for making.....	July 12, 1859.
25818	Goodale, W. G., and R. L. F. Marsh.....	Deering, N. H.....	Pruning-knives.....	Oct. 18, 1859.
23767	Goodale, William.....	East Wallingford, Vt.....	Spading-machine, steam.....	April 26, 1859.
22724	Goodale, Frank P.....	Philadelphia, Pa.....	Boring-machine.....	Jan. 25, 1859.
23764	Goodes, E. A.....	Philadelphia, Pa.....	Sewing-machines.....	July 26, 1859.
24863	Goodes, E. A., and E. L. Miller.....	Troy, N. Y.....	Screw-stock.....	July 26, 1859.
24906	Goodfellow, Simeon, assignor to self and John Fish.....	Whitlock, Cal.....	Crushing quartz, machines for.....	Oct. 18, 1859.
25819	Goodman, Merritt.....	Norwich, Conn.....	Bomb-lance.....	Aug. 9, 1859.
25080	Goodspeed, Isaac, assignor to self and George A. Mansfield.	Norwich, Conn.....	Alarm, pocket.....	Nov. 1, 1859.
26001	Goodspeed, Isaac, assignor to self and George A. Mansfield.	New Orleans, La.....	Sewing-machines.....	June 21, 1859.
24455	Goodwyn, H. H.....	New Haven, Conn.....	Rubber-cloth, manufacture of porous.....	Aug. 16, 1859.
25110	Goodyear, Charles.....	New Haven, Conn.....	Rubber-fabrics, India.....	Aug. 16, 1859.
25111	Goodyear, Charles.....	New Haven, Conn.....	Rubber-fabrics, porous-napped.....	Aug. 23, 1859.
25192	Goodyear, Charles.....	New Haven, Conn.....	Metal, tool for cutting.....	Mar. 29, 1859.
23364	Goodyear, L. F.....	Dublin, Ind.....	Ploughs, mole.....	Dec. 13, 1859.
26426	Goolman, William P., ass'r to self and Samuel B. Morris.	Dublin, Ind.....	Windlasses.....	Apr. 19, 1859.
23676	Goolman, William P.....	Dublin, Ind.....	Harrows, rotary.....	Aug. 30, 1859.
25301	Goolman, William P., assignor to self, S. B. Morris, and W. Hollingsworth.	Dublin, Ind.....	Plough, mole.....	Mar. 22, 1859.
23334	Goolman, William P., assignor to self, S. B. Morris, and W. Hollingsworth.	Washington, D. C.....	Protractor.....	Mar. 29, 1859.
23365	Gordon, Charles.....	Evansville, Ind.....	Boring earth, implement for.....	Oct. 25, 1859.
25896	Gordon, Daniel.....	New York, N. Y.....	Printing-press.....	July 5, 1859.
24626	Gordon, George P.....	New York, N. Y.....	Printing-presses.....	Apr. 5, 1859.
23677	Gordon, George P.....	New York, N. Y.....	Printing-presses.....	Aug. 9, 1859.
25008	Gordon, George P., and F. O. Degener.....	Brattleboro', Vt.....	Harvesters.....	Dec. 27, 1859.
26582	Gore, John.....	Bairdstown, Ga.....	Plane-stock, bench.....	Apr. 19, 1859.
23678	Gorham, Jackson.....	Bairdstown, Ga.....	Ploughs.....	Dec. 6, 1859.
26349	Gorham, Jackson.....	New York, N. Y.....	Paddle-wheel.....	July 5, 1859.
24627	Gorman, William.....	Baltimore, Md.....	Mail-bags.....	May 10, 1859.
23916	Gornal, Richard.....	Irville, Ohio.....	Trap, rat.....	May 10, 1859.
23917	Gorsueh, R. B. (See Seabury, Thomas S., assignor.)			
	Gortner, Henry.....			

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25568	Goshon, I. G., assignor to self, H. Ruby, J. Wonderlich, and H. R. Ruby.	Shippensburg, Pa.	Car-coupling, railroad	Dec. 27, 1859.
23679	Goss, Albert H., <i>et al.</i> (See Cronk, M. C., assignor.)	Washington, D. C.	Gins, cotton	Apr. 19, 1859.
24021	Goss, Albert H., <i>et al.</i> (See Sherwood, Allen, assignor.)	Seneca Falls, N. Y.	Pianos, &c., arrangement of key-board for	May 17, 1859.
24864	Goth, F., <i>et al.</i> (See McKenny & Goth.)	Worcester, Mass.	Helmel, submarine window	July 26, 1859.
23564	Gottheil, Edward	Huntington, N. Y.	Callipers	Apr. 12, 1859.
25466	Gould, J. H., assignor to self and E. N. Hartshorn.	Alliance, Ohio	Stove-plates, cover for	Sept. 13, 1859.
22797	Gould, John W.	Elmira, N. Y.	Railway-chairs	Feb. 1, 1859.
22641	Goulding, Henry	San Francisco, Cal.	Valves, steam	Jan. 18, 1859.
22498	Gourley, William, and Isaac Krebs	Winchester, Va.	Carriage-brakes, means of operating	Jan. 4, 1859.
24208	Gove, Jacob	Millport, N. H.	Tanning leather	May 31, 1859.
24457	Gove, Jacob	South Boston, Mass.	Harvesters	June 21, 1859.
24843	Gragg, Moses H., assignor to self and Thomas N. Page	Shelburne Falls, Mass.	Corn-buskers	July 5, 1859.
24628	Gragg, S. N.	Elizabethtown, Ky.	Bolts, flour	Aug. 30, 1859.
23258	Graham, Elias, and Isaac N. Patton	Paterson, N. J.	Railroad-cars, chairs for	Apr. 12, 1859.
23365	Graham, Henry H.	New York, N. Y.	Penholder, metallic	Mar. 29, 1859.
23366	Granger, Albert	Philadelphia, Pa.	Stoves, cooking	Aug. 23, 1859.
25193	Granger, R. D.	Philadelphia, Pa.	Heating-apparatus	Jan. 18, 1859.
22642	Granger, R. D.	Philadelphia, Pa.	Stoves, coal	Jan. 18, 1859.
22643	Granger, R. D.	Black Creek, N. Y.	Hoisting marl, &c., machine for	Jan. 18, 1859.
26029	Granger, T. A.	Waterbury, Ct.	Carpet-fastener	Nov. 29, 1859.
23366	Grant, W., and W. Callahan. (See De Train, John, assignor.)	Waterbury, Ct.	Carpet-fastener	Apr. 12, 1859.
24116	Gray, Arthur	Naples, Me.	Washing-machine	May 25, 1859.
26266	Gray, George A., jr.	Cincinnati, Ohio	Vise, bench	Nov. 29, 1859.
25545	Gray, Henry W., assignor to self and H. Alvord	Cleveland, Ohio	Railroad chairs	Sept. 20, 1859.
26383	Gray, John	Nashville, Tenn.	Bridges, truss, self-adjusting counterbraces of	Dec. 27, 1859.
22554	Gray, John S.	New York, N. Y.	Spring-door	Jan. 11, 1859.
24022	Gray, Joshua	Medford, Mass.	Sewing-machines	May 17, 1859.
22644	Gray, Joshua, <i>et al.</i> (See Pollard, Ezra, assignor.)	Anson, Me.	Trap, fish	Jan. 18, 1859.
23219	Gray, Robert	Philadelphia, Pa.	Table, extension	Mar. 8, 1859.
24553	Gray, Thomas, assignor to self and James M. Shankey	Dover, N. H.	Looms, let-off motion for	June 28, 1859.
24602	Gray, William H.	Dover, N. H.	Looms, let-off motion for	June 28, 1859.
24297	Gray, William H., assignor to self and Luther Robinson	Philadelphia, Pa.	Spinning-mule carriage tops, cleaning	June 7, 1859.
24297	Greaves, Robert	Philadelphia, Pa.	Spinning-mule carriage tops, cleaning	June 7, 1859.
24933	Greeley, Charles F.	East Kingston, N. H.	Cloth-holder for washing crockery, &c.	Aug. 2, 1859.
24933	Green, C., <i>et al.</i> (See Wilson, Green & Wilson.)	East Kingston, N. H.	Cloth-holder for washing crockery, &c.	Aug. 2, 1859.



23567	Green, Edwin J.	Valparaiso, Ind.	Buggies, joint-bodied.	April 12, 1859.
25257	Green, Jonathan H.	Christiansburg, Iowa.	Billiard-cue tip	Aug. 30, 1859.
26257	Green, Jonathan H.	Christiansburg, Iowa.	Composition for covering metals	Nov. 29, 1859.
25820	Green, Oliver C.	Dublin, Ind.	Clothes-rack	Oct. 18, 1859.
26179	Green, Oliver C.	Dublin, Ind.	Harrows	Nov. 22, 1859.
24776	Greene, Samuel, assignor to self and W. R. Green	Laampertville, Ind.	Cars, city railroad, safety apparatus for	July 12, 1859.
25302	Greene, Daniel G., assignor to self and William Nash.	North Bridgewater, Mass.	Wrenches	Aug. 30, 1859.
	Davis, E.)			
	Greene, John A. (See Parmelec, Dubois D., assignor.)			
23642	Greene, J. F., assignor to S. B. Tobey.	Brooklyn, N. Y.	Fabrics, waste, felted, obtaining fibres from	Apr. 12, 1859.
23643	Greene, J. F., assignor to S. B. Tobey.	Brooklyn, N. Y.	Fabrics, waste, felt, machinery for disintegrating	Apr. 12, 1859.
23367	Greene, W. A., and John G. Treadwell.	Albany, N. Y.	Gridirons	Mar. 29, 1859.
	Greenleaf, A. C., et al. (See Brown & Greenleaf.)			
24387	Greenleaf, George D.	Chateaugay, N. Y.	Ventilators	June 14, 1859.
24458	Greenwood, John	Rochester, N. Y.	Barrel-heads, machine for chamfering	June 21, 1859.
25009	Greenwood, Ralf	Altoona, Pa.	Locomotive-engines, fire-boxes of	Aug. 9, 1859.
	Gregg, Ford, & Sullivan. (See Ford, Sullivan, & Gregg.)			
24298	Gregory W. L.	Theresa, N. Y.	Wind-wheels	June 9, 1859.
	Gregory, G. W., et al. (See Orcutt, Nelson, assignor.)			
25503	Grenet, Eugene, jr.	Paris, France.	Galvanic battery	Sept. 20, 1859.
	Grey, Carroll, E. (See McLeod, N. N., assignor.)			
	Grier & Gill. (See Gill & Grier.)			
23367	Griffies, William J.	Marietta, Ga.	Ploughs	May 29, 1859.
26350	Griffin, Caleb H., assignor to John Williams, assignor to Walter D. Richards.	Lynn, Mass.	Boots and shoes, machinery for cutting	Dec. 6, 1859.
	Griffin, G. B., and Joseph Smith. (See Smith & Griffin.)			
23168	Griffin, John	Louisville, Ky.	Harvesters, cotton	Mar. 8, 1859.
26180	Griffin, John	Louisville, Ky.	Harvesters, cotton	Nov. 22, 1859.
23167	Griffin, Jonathan	Stanford, N. Y.	Burning fluids	Mar. 8, 1859.
23084	Griffin, Jonathan	Harpersfield, N. Y.	Air, machine for blowing uniform currents	Mar. 1, 1859.
24117	Griffith, Benjamin L.	Hazleton, Pa.	Boilers, steam	May 24, 1859.
24862	Griffith, Benjamin L.	Hazleton, Pa.	Locomotive-boilers	July 26, 1859.
25258	Griffith, Benjamin L.	Hazleton, Pa.	Boilers, steam, hollow-grate bar for	Aug. 30, 1859.
25504	Griffith, Collins W.	Dayton, Ohio	Casting journals in soft metal, gauge and box for	Sept. 20, 1859.
	Griffiths & Co. et al. (See Sigler, John I., assignor.)			
23979	Griffiths, William, assignor to self and Joseph Lambert.	Philadelphia, Pa.	Knapsack	May 10, 1859.
	Griggs, Bowers, & Wilson. (See Bowers, Griggs, & Wilson.)			
23568	Griggs, Ira, assignor to Utica Screw Manufacturing Company.	Utica, N. Y.	Screws, machine for threading	Apr. 12, 1859.
	Griggs, Ira, assignor to Utica Screw Manufacturing Company.			
23569	Griggs, Ira, assignor to Utica Screw Manufacturing Company.	Utica, N. Y.	Screws, machine for nicking heads of	Apr. 12, 1859.
23527	Grimes, W. C., assignor to self and R. B. Fitts.	Philadelphia, Pa.	Washing-machine	Apr. 5, 1859.
23528	Grimes, W. C., assignor to self and R. B. Fitts.	Philadelphia, Pa.	Generator, portable steam	Apr. 5, 1859.
22645	Grinnell, Benjamin F.	New York, N. Y.	Breastpins, &c., fastenings for	Jan. 18, 1859.
22646	Griscorn, John H.	New York, N. Y.	Ventilation, house	Jan. 18, 1859.
	{ Griswold, A. C., and	Hartford, Ct.		
	{ W. R. Griswold	Durham, Ct.	Carriages, rocking	June 7, 1859.
25010	Griswold, Leonard B.	Penfield, N. Y.	Potato-diggers	Aug. 9, 1859.
26181	Griswold, P., and H. H. Seeley.	Hudson, Mich.	Separators, grain	Nov. 15, 1859.
24736	Grodjinski, Tobias.	New York, N. Y.	Gas-meters, dry	July 12, 1859.
24555	Gronberg, C. P.	Montgomery, Ill.	Harvesters, raking-attachment for	June 28, 1859.
23368	Groom, Smith	Troy, N. Y.	Hose-coupling	Mar. 29, 1859.



## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25259	Gross, Henry.....	Tiffin, Ohio.....	Fire-arm, breech-loading.....	Aug. 30, 1859.
25427	Gross, Magnus.....	Washington, D. C.....	Preserving flesh and meats.....	Dec. 13, 1859.
26584	Grosvenor, J. P.....	Lowell, Mass.....	Planing curved surfaces, machine for.....	Dec. 27, 1859.
24629	Grout, William.....	Worcester, Mass.....	Sewing-machines.....	July 5, 1859.
25730	{ Grover, W. O., and W. E. Baker..... O. B. Potter.....	{ Boston, Mass..... New York, N. Y.....	Sewing-machines.....	Oct. 11, 1859.
24630	Grover, Benjamin A.....	Momence, Ill.....	Abdominal-supporters.....	July 5, 1859.
23680	Grunman, Josiah M.....	Brooklyn, N. Y.....	Surveyor's chain.....	April 19, 1859.
25112	Grunwald, Joseph.....	New York, N. Y.....	Skirts, clasps for skeleton.....	Aug. 16, 1859.
26585	Grunwald, Joseph A.....	New York, N. Y.....	Looms, circular.....	Dec. 27, 1859.
26641	Gruler, Joseph, and Augustus Rebetz, assignors to the Manhattan Fire-arms Manufacturing Company.	Norwich, Conn.....	Fire-arms, revolving.....	Dec. 27, 1859.
23768	Guerin, Edward.....	Paris, France.....	Brakes, self-acting apparatus for working railway.....	April 26, 1859.
24777	Gueruscy, S. B., assignor to W. H. Reed and George W. Zeigler.	Waterbury, Conn.....	Skirt-hoops, clasps for.....	July 12, 1859.
23244	Guhmann, Jacob.....	Rochester, N. Y.....	Boilers, steam, apparatus for heating and purifying feed-water of.	Mar. 15, 1859.
25566	Guild, Harvey.....	New Orleans, La.....	Gas-apparatus, for washing.....	Sept. 27, 1859.
23245	Guild, Horatio, and Luther Hall.....	Boston, Mass.....	Boots and shoes, machine for dressing heels of.....	Mar. 15, 1859.
24023	Gunkel, William, et al. (See Boyer, Michael, assignor.)	Morgantown, Va.....	Scales, weighing.....	May 17, 1859.
25638	Guseman, William D.....	Morgantown, Va.....	Scales, weighing.....	Oct. 4, 1859.
25731	Gushce, Horace, and John G. Dawes.....	San Francisco, Cal.....	Bee-hives.....	Oct. 11, 1859.
24556	Guth, Heinrich.....	New York, N. Y.....	Alcoholometers.....	June 28, 1859.
24907	Guthrie, Alfred, assignor to Wardell Guthrie.....	Chicago, Ill.....	Churn.....	July 26, 1859.
25732	Guy, John R.....	Springfield, Ohio.....	Bedstead.....	Oct. 11, 1859.
26428	Hadfield, Charles.....	Brooklyn, N. Y.....	Rockets, sticks for exhibition.....	Dec. 13, 1859.
24118	Hadley, A.....	Lynn, Mass.....	Saws, machines for filing.....	May 24, 1859.
25329	Haeckel, Edward, assignor to Haeckel & Co.....	Cincinnati, Ohio.....	Mashing, apparatus for.....	Sept. 6, 1859.
25641	Haines, Joel.....	West Middleborough, Ohio.....	Fences, field, device for connecting the panels of portable.	Oct. 4, 1859.
25821	Haines, Joel.....	West Middleborough, Ohio.....	Fences, field.....	Oct. 18, 1859.
24119	Haines, Napoleon J.....	New York, N. Y.....	Piano-forte actions.....	May 24, 1859.
23681	Hakes, W. L., jr., and A. H.....	Norwich, Conn.....	Bustles.....	April 19, 1859.
22555	Haldeman, I. R. and J. S..... (See O'Bryan, Charles, assignor.)	Bloomington, Ill.....	Washing-machine.....	Jan. 11, 1859.
23246	Hale, Albert W.....	New Britain, Conn.....	Meat-mincer.....	Mar. 15, 1859.
25260	Hale, Albert W.....	New Britain, Conn.....	Skirts, fastening for hooped.....	Aug. 30, 1859.
26491	Hale, D. B.....	New York, N. Y.....	Skirt-supporter.....	Dec. 20, 1859.
23085	Halc, Elias J., and C. H. Chandler.....	Foxcroft, Me.....	Lamps.....	Mar. 1, 1859.
25406	Hale, Elias J.....	Foxcroft, Me.....	Lamp-chimneys.....	Sept. 13, 1859.
22870	Hale, Henry J.....	Indianapolis, Ind.....	Seeding-machines, arms of broadcast.....	Feb. 18, 1859.
26182	Hale, John P.....	Kanawha, Va.....	Evaporating-vessels.....	Nov. 23, 1859.
23571	Halc, Loren.....	Milford, Mass.....	Polishing-wheel, elastic.....	April 12, 1859.
26031	Hale, Noah E.....	Palmetto, Ga.....	Drawing-machinery, applying pressure to top rolls of.....	Nov. 11, 1859.



25567	Hale, Noah E.	Palmetto, Ga.	Belt-hook, pliers, and punch	Sept. 27, 1859.
25407	Hale, Robert.	Roxbury, Mass.	Engines, steam, exhaust-pipe for	Sept. 13, 1859.
26183	Hall & Guild. (See Guild & Hall.)	Morristown, Vt.	Carriage-top	Nov. 23, 1859.
26351	Hall, Daniel M.	Bridgeport, Conn.	Car-blinds, railroad	Dec. 6, 1859.
22917	Hall, E. B., assignor to self and Joseph C. Farley	Woodbury, N. J.	Stump-extractors	Feb. 8, 1859.
26396	Hall, George N., assignor to self, S. Arthur, J. Pierce, and S. D. Arthur.	Mamakating, N. Y.	Rakes, horse hay	Dec. 6, 1859.
24871	Hall, George, and Alonzo Scudder	Morris, N. Y.	Washing-machine	July 26, 1859.
23570	Hall, H. S., A. D. Hunt, and C. J. Winchester, assignors to H. S. Hall, A. D. Hunt, and C. E. Jeffords.	Jamestown, N. Y.	Sticks, machine for tapering	April 12, 1859.
25160	Hall, Hiram, L., assignor to the Beverly Rubber Company.	Beverly, Mass.	Rubber, vulcanized, restoring waste.	Aug. 16, 1859.
23023	Hall, John M.	Warrenton, Ga.	Ploughs	Feb. 22, 1859.
22647	Hall, John M.	Warrenton, Ga.	Cultivators, cotton.	Jan. 18, 1859.
23024	Hall, John S.	Manchester, Pa.	Plough-beams	Feb. 23, 1859.
25605	Hall, Luther, assignor to self and S. S. Heinenway	Boston, Mass.	Boots and shoes, machine for shaping heels for.	Sept. 27, 1859.
24778	Hall, Moses, jr., assignor to self and Samuel Judy	Osborn, Ohio	Railroads, cattle-gates for	July 12, 1859.
24459	Hall, Thomas.	Boston, Mass.	Electro-magnetic machine	June 21, 1859.
25505	Hall, Valentine	New York, N. Y.	Cooling liquids, apparatus for.	Sept. 20, 1859.
24934	Hall, W. S.	Quincey, Mass.	Churn	Aug. 2, 1859.
24830	Hall, William	North Adams, Mass.	Sewing-machines	July 26, 1859.
25822	Hall, William	Indianapolis, Ind.	Horses from running away, apparatus for preventing	Oct. 18, 1859.
25823	Hall, William	Indianapolis, Ind.	Lightning-rod	Oct. 18, 1859.
25965	Hall, William	St. Louis, Mo.	Bran-dusters	Nov. 1, 1859.
26548	Hall, William D., assignor to Quinpiac Company	Hamden, Conn.	Fertilizers	Dec. 20, 1859.
25506	Hallett, Ezekiel, jr., et al. (See Black, James D., assignor)	Cambridge, Mass.	Lamps	Sept. 20, 1859.
24804	Halvorson, Halvor	Cambridge, Mass.	Lamp-wick, trimmer for	July 19, 1859.
26429	Halvorson, Halvor	Cambridge, Mass.	Candle-moulds	Dec. 13, 1859.
24460	Ham, Joel T.	Covington, Ky.	Bridges, connecting the iron girders of.	June 21, 1859.
24972	Hamer, James A., assignor to self and N. Marris.	Reading, Pa.	Brick-moulds	Aug. 2, 1859.
25467	Hamer, James A., assignor to self and N. Marris.	Reading, Pa.	Brick-machines	Sept. 13, 1859.
23572	Hamerley, William J.	Hartford, Conn.	Strutrops	April 12, 1859.
26101	Hamel, George.	Abington, Pa.	Cars, horse, apparatus for starting city railroad	Nov. 15, 1859.
23169	Hamilton, A. J.	Kewanee, Ill.	Gates, farm, method of operating, by approaching vehicles.	Mar. 8, 1859.
25113	Hamilton, James	New York, N. Y.	Sawing-machine, cross-cut.	Aug. 16, 1859.
25408	Hamilton, William	St. Catharine, Mo.	Excavator	Sept. 13, 1859.
22530	Hamilton, William G., assignor to John C. Hamilton	New York, N. Y.	Boiler-furnaces, bridge-walls of.	Jan. 4, 1859.
22949	Hammer, George	Philadelphia, Pa.	Cork-cutting machine	Feb. 15, 1859.
25114	Hammond, A.	Jacksonville, Ill.	Plough, molo.	Aug. 16, 1859.
25261	Hammond, William H.	New York, N. Y.	Chronometers, escapement for.	Aug. 30, 1859.
25824	Hansher, Samuel W.	Decatur, Ill.	Harrow	Oct. 18, 1859.
22499	Hancock, E. H.	Augusta, Ga.	Sawing-laths, machine for	Jan. 4, 1859.
24869	Hancock, E. H.	Augusta, Ga.	Sawing-machines	July 26, 1859.
25330	Hancock, E. H.	Augusta, Ga.	Gates, flood	Sept. 6, 1859.
23462	Hancock, John M.	Lansing, Iowa.	Fire-escape	April 5, 1859.
25161	Hand, Miles B., assignor to self and Sheldon B. Hand	Handsboro', Miss.	Presses, cotton	Aug. 16, 1859.
26430	Hanford, W. H., and Wm. Phelps. (See Phelps & Hanford.)	Hope, N. J.	Washing-machine	Dec. 13, 1859.
26431	Hanson, John O., et al. (See Howland, W. H., assignor.)	Sacramento, Cal.	Bee-hives	Dec. 13, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22500	Harrison, John S	Sacramento, Cal.	Bee-hives	Jan. 4, 1859.
26102	Hardenbergh, Jacob E	Fultonville, N. Y.	Harvesters, potato	Nov. 15, 1859.
25331	Hardie, Jason W	New York, N. Y.	Sewing-machines	Sept. 6, 1859.
23463	Harding, A. E.	Middletown, Ohio	Ship's propelling-apparatus	April 5, 1859.
24388	Hardy, A., and M. B. Bigelow. (See Bigelow & Hardy.)	Cincinnati, Ohio	Engines, rotary	June 14, 1859.
24935	Hardy, Dexter H.	Boston, Mass.	Chairs, recumbent	Aug. 2, 1859.
23300	Hardy, Jean Pierre. (See Willward, Francis, assignor.)	Washington, D. C.	Envelopes, letter	Mar. 22, 1859.
25966	Hartan, J., et al. (See Purlier, Hartan, & Chcek.)	Fort Worth, Texas	Motion, converting reciprocating into rotary	Nov. 1, 1859.
26184	Harper, C. A.	Riceville, N. J.	Fertilizers	Nov. 22, 1859.
25011	Harper, John M., et al. (See Mershon, Ralph S., assignor.)	Davenport, Iowa	Planters, seed	Aug. 9, 1859.
23682	Harral, W. D., and B. S. Baldwin.	Missouri City, Mo	Mills, cooling and feeding material to	April 19, 1859.
24024	Harrington, B. F., and U. B. Burris.	Rochester, N. Y.	Roasting coffee, machine for	May 17, 1859.
	Harrington, Josiah D.			
	Harrington, N. S., and F. Wesson. (See Wesson & Harrington.)			
23918	Harris, A. and J. W. (See Howson, Henry, assignor.)	Brooklyn, N. Y.	Register their time, mechanism by which employés	May 10, 1859.
23086	Harris, Benjamin T.	New Orleans, La	Hair, application for restoring the	Mar. 1, 1859.
24352	Harris, C., and P. W. Zoimer, assignors to themselves and J. Langstaff.	Cincinnati, Ohio	Stoves	June 9, 1859.
26032	Harris, E. H.	Palmetto, Ga.	Carriage-seats	Nov. 8, 1859.
24025	Harris, Elijah	Princeton, Ill.	Lever power, mode of applying	May 17, 1859.
23370	Harris, Elijah	Princeton, Ill.	Watchmaker's lathes	Mar. 29, 1859.
24631	Harris, Elijah	Princeton, Ill.	Rakes, horse	July 5, 1859.
23464	Harris, G. D.	Fitchburg, Mass	Stump-extractor	April 5, 1859.
25825	Harris, Joseph.	Allegheny, Pa.	Railroad-brake.	Oct. 18, 1859.
26033	Harris, J. P.	Byhalia, Miss.	Ploughs	Nov. 8, 1859.
24300	Harris, John W.	Durhamville, N. Y.	Paddle-wheel	June 7, 1859.
22648	Harris, Lyman P.	Mansfield, Ohio	Evaporating saccharine juices, apparatus for	Jan. 18, 1859.
25012	Harris, Robert S.	Galena, Ill.	Gauge, water, for steam-boilers.	Aug. 9, 1859.
25013	Harrison, James, jr.	New York, N. Y.	Sewing-machines	Aug. 9, 1859.
24557	Harrison, James, jr.	New York, N. Y.	Springs, upholstery, machine for making	June 28, 1859.
25282	Harrison, James, jr.	New York, N. Y.	Sewing-machines	Aug. 30, 1859.
26586	Harrison, James, jr.	New York, N. Y.	Sewing-machines	Dec. 27, 1859.
25640	Harrison, Joseph, jr.	Philadelphia, Pa.	Boiler, steam	Oct. 4, 1859.
26459	Hersha, Mortimer S., assignor to self and R. S. Sanborn and H. B. Jones.	Sycamore, Ill.	Churn	Dec. 13, 1859.
23573	Hart, H. P.	Woodstock, N. Y.	Bed-bottom	April 12, 1859.
25409	Hart, Stephen P.	Boston, Mass.	Syringes, barrel	Sept. 13, 1859.
24632	Hartsfield, W.	Thomaston, Ga.	Fastening, door	July 8, 1859.
	Hartmann & Kimball. (See Kimball & Hartmann.)			
	Hartson, George B. (See Tait, A. H., assignor.)			



23919	Hartwell, Samuel E.	New York, N. Y.	Planters, corn	May 10, 1859.
24868	Hartzler, Enos	Orville, Ohio	Pumps	July 26, 1859.
23574	Harvey, C. T.	Marquette, Mich.	Piers or breakwaters	April 12, 1859.
26492	Harvey, Hayward A.	New York, N. Y.	Railroads, chairs for	Dec. 20, 1859.
26324	Harvey, Lemuel, <i>et al.</i> (See Rulofson, Lemuel, assignor.)	Wooster, Ohio	Washing-machine	Nov. 30, 1859.
23575	Harvey, Thomas, assignor to self and David Kramer	Baltimore, Md.	Collars, horse	April 12, 1859.
23576	Harvey, Thomas	Baltimore, Md.	Collars, horse	April 12, 1859.
23507	Haskell, Riley	Painesville, Ohio	Fish, trolling bait for catching	Sept. 20, 1859.
24209	Hassel, John, jr.	Newark, N. J.	Teeth, artificial, construction of pins for securing	May 31, 1859.
25410	Hassler, Malachi B.	Columbia City, Ind.	Churn	Sept. 13, 1859.
22798	Hatch, Nathaniel B.	Pittsburg, Pa.	Distilling coal oil, retorts for	Feb. 1, 1859.
23263	Hatch, Royal	Stratford, Vt.	Bed-bottom	Aug. 30, 1859.
	Hatch, Samuel W., <i>et al.</i> (See Clark, John G., assignor.)			
	Hathaway, Franklin S., <i>et al.</i> (See Woodward & Hathaway.)			
26148	Hathaway, John H., deceased, II. C. Rice, administrator.	Worcester, Mass.	Engines, rotary	Nov. 15, 1859.
24210	Havely, Henry	Newark, N. J.	Meat-cutter	May 31, 1859.
24301	Hawkes, W. A.	Corinth, N. Y.	Car, rotating dumping	June 7, 1859.
	Hawkins, H. N. and C. U., and J. H. Crandall. (See Crandall & Hawkins.)			
25826	Hawkins, James	Wilkins, Pa.	Ploughs, steam	Oct. 18, 1859.
23194	Hawkins, John S. and R.	Greenfield, Ind.	Harvesters	Aug. 23, 1859.
25411	Hawley, R. K.	Baltimore, Md.	Saws, segmental circular, construction of	Sept. 13, 1859.
23839	Hawkins, T.	Mobile, Ala.	Valve-gear of steam-engine	May 3, 1859.
23840	Hawkins, Thomas L.	Sturgeon, Mo.	Wheelwright-machine	May 3, 1859.
22799	Hawse, Asa P., and L. J. Adams	Morrisville, Vt.	Pail, scrubbing	Feb. 1, 1859.
24026	Hawthorn, Joseph	Thomas County, Ga.	Press, cotton	May 17, 1859.
25264	Hay, Alexander	Philadelphia, Pa.	Cars, &c., railroad springs for	Aug. 30, 1859.
23352	Hay, Alexander	Philadelphia, Pa.	Railroad and other machinery, bearings for	Dec. 6, 1859.
26483	Hay, Alexander	Philadelphia, Pa.	Shoes and gaiters	Dec. 20, 1859.
25014	Hay, George R., assignor to self and R. Phelps	Berea, Ohio	Wooden-ware, machine for cutting out	Aug. 9, 1859.
	Hayman, R. R., <i>et al.</i> (See Pease & Hayman.)			
24937	Hayden, H. H., <i>et al.</i> (See Miller & Wirsching, assignors.)	Waterbury, Conn.	Sewing-machines	Aug. 2, 1859.
25932	Haynes, Charles Y., assignor to C. Y. Haynes & Co.	Philadelphia, Pa.	Razor-straps	Oct. 25, 1859.
23371	Haynes, Jacob	Cameron, Ill.	Planters, corn	Mar. 29, 1859.
25015	Haynes, James	Hollis, Me.	Saw-frame, wood	Aug. 9, 1859.
23087	Haynes, William C.	McIntosh, Texas	Fire-arm, revolving	Mar. 1, 1859.
25639	Hays, Henry	New York, N. Y.	Stave-machine	Oct. 4, 1859.
24633	Hays, Henry	New York, N. Y.	Boring, machine for	July 8, 1859.
26494	Hazard, George V.	Torry, N. Y.	Fastener, door	Dec. 20, 1859.
25333	Hazen, Kelsey	Brooklyn, N. Y.	Amalgamator	Sept. 20, 1859.
24120	Hazen, Luther T.	Coventry, N. Y.	Carriage-wheels, hubs for	May 24, 1859.
24211	Hazlett, Robert W., and John H. Hobbs	Wheeling, Va.	Distilling coal-oils, retorts for	May 31, 1859.
26002	Head, Stephen H., <i>et al.</i> (See Parrott & Head.)	Boston, Mass.	Boilers, steam	Nov. 1, 1859.
25115	Heald, Stephen H., assignor to self and W. P. Parrot	Cohocton, N. Y.	Wagon-brakes, self-acting	Aug. 16, 1859.
22800	Healy, B. S.	Boston, Mass.	Shirt-collars	Feb. 1, 1859.
	Heard, George W.			

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22801	Ilelden, John.....	Medford, Mass.....	Washing-machine.....	Feb. 1, 1859.
23301	Hecker, John and William Hontine.....	New York, N. Y.....	Dough-rolling machine.....	Mar. 22, 1859.
22501	Hedenberg, John W.....	St. Louis, Mo.....	Pots, coffee.....	Jan. 4, 1859.
22802	Hedges, Isaac A.....	Cincinnati, Ohio.....	Mill for grinding cane, &c.....	Feb. 1, 1859.
23325	Hedges, Wheeler, assignor to self and P. W. Gates.....	Chicago, Ill.....	Sugar-juice, pans for evaporating.....	Nov. 29, 1859.
22349	Heermans, Theodore.....	Mitchellsville, Tenn.....	Coffee-roasters.....	Jan. 18, 1859.
23170	Heermans, Theodore.....	Mitchellsville, Tenn.....	Cultivators.....	Mar. 8, 1859.
25508	Heimisch, Roelus.....	Newark, N. J.....	Tailor's shears.....	Sept. 20, 1859.
22950	Hely, Gorges.....	Laporte, Ind.....	Horse-power equalizer.....	Feb. 13, 1859.
23572	Hemphill, Francis M.....	Newport, Ky.....	Mills, grinding.....	Mar. 29, 1859.
25363	Henderson, George, assignor to George Hutchinson.....	Alligheny, Pa.....	Printing-presses for addressing newspapers, &c.....	Sept. 6, 1859.
24844	Henderson, Joseph C., assignor to Rathbone & Co.....	Albany, N. Y.....	Stoves.....	July 12, 1859.
26495	Henderson, Simson S.....	Middlebourne, Ohio.....	Trap, rat.....	Dec. 20, 1859.
25116	Henderson, William M.....	Baltimore, Md.....	Car-seats.....	Aug. 16, 1859.
25642	Henderson, William M.....	Baltimore, Md.....	Pumps.....	Oct. 4, 1859.
23171	Henderson, John.....	Bluff Springs, Miss.....	Cotton-scraper.....	Mar. 8, 1859.
24634	Henderson, John.....	Bluff Springs, Miss.....	Stoves.....	July 5, 1859.
22803	Hendrick, James A.....	Providence, Pa.....	Saws, machine for grinding and polishing.....	Feb. 1, 1859.
25733	Hendy, Joshua.....	San Francisco, Cal.....	Coupling, double-friction.....	Oct. 11, 1859.
23450	Hendry, Thomas C., assignor to self, J. Dillworth, and F. E. Askin.....	Conyers, Ga.....	Car, gravel.....	Dec. 13, 1859.
25117	Hencage, Robert.....	Buffalo, N. Y.....	Hose-coupling.....	Aug. 16, 1859.
24392	Heuley, Henry W.....	New York, N. Y.....	Mattress.....	June 7, 1859.
24121	Henney, William.....	Wapello, Ill.....	Railroad-track, machine for raising.....	May 24, 1859.
26353	Henry, George G.....	Mobile, Ala.....	Drying wet seed-cotton.....	Dec. 6, 1859.
23465	Henry, J. B., et al., (See Atkins & Altin, assignors.)	New York, N. Y.....	Matches water-proof, rendering friction.....	April 5, 1859.
23920	Henry, Levi J., assignor to D. Beurino.....	Chenoo, Ill.....	Seeding-machines.....	May 10, 1859.
24737	Henry, Samuel.....	New York, N. Y.....	Sewing-machines.....	July 12, 1859.
22804	Henshaw, George.....	Fitchburg, Mass.....	Clothes-frame.....	Feb. 1, 1859.
26587	Henshaw, Dexter.....	Mendota, Ill.....	Ploughs, gang.....	Dec. 27, 1859.
24303	Herald, John, and C. B. Tompkins.....	Trumansburgh, N. Y.....	Harrows.....	June 7, 1859.
26354	Herald, John, and C. B. Tompkins.....	Trumansburgh, N. Y.....	Pitchforks.....	Dec. 6, 1859.
26640	Hermans, Alva, by Mary E. Hermans, administratrix.....	Henderson, Texas.....	Peach-parer.....	Dec. 27, 1859.
25332	Herrick, Hiram H.....	East Boston, Mass.....	Carpet-sweeper.....	Sept. 6, 1859.
25643	Herringshaw, Hugh, et al., (See Parker, Sidney, assignor.)	Buffalo, N. Y.....	Faucets.....	Oct. 4, 1859.
24872	Hersee, Thomson, and F. J. Bourgnon.....	Boston, Mass.....	Pumps, rotary.....	July 26, 1859.
24389	Hersey, Charles H.....	Lancaster, Pa.....	Rakcs, horse.....	June 14, 1859.
24637	Hersh, Henry.....	West Union, Iowa.....	Boilers, steam, device for heating.....	July 5, 1859.
25897	Hess, Daniel.....	West Union, Iowa.....	Cotton, machinery for cleaning.....	Oct. 25, 1859.
24805	Hess, Daniel.....	Niagara Falls, N. Y.....	Lathes.....	July 12, 1859.



24738	Hewes, S. E.	Albany, N. Y.	Stoves.	July 12, 1859.
25893	Hewit, Silas.	Seneca Falls, N. Y.	Pumps.	Oct. 25, 1859.
24304	Hewitt, Charles.	Trenton, N. J.	Iron from the rolls, machine for moving.	June 7, 1859.
26034	Hicks, Horatio F.	Cooperstown, N. Y.	Cotton and corn stalks, machines for pulling and cutting.	Nov. 8, 1859.
25546	Hicks, Horatio F., assignor to Hicks Brothers.	Grandrew, Ind.	Presses.	Sept. 20, 1859.
23577	Hicks, William Cleveland.	Boston, Mass.	Sewing-machines.	April 12, 1859.
26035	Hicks, William Cleveland.	Boston, Mass.	Sewing-machines.	Nov. 8, 1859.
26496	Hickok, D. K.	Morrisville, Vt.	Clothes-dryer.	Dec. 20, 1859.
23373	Hickok, Russell.	Fort Edward, N. Y.	Lightning-rods, insulator for.	Mar. 29, 1859.
22871	Hickok, Samuel.	Buffalo, N. Y.	Refrigerator.	Feb. 8, 1859.
23025	Hickok, William O.	Harrisburg, Pa.	Straw and hay, machine for cutting.	Feb. 22, 1859.
23247	Hidden, Enoch.	New York, N. Y.	Ship's lights.	Mar. 15, 1859.
25734	Higgins, Hatzel.	Orleans, Mass.	Steering-apparatus.	Oct. 11, 1859.
22805	Hildrup, W. T.	Harrisburg, Pa.	Harrows, rotary.	Feb. 1, 1859.
23578	Hildrup, W. T.	Harrisburg, Pa.	Harrows, rotary.	April 12, 1859.
24936	Hill, Albert V.	Hinsdale, N. Y.	Fire-arms, breech-loading.	Aug. 2, 1859.
26497	Hill, Joseph S., et al. (See Belcher, G. G., assignor.)	Greenport, N. Y.	Hydro-carbon vapor apparatus.	Dec. 20, 1859.
25196	Hill, Luther, et al. (See Trip, Seth D., assignor.)	Nangatuck, Conn.	Cooking-apparatus.	Aug. 23, 1859.
23579	Hills, S. C. (See Morrison, E. R., assignor.)	Freeport, Ill.	Lamps.	April 12, 1859.
22769	Hill, Samuel A., and David Alter. (See Sherwood, Allen, assignor.)	Coloies, N. Y.	Knitting-machines.	Jan. 25, 1859.
23026	Hill, Jonathan, and Joseph Bullock, assignors to William Smith.	Albany, N. Y.	Railroad-track bars, railroad splice.	Feb. 22, 1859.
26355	Hinton, Charles.	Galesburg, Ill.	Plough, mole.	Dec. 6, 1859.
22725	Hinckley, F. E.	Haynesville, Mo.	Hemp-brakes.	Jan. 25, 1859.
23027	Hindman, John.	Cooperstown, Pa.	Horse and ox-shoes.	Feb. 23, 1859.
26036	Hinds, N. E.	Cooperstown, Pa.	Horse-shoe.	Nov. 8, 1859.
23062	Hinds, N. E.	Little Falls, N. Y.	Straw-cutters.	Feb. 22, 1859.
24873	Hinds, William, assignor to Jerome Hinds.	Troy, N. Y.	Bedsteads.	July 26, 1859.
25231	Hinkley, Benjamin.	Clarksfield, Ohio.	Sewing-machines.	Aug. 23, 1859.
25231	Hinkley, Jouas, assignor to self and Frederick A. Wildman.	Clarksfield, Ohio.	Sewing-machines.	Aug. 23, 1859.
25412	Hinman, David.	Berea, Ohio.	Grinding the teeth of mowers and reapers.	Sept. 13, 1859.
22919	Hinman, George, assignor to self and Charles Mason.	New Haven, Conn.	Knife-sharpener.	Feb. 8, 1859.
22726	Hintz, John C.	Cincinnati, Ohio.	Saving winding forms, machine for.	Jan. 25, 1859.
25197	Hirsch, Hermann.	Berlin, Prussia.	Propeller, marine.	Aug. 23, 1859.
25198	Hirsch, Hermann.	Berlin, Prussia.	Ships, construction of.	Aug. 23, 1859.
22650	Hitchcock, M. T. (See Woodworth, Woodworth, & Hitchcock.)	Genoa, Ill.	Planters, corn.	Jan. 18, 1859.
22872	Hoag, John L.	Mansfield, Pa.	Lock, door.	Feb. 8, 1859.
25735	Hoard, J. S., and V. O. Spencer.	Philadelphia, Pa.	Furnaces, hot-air.	Oct. 11, 1859.
23248	Hobbs, John H., et al. (See Hazlett & Hobbs.)	Quincy, Ill.	Roofing, compositions for.	Mar. 15, 1859.
25334	Hobbs, J. W., George H. Sellers, and A. W. Rand.	Stout's Grove, Ill.	Ploughs, mole.	Sept. 6, 1859.
26326	Hobrecker, John.	Pittsburg, Pa.	Distilling coal-oil, retorts for.	Nov. 29, 1859.
25334	Hobson, Iris. (See Louis, A., assignor.)	New York, N. Y.	Printing railroad and other tickets, machine for.	Mar. 8, 1859.
26326	Hodgins, I. P., et al. (See Lyman, Hodgkins, & Rawson.)	New York, N. Y.	Printing railroad and other tickets, machine for.	Mar. 8, 1859.
23172	Hodkinson, Mathew, assignor to M. Hodgkinson, jr.	New York, N. Y.	Printing-machines.	July 26, 1859.
24875	Hodgson, W., and N. Cope. (See Cope & Hodgson.)	New York, N. Y.	Printing-machines.	July 26, 1859.
24875	Hoe, Richard M.	New York, N. Y.	Printing-machines.	July 26, 1859.
24875	Hoe, Richard M.	New York, N. Y.	Printing-machines.	July 26, 1859.

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25199	Hoe, Richard M. Hoe, Richard M., R., & P. S. (See Tucker, Stephen D., assignor.)	New York, N. Y.	Printing-presses, feeding paper to.....	Aug. 23, 1859.
26037	Hoffacker & Richards. (See Richards & Hoffacker.)	Belleville, Mich.	Mills, eider.....	Nov. 8, 1859.
24638	Hoffman, Henry	New York, N. Y.	Fans, automatic.....	June 8, 1859.
25336	Hoffman, Lewis G.	Waterford, N. Y.	Bolt, door.....	Sept. 6, 1859.
25185	Hoffman, Lewis G.	Waterford, N. Y.	Fastening, door.....	Nov. 23, 1859.
26432	Hoffman, Samuel W. (See McWilliams, Robert, assignor.)	Benicia, Cal.	Tray, butcher's.....	Dec. 13, 1859.
24122	Hofmeister, John F.	Alton, Ill.	Ovens.....	May 24, 1859.
22918	Hoffner, P., assignor to self and S. F. Covington.	Rising Sun, Ind.	Screws, die for cutting.....	Feb. 8, 1859.
25016	Hoga, S. W., P. Piggott, and S. Beardmore.	Middlesex co., England.	Telegraph, mode of generating and applying electro-currents in.	Aug. 9, 1859.
25736	Hogle, Sidney S.	Cleveland, Ohio.	Harrows, rotary.....	Oct. 11, 1859.
23028	Holt, L. B.	New York, N. Y.	Brushes, fountain.....	Feb. 22, 1859.
25265	Holcomb, Milo A.	Granby, Conn.	Razor-strop, metallic.....	Aug. 30, 1859.
25788	Holden, Stoughton B., assignor to self and Parker Nichols.	Woburn, Mass.	Alarm, burglar's.....	Oct. 11, 1859.
26588	Holland, Homer	Westfield, Mass.	Sulphuric acid, process for making.....	Dec. 27, 1859.
26589	Holland, Homer	Westfield, Mass.	Sulphate and oxides of copper, process for the production of.	Dec. 27, 1859.
26590	Holley, Alexander L.	New York, N. Y.	Sulphurets, metalliferous, mode of treating.....	Dec. 27, 1859.
23683	Holley, Alexander L.	New York, N. Y.	Railroads, chairs for.....	April 19, 1859.
23684	Hollen, Joseph.	New York, N. Y.	Engines, steam, variable cut-off gear for.....	April 19, 1859.
25827	Hollingsworth, W., et al. (See Goolman, W. P., assignor.)	Fostoria, Pa.	Knitting-machines.....	Oct. 18, 1859.
23143	Hollman, W. W.	New York, N. Y.	Faucet, measuring.....	Mar. 1, 1859.
25413	Holman, W. W.	New York, N. Y.	Mangle.....	Sept. 13, 1859.
24558	Holloway, J. F.	Saline Mines, Ill.	Ship's capstan.....	June 28, 1859.
22806	Holman, George W.	Beloit, Wis.	Meal and flour, machines for making.....	Feb. 1, 1859.
25737	Holman, R. W., et al. (See Symmes, H. K., assignor.)	Halifax, Mass.	Clothes-frame.....	Oct. 11, 1859.
24739	Holmes, D. E.	Warren, Mass.	Clothes-frame.....	July 12, 1859.
23841	Holmes, John	Boston, Mass.	Skirts, ladies' hoop.....	May 3, 1859.
26433	Holmes, John B., jr.	New York, N. Y.	Blind cord, ratchet-pulleys for.....	Dec. 13, 1859.
25644	Holmes, John B., jr.	New York, N. Y.	Curtain-fixtures.....	Oct. 4, 1859.
24212	Holmes, J. E., assignor to self and Joseph Palmer.	Newark, Ohio.	Distilling oil from coal, retorts for.....	May 31, 1859.
23427	Holmes, J. E., assignor to self and Joseph Palmer.	Newark, Ohio.	Distilling coal-oil, retorts for.....	Mar. 29, 1859.
23580	Holmes, Thomas, and Van Wyck Foster. (See Shepherd, William, jr.)	Barnsville, Ga.	Ploughs.....	April 12, 1859.
25967	Holmes, W. C.	Washington, D. C.	Fire-arms, projectiles for.....	Nov. 1, 1859.
25336	Holroyd, John	Oberlin, Ohio.	Propellers, marine.....	Sept. 6, 1859.
25967	Holsman, Daniel, et al. (See Miller, L. B., assignor.)			
25336	Holtzlander, Loreuzo			
25336	Homan, Henry, et al. (See Millward, Francis, assignor.)			



26356	Homer, Truman J.	St. Louis, Mo.	Collection-box, portable	Dec. 6, 1859.
25738	Hood, Bold R.	Clinton, N. C.	Ploughs	Oct. 11, 1859.
25103	Hook, Albert H.	New York, N. Y.	Glass, machines for grinding	Nov. 15, 1859.
26434	Hook, Albert H.	New York, N. Y.	Clamps for metal straps	Dec. 13, 1859.
24027	Hook, Albert H.	New York, N. Y.	Sewing-machines	May 17, 1859.
24908	Hook, Albert H., assignor to William H. Horstmann.	New York, N. Y.	Glass polishing-machine	July 26, 1859.
24017	Hooper, Robert	Baltimore, Md.	Boilers, steam	Aug. 9, 1859.
24213	Hooton, Henry, and Joseph G. Bicknell.	Boston, Mass.	Jack for carriages, &c., wheel	May 31, 1859.
25645	Hoover, Lewis	Flushing, N. Y.	Lanterns, signal	Oct. 4, 1859.
22807	Hope, William H.	Washington, D. C.	Mill for grinding grain	Feb. 1, 1859.
26104	Hopkins, Eliza G.	Penn Yan, N. Y.	Bedstead-fastening	Nov. 15, 1859.
23374	Hopkins, Gardner P.	Cabot, Vt.	Churn	Mar. 29, 1859.
25195	Hopkins, Thomas, assignor to self and R. E. Robinson.	Petersburg, Va.	Presses, screw	Aug. 23, 1859.
25232	Hopkins, Thomas, assignor to self and R. E. Robinson.	Petersburg, Va.	Presses, cam	Aug. 23, 1859.
22952	Hopkins, W. W.	Amelia, Ohio	Electricity, galvanic, method of lighting gas by	Feb. 15, 1859.
22727	Homer, E. N.	New Brighton, Pa.	Oils from coal, method of extracting	Jan. 25, 1859.
26186	Horning, Julius	Newark, N. J.	Valves, steam, cut-off arrangement for	Nov. 22, 1859.
24178	Horton, H. W., assignor to Oliver H. Horton, and Roswell E. Adams.	Wheaton, Ill.	Cooking by steam, apparatus for	May 24, 1859.
24559	Horton, Marcus L.	Claremont, N. H.	Stoves	June 28, 1859.
23258	Horton, William J.	La Grange, Ala.	Riving basket-splints, machine for	Nov. 29, 1859.
25414	Horstmann, William H.	Brooklyn, N. Y.	Telegraphic cables, mode of manufacturing	Sept. 13, 1859.
25899	Horstmann, William H. (See Hook, Albert H., assignor.)	Wilmington, Ohio	Ditching and grading-machine	Oct. 25, 1859.
26498	Hosmer, Isaac & Josiah	Bedford, Mass	Stump-extractor	Dec. 20, 1859.
24461	Hotehkiss, Edwin	Sharon, Conn.	Harvesters, guard-fingers for	June 21, 1859.
23685	Hotehkiss, Bennet	New Haven, Conn.	Engine, steam, variable cut-off gear for	April 19, 1859.
24428	Hotehkiss, Bennet, assignor to self and F. S. Collins	New Haven, Conn.	Hammer, trip	June 14, 1859.
24305	Hotehkiss, Gideon	Windsor, N. Y.	Butter, machine for working	June 7, 1859.
26357	Hotehkiss, Sheldon A.	New Haven, Conn.	Raising weights, machine for	Dec. 6, 1859.
26499	Hotine, William, and John Hecker. (See Hecker & Hotine.)	Worcester, Mass	Paper, machine for cutting	Dec. 20, 1859.
22651	Houchin, Thomas W.	Cleveland, Ohio	Harrows, rotary	Jan. 18, 1859.
23686	House, Mark W.	Springfield, Mass	Corn-shellers	April 19, 1859.
22873	Hovey, William H.	Stoneham, Mass.	Sole-cutting machines	Feb. 8, 1859.
24806	Howard, A. P., and A. Rowe, jr.	Westfield Township, Ohio	Raking and loading hay, machines for	July 19, 1859.
24306	Howard, Grove	Philadelphia, Pa.	Loom-templates	June 7, 1859.
25568	Howard, William H.	Salem, Mass.	Distilling oils from coal, machines for	Sept. 27, 1859.
24639	Howe, John	Northfield, Vt.	Railroad-chairs	June 7, 1859.
25569	Howe, Abel B., et al. (See Carrier, James W., assignor.) Howe, Abel, and S. Gaty. (See Gaty & Howc.) Howe, Elias, jr. (See McCurdy, James.)	Cambridgeport, Mass.	Bedstead-slats	Sept. 27, 1859.
24639	Howe, Isaac B.	Northfield, Vt.	Railroad-chairs	June 7, 1859.
22502	Howe, Tyler	Cambridgeport, Mass.	Bedstead-slats	Sept. 27, 1859.
22556	Howe, William G., et al. (See Moor, H. K., assignor.)	Cleveland, Ohio	Harrows, rotary	Jan. 4, 1859.
23808	Howell & Cotton. (See Appleton, Charles J., assignor.)	Hope, N. J.	Washing-machine	Jan. 11, 1859.
24390	Howell, Charles	Burlington, N. J.	Hinge	April 26, 1859.
	Howell, Eden S.	New York, N. Y.	Omnibus-register	June 14, 1859.
	Howell, Levi T., assignor to self and De Witt C. Taylor.			
	Howells, Henry C., and			
	Joseph C. Howells	Madison, Wis.		

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25646	Howes, Simeon, and H. Montgomery. (See Montgomery & Howcs.)	New York, N. Y.	Pipe, gas, tool for cutting.	Oct. 4, 1859.
24214	Howland, G., and J. B. Palser. (See Palser & Howland.)	Waterbury, Conn.	Latch, door.	May 31, 1859.
25933	Howland, W. H., assignor to self and John O. Hanscom.	San Francisco, Cal.	Amalgamator.	Oct. 25, 1859.
25647	Howlett, J. W.	Greensboro', N. C.	Disinfecting feathers, mode of.	Oct. 4, 1859.
24080	Howson, Henry, assignor to A. & J. W. Harris.	Philadelphia, Pa.	Gas-meters, valves for dry.	May 17, 1859.
25648	Hoyt, C. B.	Port Washington, Wis.	Vegetable-cutter.	Oct. 4, 1859.
24874	Hoyt, Francis A.	Boston, Mass.	Gauge, warer, and alarm for steam-boilers.	July 26, 1859.
25826	Hoyt, Francis A.	Boston, Mass.	Gaugc for steam-boilers, water.	Oct. 18, 1859.
24897	Hoyt, Lewis S., and B. B. Beers.	New Fairfield, Conn.	Bit-stock and wrench.	July 19, 1859.
24560	Hubbard, D. L.	Glastenbury, Conn.	Tanning, apparatus for.	June 28, 1859.
22953	Hubbard, M. G.	Penn Yan, N. Y.	Harvesters.	Feb. 15, 1859.
23029	Hubbard, M. G.	Penn Yan, N. Y.	Harvesters.	Feb. 22, 1859.
23921	Hubbard, M. G.	Penn Yan, N. Y.	Harvesting-machines.	May 10, 1859.
26105	Hubbard, M. G.	Penn Yan, N. Y.	Harvesters.	Nov. 15, 1859.
22557	Hubbard, Thomas J.	Hamilton, N. Y.	Flail-caps.	Jan. 11, 1859.
24391	Hubbell, Solon P.	Unadilla, N. Y.	Sewing-machines.	June 14, 1859.
22874	Hudson, Gilbert L.	Conneaut, Ohio.	Springs, door.	Feb. 8, 1859.
25968	Hudson, Henry.	Threc Springs, Pa.	Sewing-machines.	Nov. 1, 1859.
25829	Hudson, Thomas J.	Newbern, N. C.	Engines, steam, packing piston-rods for.	Oct. 18, 1859.
22808	Hudson, W. S.	Paterson, N. J.	Boilers, steam, apparatus for regulating the draught of.	Feb. 1, 1859.
22954	Huey, William.	Christiana, Pa.	Window-sashes, elevator for.	Feb. 15, 1859.
23466	Hughes, Daniel.	Rochester, N. Y.	Engine, rotary.	April 5, 1859.
26435	Hughes, Daniel.	Rochester, N. Y.	Lock, hoop.	Dec. 13, 1859.
26106	Hughes, Daniel.	Rochester, N. Y.	Propeller.	Nov. 15, 1859.
22770	Hughes, David E., assignor to the American Telegraph Co.	New York, N. Y.	Telegraphing-machines.	Jan. 25, 1859.
22531	Hughes, David E., assignor to the American Telegraph Company.	New York, N. Y.	Telegraphing, electro-magnetic.	Jan. 4, 1859.
22652	Hughes, James, and Nathan Stonecipher.	Cambridge, Ind.	Planters, corn.	Jan. 18, 1859.
24740	Hughes, John P.	Spout Spring, Va.	Water-wheel.	Jan. 11, 1859.
24462	Hulbert, A., and V. Norman Cowles. (See Cowles & Hulbert.)	Plantsville, Conn.	Trace-fastener.	June 21, 1859.
22875	Hull, D. H.	Birmingham, Conn.	Skirts, ladies' hoop.	Feb. 8, 1859.
26232	Hull, Frederick.	Charlestown, Mass.	Varnish, copal, method of making.	Nov. 22, 1859.
24392	Hull, Liveras, assignor to self and A. Whiceler.	Jonesborough, Tenn.	Key-board, tuning.	June 14, 1859.
22558	Hunt, A. D., et al. (See Hall, Hunt, & Winchester.)	Talford, England	Preparation of resins.	Jan. 11, 1859.
26637	Hunt, Edward, and Henry D. Pochin.	Cincinnati, Ohio	Straw-cutters.	Dec. 27, 1859.
25831	Hunt, Franklin B., assignor to R. D. Van Deursen and J. B. Gibbs.	New York, N. Y.	Cans, oil.	Oct. 18, 1859.
25831	Hunt, George P.	New York, N. Y.	Cans, oil.	Oct. 18, 1859.



25118	Hunt, German H., et al. (See Pool, Robert, assignor.)	Ottumwa, Iowa	Visc	Aug. 16, 1859.
23287	Hunt, H. C.	Indianapolis, Ind.	Mills, sugar	Mar. 15, 1859.
24517	Hunt, Thomas E., assignor to self and Nathan T. Hunt.	New York, N. Y.	Boots and shoes, heels for	June 21, 1859.
25830	Hunt, Walter	Brooklyn, N. Y.	Burners, vapor, construction of	Oct. 18, 1859.
	Hunt, William H.			
	Hunter, Alfred. (See Waters, O. H., assignor.)			
25200	Hunter, Charles H.	Shelbyville, Ind.	Weighing grain, machine for	Aug. 23, 1859.
23759	Hunter, Stephen R.	Cortlandt, N. Y.	Seeding-machines	Apr. 26, 1859.
24463	Huntington, W. S.	Audrusville, N. Y.	Ploughs for railroads, snow	June 21, 1859.
25119	Huntley, John W.	Lane's Creek, N. C.	Planters, cotton-seed	Aug. 16, 1859.
24640	{ Hurd, Julius C., and Moses A. Johnson	Dorchester, Mass	Wadding, manufacturing	July 5, 1859.
24123	Hurlbut, C. R.	Lowell, Mass.	Clothes-dryer	May 24, 1859.
	Hurlbert, H. A., et al. (See Wilson, Archelaus, assignor.)			
25509	Hurlbert, W. M.	Northfield, Vt.	Engines, steam, variable exhaust for	Sept. 20, 1859.
26187	Husbrand, J. L.	Philadelphia, Pa.	Propelling-wheel	Nov. 22, 1859.
22955	Huse, Samuel	Chicago, Ill.	Engine, rotary	Feb. 15, 1859.
23088	Huse, W. W.	Brooklyn, N. Y.	Tin-foil, manufacture of	Mar. 1, 1859.
25266	Hussey, Daniel	Nashua, N. H.	Warps upon the beam, machinery for winding	Aug. 30, 1859.
25201	Hussey, Obed	Baltimore, Md.	Harvesters	Aug. 23, 1859.
24641	Hussey, Obed	Baltimore, Md.	Mowing-machines	July 5, 1859.
25649	Hussey, R., and U. Thornburg, sr.	Walnut Run, Ohio	Plough, molo	Oct. 4, 1859.
24215	Huston, Robert W.	Calais, Me.	Bottles, modes of securing the corks in	May 31, 1859.
26188	Huston, Robert W.	Calais, Me.	Coal-hods	Nov. 23, 1859.
25337	Hutehinson, George, et al. (See Henderson, George, ass'r.)	Allegheny, Pa.	Printing the address on newspapers, &c., apparatus for	Sept. 6, 1859.
	Hutton & Vaughn. (See Vaughn & Hutton.)			
23063	Hyde, Lyman, assignor to Ellenville Glass Company	Ellenville, N. Y.	Carboys, machines for finishing	Feb. 22, 1859.
23467	Hyde, J. B.	Newark, N. J.	Treatment of peat for composition	Apr. 5, 1859.
23468	Hyde, J. B.	Newark, N. J.	Shot and shells, rotating	Apr. 5, 1859.
25832	Hyde, J. B.	Newark, N. J.	Compound blow-pipe, construction of	Oct. 18, 1859.
25806	Hyde, J. B., assignor to Phebe Bamman	Newark, N. J.	Gas from peat, method of making	Oct. 18, 1859.
25969	Iams, William	Baltimore, Md.	Hydrants	Nov. 1, 1859.
22728	Illingworth, Benjamin	Freeport, Ill.	Washing-machine	Jan. 25, 1859.
	Het, J. T., et al. (See Roder, Conrad, assignor.)			
24353	Ingersoll, George L., assignor to J. E. Ingersoll	Cleveland, Ohio	Heating water, apparatus for	June 7, 1859.
22876	Ingersoll, Marshall	Grafton, Ohio	Surveying instruments for determining inaccessible heights and distances	Feb. 8, 1859.
	Ingersoll, P. C.	Green Point, N. Y.	Bands, metallic, hoop, lock for securing the ends of	Mar. 15, 1859.
	Ingham, J. & J. Firth. (See Firth & Ingham.)			
23250	{ Ingraham, H. C., and Ingraham, H. S.	Guilford, Ohio	Planing-machines, rotary	Mar. 15, 1859.
26189	Inman, George E.	Granger, Ohio	Ditching-machine	Nov. 22, 1859.
26107	Innis, William J.	Buffalo, N. Y.	Awl and punch-belt	Nov. 15, 1859.
25415	Inskeep, A. H.	Providence, R. I.	Harvesting-machines	Sept. 13, 1859.
25303	Iron, Michael, assignor to self and Jacob Heidel	Middleburgh, Ohio	Shears	Aug. 30, 1859.
24216	Irving, A. B.	Utica, N. Y.	Sewing-machines	May 31, 1859.
26242	Irving, Joshua	Terre Haute, Ind.	Turning-ovals	July 5, 1859.
22653	Irwin, John II.	New York, N. Y.	Pump, cattle	Jan. 18, 1859.
23469	Isky, Anthoni	Carlinville, Ill.	Tables, extension	Apr. 5, 1859.
24741	Iske, Anthoni	Lancaster, Pa.	Wagon, dumping	July 12, 1859.
25018	Iske, Anthoni, and Jacob B. Erb	Lancaster, Pa.	Gate, approach opening	Aug. 9, 1859.
25900	Iske, Anthoni, and Jacob Teufel	Lancaster, Pa.	Latch and lock, door	Oct. 25, 1859.

## Patentees of inventions and designs, 1859.

No.	Name of patentec.	Residence.	Invention or discovery.	Date.
25934	Ives, Joseph	Bristol, Conn.	Watches	Oct. 25, 1859.
25120	Ives, Levi, S.	Brooklyn, N. Y.	Millstone-bushes	Aug. 16, 1859.
23470	Ivens, Edmund M.	New Orleans, La.	Boilers, steam	Apr. 5, 1859.
23842	Ivens, Ellwood	Waterbury, Conn.	Hair-crimper	May 3, 1859.
23381	Jackson, William R.	Baltimore, Md.	Car-seat and couch, railroad	Apr. 5, 1859.
24307	Jacobs, Enoch	Cincinnati, Ohio	Prisons, construction of	June 7, 1859.
25108	Jacobs, Enoch	Cincinnati, Ohio	Fastening for jail doors	Nov. 15, 1859.
26591	Jacobs, Jesse	Yellow Springs, Ohio	Harvesters	Dec. 27, 1859.
25364	Jacot, C. E., assignor to Saltzman, Jacob, & Co.	New York, N. Y.	Watches	Sept. 6, 1859.
24217	Jaeger, William G. W.	Baltimore, Md.	Distilling oil from coal, retorts for	May 31, 1859.
24561	Jaeger, William G. W.	Baltimore, Md.	Oils, coal, apparatus for condensing	June 28, 1859.
24125	Jalovreau, Alfred Fauvin	Paris, France	Cement pipes, water-proof, manufacture of	May 24, 1859.
26592	James, Aaron E.	Decatur, Ill.	Straw-cutters	Dec. 27, 1859.
26593	James, Henry B.	Trenton, N. J.	Watches	Dec. 27, 1859.
22956	Jameson, John	Gateshead, England	Fluids, elastic, apparatus for compressing	Feb. 15, 1859.
23302	Jaminet, A.	St. Louis, Mo.	Filters	Mar. 22, 1859.
26594	Jaques, George	Somerville, Mass.	Tobacco, preparations of	Dec. 27, 1859.
	Jaques, H. H., et al. (See Boyden, Seth, assignor.)			
	Jarrell, U. M., et al. (See Bunting, Gillett, assignor.)			
	Jay, J. M., et al. (See Danner, John, assignor.)			
26595	Jay, James M., and John Danner	Canton, Ohio	Heating water, apparatus for	Dec. 27, 1859.
26109	Jebb, Thomas A.	Buffalo, N. Y.	Churn	Nov. 15, 1859.
24518	Jeffers, William M., assignor to self and Wm. L. Gibson	Elmira, N. Y.	Cannon for chain-shot, double	June 21, 1859.
24464	Jeffrey, E. A.	Corning, N. Y.	Bale-hoops, tools for fastening	June 21, 1859.
	Jeffords, C. E., et al. (See Hall, Hunt, & Winchester, assignors.)			
24562	Jeffries, J. C.	Keokuk, Iowa	Bedstead-fastening	June 28, 1859.
25510	Jenkins, Edward T., and Frank B. Polly	Williamsburg, N. Y.	Steam-trap	Sept. 20, 1859.
	Jenkins, H., et al. (See Wickersham & Jenkins.)			
25302	Jenkins, Jacob	Lynn, Mass.	Boot or shoe while applying the sole, mechanism for protecting the upper of a	Aug. 23, 1859.
22729	Jenkins, Richard	Covington, Ky.	Lamps	Jan. 25, 1859.
23142	Jenkinson, James, assignor to self and Emanuel Mandel	Williamsburg, N. Y.	Springs, tempering steel	Mar. 1, 1859.
24973	Jenks, George L., assignor to self and George Kendell and John Kendrick	Providence, R. I.	Sewing-machines	Aug. 2, 1859.
22809	Jemison, George C.	Ware, Mass.	Ovens	Feb. 1, 1859.
28110	Jerome, Arthur E.	Monroeville, Ohio	Harrow, seeding	Nov. 15, 1859.
24308	Jewett, Sherman S.	Buffalo, N. Y.	Stoves, cooking	May 3, 1859.
22810	Jipson, O. W.	Rochester, N. Y.	Scales, weighing	Feb. 1, 1859.
23375	Jobson, Robert	Wordsley, England	Castings, making moulds for	Mar. 29, 1859.
23582	Johns, W. B.	United States Army	Knapsacks	April 12, 1859.
25122	Johnson, A., and George W. Wilson. (See Wilson & Johnson.)	United States Army	Gas-burners, apparatus for lighting	Aug. 16, 1859.
	Johnson, A., et al. (See Falk, Johnson, & Erickson.)			



25970	Johnson, A. E., <i>et al.</i> (See Nealey, Daniel P., assignor.) Johnson, A. Livingston	Baltimore, Maryland	Engines and railroad cars from being thrown from the track, machine for preventing	Nov. 1, 1859.
24974	Johnson, Alonzo, and J. M. Adams. (See Adams, James M., assignor.)	Chicago, Ill.	Clothes-dryer	Aug. 2, 1859.
24909	Johnson, Danforth, assignor to Benjamin B. Worden and William Caldwell.	Collinsville, Ill.	Ladder, fire-escape	July 25, 1859.
23583	Johnson, Hezekiah, and W. J. Matthews, assignors to themselves and J. Berkey, assignors to Hezekiah Johnson.	Washington, D. C.	Lamps, vapor, burners for	April 12, 1859.
23471	Johnson, Henry	Farmersville, N. Y.	Tanning	April 5, 1859.
23584	Johnson, Hiram	Spuyten Duyvel, N. Y.	Stove-covers	April 12, 1859.
24429	Johnson, Isaac G.	East Brooklyn, N. Y.	Composition for cementing iron	June 14, 1859.
26269	Johnson, J., and J. Stevens. (See Stevens & Johnson.)	New York, N. Y.	Toy-gun	Nov. 29, 1859.
24603	Johnson, Job, assignor to Charles D. Archibald.	Buffalo, N. Y.	Fuseur, portable door	June 28, 1859.
26190	Johnson, Levi C., assignor to self and Josiah B. Smith	Grand Ledge, Mich.	Engines, rotary steam	Nov. 22, 1859.
24975	Johnson, Luther	Milwaukee, Wis.	Locks, bank	Aug. 2, 1859.
23472	Johnson, Moses A., and J. C. Hurd, (See Hurd & Johnson.)	Lambertville, N. J.	Lathe-clutch	April 5, 1859.
23585	Johnson, Nathan, <i>et al.</i> (See Travis, Nathan C., assignor.)	Lambertville, N. J.	Boots and shoes, machine for chamfering the soles of	April 12, 1859.
24465	Johnson, William	Hampstead, N. H.	Chamfering-tool	June 21, 1859.
24808	Johnson, William, 2d	Auburn, N. Y.	Steam-cock	July 19, 1859.
25416	Johnson, William, and Martin Siltner	Raleigh, N. C.	Cultivators	Sept. 13, 1859.
25417	Johnson, W. D.	Raleigh, N. C.	Seeding-machines	Sept. 13, 1859.
25739	Johnson, W. D.	Springfield, Mass.	Telegraphic-cable	Oct. 11, 1859.
24029	Johnson, William W.	Clarksburg, Va.	Fencing, picket, machine for manufacturing	May 17, 1859.
23644	Johnston, Hezekiah, assignor to self and Richard Withers.	Collinsville, Ill.	Cornstalks, &c., on ground preparatory to ploughing, machines for cutting	April 12, 1859.
23687	Johnston, James J.	Allegheny, Pa.	Corn-shellers	April 19, 1859.
22654	Johnston, John M. (See Quinn, James E., assignor.)	Brooklyn, N. Y.	Metal pipes, composition for lining	Jan. 18, 1859.
25123	Jolly, Thomas J.	Olean, Ind.	Washing-machine	Aug. 16, 1859.
24124	Jones & Lauth. (See Lauth, B., assignor.)	Brooklyn, N. Y.	Beer, coolers for	May 24, 1859.
22811	Jones, Charles	Brooklyn, N. Y.	Derrick, floating and revolving	Feb. 1, 1859.
25901	Jones, Daniel C. (See Lipshut & Jones.) Jones, E., <i>et al.</i> (See Coxell, James T., assignor.)	Albany, N. Y.	Boilers, steam, furnaces of	Oct. 25, 1859.
24030	Jones, Edward	Brooklyn, N. Y.	Cars, railroad, adjustable canopy for	May 17, 1859.
25650	Jones, Edward H., and R. Stevenson Jones, H., A. P. Drake, and N. W. Langley. (See Langley, Jones, & Drake.) Jones, H. B., <i>et al.</i> (See Hersh, Mortimer S., assignor.)	Cincinnati, Ohio	Spark-arrester	Oct. 4, 1859.
22730	Jones, Isaac E.	Cincinnati, Ohio	Cars, railroad, adjustable canopy for	May 17, 1859.
24698	Jones, Isaac E.	Baltimore, Md.	Clay pipe, machine for making	Jan. 25, 1859.
22559	Jones, John. (See Linton, William, assignor.)	Philadelphia, Pa.	Butter-worker	July 5, 1859.
25902	Jones, Joseph, assignor to self and James G. Bryee	Johnstown, Pa.	Sausage-stuffer	Jan. 11, 1859.
23843	Jones, R. V.	St. Paul, Ind.	Plough, mole	Oct. 25, 1859.
26111	Jones, Samuel F.	St. Paul, Ind.	Egg-beater	May 3, 1859.
23251	Jones, Samuel F.	Joliet, Ill.	Ploughs	Nov. 15, 1859.
	Jordon, Douglas B.	Woonsocket, R. I.	Journals, mode of oiling	Mar. 15, 1859.

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24126	Jordan, E., and W. B. Barnard. (See Barnard & Jordan.) Jordan, G. P. Jordan, P. J., and Thomas J. Woolf. (See Ager, Wilson, assignor.)	Burlington, Iowa	Smut-machines, separators for.	May 24, 1859.
24643	Jorey, Joseph.	Rocky Hill, Conn.	Horse-shoe.	July 5, 1859.
23344	Josephs, Uriel.	Quincy, Mass.	Skates	May 3, 1859.
22560	Joslin India Rubber Co. (See Eaton, A. K.) Joslin, H. W.	Trenton, N. J.	India-rubber, treatment of.	Jan. 11, 1859.
26233	{ Joslin, Henry W., and A. K. Eaton, assignors to W. Reinsen, assignor to Joslin India Rubber Co. Joslin, W. C., et al. (See Williams & Joslin.)	Trenton, N. J. New York, N. Y.	India-rubber, treatment of.	Nov. 22, 1859.
24031	Joslin, William.	Cleveland, Ohio.	Gun, centrifugal	May 17, 1859.
22731	Jouan, Augustus.	San Francisco, Cal.	Propeller-screw	Jan. 25, 1859.
22732	Jouan, Augustus.	San Francisco, Cal.	Cane-juice, apparatus for evaporating.	Jan. 25, 1859.
22877	Jouan, Augustus.	San Francisco, Cal.	Sounding-apparatus, deep-sea	Feb. 8, 1859.
26270	Joyner, Francis H.	Richmond, Va.	Railroad-switches	Nov. 29, 1859.
26191	Judson, H. P.	Bethlehem, Conn.	Yokes, ox.	Nov. 22, 1859.
24218	Judy, Samuel H., et al. (See Hall, Moses, jr., assignor.)	New York, N. Y.	Motion, machinery for transmitting	May 31, 1859.
25267	Kaefler, Mathaus.	Bernville, Pa.	Furnaces for smelting zinc ore.	Aug. 30, 1859.
26112	Kalbach, H., and A. Andrews. (See Andrews & Kalbach.)	New York, N. Y.	Billiard-table	Nov. 15, 1859.
22733	Kappner, J. G.	Cincinnati, Ohio.	Bathing, electro, apparatus.	Jan. 25, 1859.
25740	Karslner, William W.	Brooklyn, N. Y.	Register, omnibus	Sept. 6, 1859.
25606	Keage, William M.	New York, N. Y.	Bungs for casks	Sept. 27, 1859.
24878	Keane, John, assignor to self and Andrew McL. Wood. Kearsing, George T., and William F. Keating, Thomas W., et al. (See Duff & Keating.)	Butte City, Cal.	Mills for crushing quartz.	July 26, 1859.
24938	Keeler, Edward L. Keeler, J. F., and O. D. Barrett. (See Barrett, O. D. assignor.)	Pittsburg, Pa.	Car-couplings	Aug. 2, 1859.
24032	Keeley, Albert B., and James S. Beck	Philadelphia, Pa.	Pumps	May 17, 1859.
25741	Keeley, Miles, and G. W. Cressman	Barren Hill, Pa.	Hydraulic-motors	Sept. 6, 1859.
25124	Keen, Morris L.	Rogers' Ford, Pa.	Fuel, artificial, machinery for manufacturing.	Aug. 16, 1859.
25418	Keen, Morris L.	Rogers' Ford, Pa.	Boilers for making paper-pulp from wood.	Sept. 13, 1859.
25552	Keen, Morris L.	Rogers' Ford, Pa.	Distilling liquid from coal-tar, mode of.	Sept. 20, 1859.
22735	Kenny, Chauncey G. (See Buell, F. L., assignor.)	Manchester, Conn.	Knitting-machines.	Jan. 25, 1859.
23376	Keese, Henry R.	Bridport, Vt.	Harvesters	Mar. 29, 1859.
25436	Keffer, Peter	Reading, Pa.	Boots	Dec. 13, 1859.
23386	Kegg, William	Lassellville, N. Y.	Mortising-machine.	April 12, 1859.
25419	Keith, Asa M.	Kosciusko, Miss.	Cultivators	Sept. 13, 1859.
25203	Kellogg, Charles H., and N. Olney. (See Olney & Kellogg.)	Reedtown, Ohio.	Scales	Aug. 23, 1859.
24939	Kelly, Walter W.	Harper's Ferry, Va.	Sewing-machines	Aug. 2, 1859.
24939	Kelsey, David.	Harper's Ferry, Va.	Sewing-machines	Aug. 2, 1859.



26398	Kemp, John P., assignor to N. F. Stevens.	Charlestown, Mass.	Peg-tubes and drivers	Dec. 6, 1859.
23030	Kendall, Edward	Cambridgeport, Mass.	Boilers, steam	Feb. 22, 1859.
24393	Kendrick, Henry L.	Providence, R. I.	Serews, wood	June 14, 1859.
	Kendrick, Rufus, <i>et al.</i> (See Dyar, Nathan A., assignor.)			
	Kendrick, William H., <i>et al.</i> (See Okey, Joseph B., assignor.)			
23252	Kenistou, James	Cincinnati, Ohio	Spark-extinguisher	Mar. 15, 1859.
22732	Kennedy, William, jr.	New York, N. Y.	Engines, marine steam	Jan. 25, 1859.
23992	Kennedy, Charles W., and Richard T. Brown	Williamsburgh, N. Y.	Coal, machines for breaking	May 10, 1859.
24742	Kennedy, John W., and John T. Plummer	Plainfield, Conn.	Mill-stones, machines for dressing	July 12, 1859.
23638	Kenny, George	Millford, N. H.	Stump-extractor and press, combined	April 19, 1859.
22604	Kenny, George, assignor to himself and Josephus Baldwin	Millford, N. H.	Axles, mode of attaching thills to	Jan. 11, 1859.
26301	Kerrick, William A., and George H. Whiteher	Boston, Mass.	Dock, graving	Dec. 20, 1859.
26596	Kesler, Charles, and F. Reinhard	Columbus, Texas	Planters, cotton-seed	Dec. 27, 1859.
23089	Kessler, Peter	Belleville, Ill.	Distilling	Mar. 1, 1859.
25742	Ketehum, Archibald C.	New York, N. Y.	Kettles, tea	Sept. 6, 1859.
21876	Kettler, Frederic	Milwaukee, Wis.	Pump, force	July 26, 1859.
24877	Kettler, Frederic	Milwaukee, Wis.	Pump, force	July 26, 1859.
23173	Kidder, Francis L.	Williamsburgh, N. Y.	Carriage-thills to axles, attaching	Mar. 8, 1859.
25511	Kieffer, Christian	Lancaster, Pa.	Boilers	Sept. 20, 1859.
	Kilbourne, George. (See Van Hagen, Stephen F., ass'r.)			
24308	{ Killbourn, Joseph K., and Edward E. Killbourn	Pittsfield, Mass.	Knitted fabrics, manufacturing	June 7, 1859.
26192	Kilburn, Cheney	Litchfield, Conn.	Lathe attachment	Nov. 22, 1859.
25051	Kilgore, Martin C.	Burlington, Vt.	Harrow, rotary	Oct. 4, 1859.
24940	Killam, Benjamin F.	Washington, Iowa	Tooth-keys	Aug. 2, 1859.
	Kimball, H. J., and George Cook. (See Cook & Kimball.)			
26113	Kimball, John	Boston, Mass.	Shoes, machine for rabbeting wooden soles for	Nov. 15, 1859.
25420	Kimball, John C.	New Haven, Conn.	Carriages, movable tops for	Sept. 13, 1859.
	Kimball, L., and Josephus Baldwin. (See Buxton, Levi W., assignor.)			
23689	Kimball, Samuel, and William Sawyer	Boxford, Mass.	Drying shoe-pegs and grain, apparatus for	April 19, 1859.
23253	Kimball, W. M., and K. Hartmann	Cleveland, Ohio	Lanterns	Mar. 15, 1859.
26597	King, John R.	Raleigh, Tenn.	Cultivators, cotton	Dec. 27, 1859.
24941	King, Obed H.	Salem, Iowa	Harvesters	Aug. 2, 1859.
24309	King, T. E.	West Andover, Ohio	Saw-filing machine	June 7, 1859.
23980	King, William H., assignor to self and Nelson Colson	Charleston, Ill.	Planters, corn	May 10, 1859.
25019	Kingsmau, John W.	Dover, N. H.	Milking cows, machine for	Aug. 9, 1859.
23587	Kingsbury, Gilbert J.	Rochester, N. Y.	Stoves	April 12, 1859.
23845	Kinman, Ira	Freeport, Ill.	Faucets, measuring	May 13, 1859.
24468	Kinne, K. H.	Mexico, N. Y.	Saws, apparatus for cutting teeth in	June 21, 1859.
23031	Kinsey, Zebulon	Dubuque, Iowa	Lead, bar-packing	Feb. 22, 1859.
23090	Kinyon, David F.	Raritan, N. J.	Harvesters	Mar. 1, 1859.
25502	Kipple, H., and J. D. Bullock	Philadelphia, Pa.	Car-trucks	Dec. 20, 1859.
24310	Kirby, Josiah	Cincinnati, Ohio	Bung-eutter	June 7, 1859.
25512	Kirby, Josiah	Cincinnati, Ohio	Borer and reamer, bung-hole	Sept. 20, 1859.
26114	Kirby, W. A.	Buffalo, N. Y.	Harvesters	Nov. 15, 1859.
23923	Kirk, Lewis	Reading, Pa.	Car-brakes, railroad	May 10, 1859.
23254	Kirkham, William S.	Branford, Conn.	Locks and latehes	Mar. 15, 1859.
	Kirkpatrick, John, and R. Nuttall. (See Nuttall & Kirkpatrick.)			
23846	Kirkpatrick, William	Lancaster, Pa.	Shingle-machine	May 3, 1859.



## Patentees of invention and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25833	Kirlin, A.	New Boston, Ill.	Planters, corn.	Oct. 18, 1859.
25834	Kitchen, George H.	New York, N. Y.	Gas-regulators, construction of.	Oct. 18, 1859.
26070	Kitchen, Pearson B., assignor to William M. Marshall.	Philadelphia, Pa.	Hydro-carbon liquids, apparatus for heating.	Nov. 8, 1859.
23174	Kite, Joseph H.	Conrad's Store, Va.	Harvesters, corn.	Mar. 8, 1859.
25835	Klans, Adam.	Bellville, Ill.	Planters, seed.	Oct. 18, 1859.
26071	Krapp, A. H., assignor to self, E. H. Barstow, and A. R. Towbridge.	Newton Center, Mass.	Lamps.	Nov. 8, 1859.
25421	Knapp, Nelson J.	Chicago, Ill.	Lamps, locomotive.	Sept. 13, 1859.
	Knauss, Franklin, and J. S. Lash. (See Lash, John S., assignor.)			
	Kneass, S., <i>et al.</i> (See Macferran & Kneass.)			
23091	Kneeland, F. C.	Hartford, Wis.	Rakes, horse.	Mar. 1, 1859.
26369	Knickerbaeker, John.	Stockport, N. Y.	Coupling, clutch or pulley.	Dec. 6, 1859.
26437	Kniffen, L. G.	North Salem, N. Y.	Harvesters.	Dec. 13, 1859.
24563	Knight, Edward C.	Philadelphia, Pa.	Cars, railroad, mode of arranging couches in.	June 28, 1859.
25570	Knight, Edward C.	Philadelphia, Pa.	Cars, railroad, mode of arranging couches in.	Sept. 27, 1859.
25268	Knight, Eleazer B., assignor to self and Nathan Kellogg.	Malden, N. Y.	Stones, machines for holding.	Aug. 30, 1859.
	Knott, S. E., <i>et al.</i> (See Nicolai, John L., assignor.)			
22771	Knowles, Hezekiah, assignor to Fellows, Hoffman & Co.	New London, Conn.	Lamps.	Jan. 25, 1859.
25652	Knowles, H. B.	Providence, R. I.	Sewing machines, attachment to treadles of.	Oct. 4, 1859.
23092	Knowles, Hazard.	New York, N. Y.	Bands on bales and packages, fastening.	Mar. 1, 1859.
25125	Knowles, Hazard.	New York, N. Y.	Bales, &c., cotton, clasp for fastening bauls on.	Aug. 16, 1859.
22503	Knowles, Lueius J.	Warren, Mass.	Valves of pumping-engines, method of operating.	Jan. 4, 1859.
23770	Knowlton, David.	Camden, Me.	Steering-wheel.	Apr. 26, 1859.
23847	Knowlton, David.	Camden, Me.	Windlass.	May 3, 1859.
24467	Knowlton, David.	Camden, Me.	Capstan, ship's.	June 21, 1859.
24809	Knowlton, David.	Camden, Me.	Pump, pipes for.	July 19, 1859.
24810	Knowlton, David.	Camden, Me.	Ships' working chucks.	July 19, 1859.
22561	Knowlton, John L.	Glasborough, N. J.	Stump-extractor.	Jan. 11, 1859.
24564	Knox, Melvin W.	Silver Creek, N. Y.	Sawing-machines, cross-cut.	June 28, 1859.
26598	Koch, John P.	New York, N. Y.	Bedstead, folding.	Dec. 27, 1859.
25903	Koch, Louis.	New York, N. Y.	Power, moving tread.	Oct. 2, 1859.
25081	Koch, Louis, assignor to self and H. Forstrick.	New York, N. Y.	Indicator, railroad station.	Aug. 9, 1859.
25653	Koch, Philip.	New Haven, Conn.	Metals, punching.	Oct. 4, 1859.
26271	Koegel, Bernhard.	New York, N. Y.	Vinegar, manufacture of.	Nov. 29, 1859.
	Koerber, J., and F. Wuterich (See Wuterich & Koerber.)			
	Kramer, David, <i>et al.</i> (See Harvey, Thomas, assignor.)			
23175	Krauser, Daniel H.	Pottsville, Pa.	Turning irregular forms, machine for.	Mar. 8, 1859.
	Krebs, Isaac, and William Gourley. (See Gourley & Krebs.)			
22504	Krebs, Isaac.	Winchester, Va.	Carriage-brakes, means of operating.	Jan. 4, 1859.
24644	Kribs, Philip.	Jefferson Furnace, Pa.	Cultivators.	July 5, 1859.
25571	Kuhlenschmidt, W.	Jersey City, N. J.	Wrench, serew.	Sept. 27, 1859.
22878	Kuhlmann, Frederic.	Paris, France.	Varnishing and protecting surfaces, method of.	Feb. 8, 1859.
23255	Kulm, John C.	Boonville, Ark.	Peach-cutting and stoning apparatus.	Mar. 15, 1859.
26503	Kunze, John G.	New York, N. Y.	Piano-fortes.	Dec. 20, 1859.



24743	Kurtzman, J.....	Lancaster, Ohio.....	Saw-mills, head blocks for.....	July 12, 1859.
25971	Laage, G. L., <i>et al.</i> (See Tyler, Stephen E., assignor.)	Jersey City, N. J.....	Boat, life.....	Nov. 1, 1859.
25422	La Baw, George W.....	Holderness, N. H.....	Pegs, machine for arranging.....	Sept. 13, 1859.
25468	Ladd, Jesse.....	Rockford, Iowa.....	Clocks, calender.....	Sept. 13, 1859.
25423	La Due, S. P., assignor to Thomas S. La Due.....	Battle Creek, Mich.....	Board-measure.....	Sept. 13, 1859.
26327	Lafever, Augustus.....	Boston, Mass.....	Nursing bottles.....	Nov. 29, 1859.
22562	La Forne, Frances J.....	New York, N. Y.....	Collars, horse.....	Jan. 11, 1859.
22957	Lafreniere, Oliver.....	Pittsburg, Pa.....	Fire-arms, tape primer for.....	Feb. 15, 1859.
225836	Laidley, Theodore T. S.....	Smith's Landing, N. J.....	Steering-apparatus.....	Oct. 18, 1859.
24845	Lake, Lorenzo, assignor to self and William Patton.....	Middlebury, Pa.....	Churn.....	July 19, 1859.
23176	Lake, E. L., and Samuel Wood.....	Keokuk, Iowa.....	Screws, moulding female.....	Mar. 8, 1859.
24565	Lamb, Isaac. (See Mendenhall, Stephen C., assignor.)	West Novi, Mich.....	Brading-machines.....	June 28, 1859.
23924	Lambert, Joseph H., <i>et al.</i> (See Griffith, William, assignor.)	Baltimore, Md.....	Mail-bags.....	May 10, 1859.
23588	Lamden, Thomas J.....	Van Wert, Ohio.....	Boilers, steam, device for heating feed-water of.....	Apr. 12, 1859.
22532	Lamon, Samuel, and W. S. Gaskill.....	New York, N. Y.....	Corsets and bustles, manufacturing.....	June 4, 1859.
25338	Lamoureux, Damase, assignor to Douglas & Sherwood.....	New York, N. Y.....	Grates, parlor.....	Sept. 6, 1859.
24744	Lamoureux, Damase.....	Greenwich, Ohio.....	Mallets, method of constructing.....	July 12, 1859.
25513	Lance, William.....	Rocky Mount, N. C.....	Planters, seed.....	Sept. 20, 1859.
23303	Lancaster, Levi L.....	South Providence, R. I.....	Chains, making ornamental.....	Mar. 22, 1859.
25837	Lancelott, James.....	South Providence, R. I.....	Chains, making ornamental.....	Oct. 18, 1859.
25294	Lancelott, James.....	Hartford, Conn.....	Pegging-machine.....	Aug. 23, 1859.
22656	Landfear, W. R.....	Camden, N. J.....	Railroad-chairs.....	Jan. 18, 1859.
	Landry, Henry A., assignor to A. B. Stoughton, assignor to F. G. Ransford.....			
23809	Lane & Bodley. (See Smith & Lane, assignors.)	Hamilton, Ohio.....	Horse-power.....	Apr. 26, 1859.
23032	Lane, Clark, assignor to Owens, Lane, Dyer & Co.....	Merideth, N. H.....	Gauge, steam-pressure.....	Feb. 22, 1859.
24468	Lane, P. P., <i>et al.</i> (See Miles & Lane.)	Boston, Mass.....	Rocket-exhibition.....	June 21, 1859.
25126	Lane, Thomas W.....	Cleveland, Ohio.....	Churn.....	Aug. 16, 1859.
26370	Langdon, S. S.....	East Cambridge, Mass.....	Photographs to tombstones, mode of securing.....	Dec. 6, 1859.
	{ Langley, N. W., and A. S. Drake. (See Harris & Zoiner, assignors.)	Stoughton, Mass.....		
26272	Langstaff, I., <i>et al.</i> (See Harris & Zoiner, assignors.)	Eufaula, Ala.....	Horses, apparatus for taming.....	Nov. 29, 1859.
23690	Lanier, John M.....	Wilkesbarre, Pa.....	Pumps.....	April 19, 1859.
25838	Laning, A. C.....	Cleveland, Ohio.....	Washing-machine.....	Oct. 18, 1859.
22879	Lanphear, S. E., and O. D. Barrett.....	New York, N. Y.....	Churn.....	Feb. 8, 1859.
23093	Lapbam, Rufus, and Riley P. Wilson.....	New York, N. Y.....	Boiler for generating steam.....	Mar. 1, 1859.
24459	Larnard, Joseph G. E.....	Cohocton, N. Y.....	Sled-brake.....	June 21, 1859.
25424	Larowe, Albertus.....	Carlisle, Pa.....	Cart, dumping.....	Sept. 13, 1859.
25789	Lash, John S., assignor to self and Franklin Knauss.....	Carlisle, Pa.....	Straw-cutter.....	Oct. 11, 1859.
26438	Lathrop, George A.....	East Saginaw, Mich.....	Fire-arm, breech-loading.....	Dec. 20, 1859.
23589	Latta, A. B.....	Cincinnati, Ohio.....	Generators, steam.....	April 12, 1859.
25235	Lauth, Bernard, assignor to Jones & Lauth.....	Pittsburg, Pa.....	Iron, manufacture of.....	Aug. 23, 1859.
23177	Lavender, Thomas.....	Philadelphia, Pa.....	Metallic lining for water-coolers.....	Mar. 8, 1859.
24779	Law, Robert, assignor to self and P. T. Dix.....	Lockport, N. Y.....	Packing fruit, apparatus for.....	July 12, 1859.
	Lawrence & Abbott. (See Abbott & Lawrence.)			
23094	Lawrence, Edwin, and Robert Safely, 2d.....	Waterford, N. Y.....	Pumps.....	Mar. 1, 1859.
25743	Lawrence, J. R., and George E. Gould.....	Green Island, N. Y.....	Horse-power machines, endless chains for.....	Oct. 11, 1859.
26461	Lawrence, James W., assignor to self, H. Brewster, and John W. Britton.....	New York, N. Y.....	Vehicles, connecting elliptic springs to.....	Dec. 13, 1859.



## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22958	Lawrence, Richard S.	Hartford, Conn	Fire-arms, adjustable sight for	Feb. 15, 1859.
23590	Lawrence, Richard S.	Hartford, Conn	Gun-locks, self-priming.	April 12, 1859.
26304	Lawrence, Richard S.	Hartford, Conn	Fire-arms, breech-loading	Dec. 20, 1859.
23033	Lawton, Robert B., and William H. Bliss.	Newport, R. I.	Horse-coupling	Feb. 22, 1859.
22657	Layland, William	Mixerville, Ind	Car-couplings	Jan. 18, 1859.
24262	Lazelle, William H., assignor to self and Elbridge B. Lazelle.	Boston, Mass	Refrigerators	May 31, 1859.
22505	Leach, John H.	Oakville, Md	Guano and other fertilizers, machines for sowing.	June 20, 1859.
22920	Leach, William, assignor to self and George P. Tisdale.	Clarkson, N. Y.	Press, cheese, self-acting.	Feb. 8, 1859.
23981	Learnard, Charles, assignor to self and George P. Stevens.	Indianapolis, Ind	Seed-drills	May 10, 1859.
23178	Leavenworth, Lucius	Trumansburg, N. Y.	Clothes-fastener	Mar. 8, 1859.
24470	Leavenworth, Lucius	Trumansburg, N. Y.	Whip and line-holder for guiding horses without the use of the hands.	June 14, 1859.
25744	Leavenworth, Lucius	Trumansburg, N. Y.	Straw-cutters	Oct. 11, 1859.
24394	Leavitt, Daniel	Chicopee, Mass.	Fire-arms, breech-loading	June 14, 1859.
24645	Leavitt, William D. (See Lee, Rufus S., and William D. Leavitt.)	Lancaster, Pa.	Rakes, horse.	July 5, 1859.
23095	Lebzelter, Philip.	Westminster, N. C.	Apple-cutting and coring-machine	Mar. 1, 1859.
26549	Lechtenberger, F. W., et al. (See Althouse, J. A., assignor.)	New York, N. Y.	Rubber-belt, India	Dec. 20, 1859.
25654	Lee, Benjamin F., assignor to New York Rubber Company.	Blakely, Ga.	Ploughs	Oct. 4, 1859.
22838	Lee, E. D., and Z. W. Lee.	New York, N. Y.	Stereoscopic apparatus	Feb. 1, 1859.
26439	Lee, James, assignor to self and Milton Finkle.	Camauche, Iowa	Planters, seed	Dec. 13, 1859.
25127	Lee, James II.	Galesburg, Ill.	Plough, mole	Aug. 16, 1859.
23377	Lee, Rufus S., and William D. Leavitt.	Cincinnati, Ohio	Shafts, saw, rocker-boxes for	Mar. 29, 1859.
23982	Lee, Samuel, assignor to James S. Pomeroy	Taunton, Mass	Knives, making steels for sharpening	May 10, 1859.
24745	Leedy, John K.	Woodstock, Va.	Bee-hives	July 12, 1859.
22658	Leeds, Joseph	Philadelphia, Pa.	Ventilating-registers	Jan. 18, 1859.
23179	Leeds, Joseph	Philadelphia, Pa.	Chimneys	Mar. 8, 1859.
23096	Leeds, Lewis W.	New York, N. Y.	Heating buildings, apparatus for	Mar. 1, 1859.
25514	Leeds, Lewis W., and C. Vaux	New York, N. Y.	Heating apparatus, thermometer-regulator for	Sept. 20, 1859.
25425	Lees, William	German town, Ohio	Planters, corn	Sept. 13, 1859.
23848	Lefebvre, L.	Donaldsonville, La.	Boilers, steam	May 3, 1859.
25339	Lefel, P., and J. H. Mulholland	Springfield, Ohio	Watchmaker's lathes, method of centering in	Sept. 6, 1859.
25162	Lehay, John J., assignor to self and John Tucker.	Reading, Pa.	Churn	Aug. 16, 1859.
22659	Lehr, Ferdinand.	Hoboken, N. J.	Umbrella-ribs, machine for bending	Jan. 18, 1859.
25839	Leigh, Evan.	Manchester, England	Spinning-machines, cotton	Oct. 18, 1859.
24312	Leibbrandt, McDowell. (See Neale, Charles, assignor.)	Washington, D. C.	Fire-arms, adjustable hammer for revolving	June 7, 1859.
24313	Le Mat, Alexander	Washington, D. C.	Cannons, &c., automatic finger for closing the vent of	June 7, 1859.
24314	Le Mat, Alexander	Cincinnati, Ohio	Sawing-circular levels, machine for	June 7, 1859.



22960	Lennon, S. N.	Deposit, N. Y.	Lanterns, railroad signal.	Feb. 15, 1859.
26193	Leonard, Elisha C.	New Bedford, Mass.	Candles, paraffine, manufacture of.	Nov. 22, 1859.
26440	Leonard, Horatio, and Henry Rydler.	New Bedford, Mass.	Candles, apparatus for moulding.	Dec. 13, 1859.
29221	Leonard, Horatio, assignor to self and H. Rydler.	New Bedford, Mass.	Candles, moulding paraffine.	Feb. 8, 1859.
23983	Leonard, H. G., assignor to L. M. Leonard.	Taunton, Mass.	Stoves, cooking.	May 10, 1859.
24033	Leshner, Henry S.	Brooklyn, N. Y.	Pads, breast, and perspiration shields.	May 17, 1859.
26599	Lessig, Samuel.	Reading, Pa.	Rakes, horse-hay.	Dec. 29, 1859.
25020	Lester, Ebenezer A.	Boston, Mass.	Car-wheels, railroad.	Aug. 9, 1859.
22563	Lestey, Henry.	Cincinnati, Ohio.	Roofing-composition.	Jan. 11, 1859.
	Lenthy, F., and J. Ebner. (See Ebner & Lenthy.)			
	Lewis, Joseph S., et al. (See Comer, B., assignor.)			
23473	Lewenberg, Alron.	New York, N. Y.	Teeth, moulds for forming artificial.	April 5, 1859.
24034	Lewis, David D.	Tamaqua, Pa.	Railroad frogs.	May 17, 1859.
23428	Lewis, Henry J., assignor to self and Richard A. Lewis.	Brooklyn, N. Y.	Camera-stands.	Mar. 29, 1859.
23925	Lewis, Jabez.	New Orleans, La.	Water to cistern, apparatus for conducting.	May 10, 1859.
25702	Lewis, Nathan C., jr., assignor to self and Edwin Bruce.	Boston, Mass.	Dentists' chairs, construction of.	Oct. 4, 1859.
23474	Lewis, Richard.	Charleston, S. C.	Bands, cotton metallic.	April 5, 1859.
23475	Lewis, Richard.	Charleston, S. C.	Bands, cotton, metallic.	April 5, 1859.
24942	Lewis, S. C., and F. P. Pflagar.	Whitneyville, Conn.	Fire-arms, revolving.	Aug. 2, 1859.
26038	Lewis, S. F.	San Francisco, Cal.	Block, pulley.	Nov. 8, 1859.
22812	Lewis, William W.	Cincinnati, Ohio.	Horse-shoe machine.	Nov. 8, 1859.
23256	Liggett, Shields.	Staunton, Va.	Railroad-gates.	Feb. 1, 1859.
25426	Lighte, Ferdinand C.	New York, N. Y.	Piano-fortes.	Mar. 15, 1859.
	Lilley, William. (See Sievet, Robert W., assignor.)			
24646	Lillie, Lewis.	Troy, N. Y.	Vault-doors and cast-iron safes.	July 5, 1859.
24647	Lillie, Lewis.	Troy, N. Y.	Bolt, door-knob.	July 5, 1859.
22959	Lilliendahl, G. A.	New York, N. Y.	Alarm, buglar.	Feb. 15, 1859.
23529	Lilliendahl, G. A., assignor to Martha J. Coston.	New York, N. Y.	Signals, pyrotechnic night.	April 5, 1859.
	Lilly, John O. D., and W. A. Peaslee. (See Peaslee & Lilly.)			
23180	Lilly, N. J.	Selma, Ala.	Presses, cotton.	Mar. 8, 1859.
24943	Lincoln, H. A. and H. T. Douglas.	New Haven, Conn.	Car-brakes, railroad.	Aug. 2, 1859.
25655	Lincoln, Levi E.	Lowell, Mass.	Boilers, steam, safety apparatus for.	Oct. 4, 1859.
23378	Lindner, Edward.	New York, N. Y.	Fire-arm, breech-loading.	Mar. 29, 1859.
24219	Lindley, George.	Chicago, Ill.	Rollers, field.	June 8, 1859.
26273	Lindsay, Oliver, and Robert F. Streat.	Washington, Pa.	Fans, grain.	Nov. 29, 1859.
24944	Lindsay, Stephen A.	Unionville, Md.	Harvester.	Nov. 29, 1859.
25427	Lindsey, George, and W. Cameron.	Petersburg, Va.	Presses, tobacco.	Aug. 2, 1859.
23925	Lindsey, Hosea.	Asheville, N. C.	Pump, submerged.	Sept. 13, 1859.
26371	Linnel, Charles L.	Truro, Mass.	Vessels, jib-boom for.	Sept. 6, 1859.
26274	Linton, Thomas J.	Providence, R. I.	Precious stones, &c., mounting.	May 10, 1859.
25233	Linton, William.	Baltimore, Md.	Filters.	Dec. 6, 1859.
25233	Linton, William, assignor to John Jones.	Ballston Spa, N. Y.	Clay-pipe, machines for making.	Nov. 30, 1859.
25021	Lipshut, Theodore, and Daniel C. Jones.	Ballston Spa, N. Y.	Batteries, self-acting, for scaring crows, &c.	Aug. 23, 1859.
	Little, Isaac, et al. (See Wheeler & Little.)			
23181	Little, James.	Evansville, Ind.	Staves from the block, machine for cutting.	Mar. 8, 1859.
26505	Little, James.	Evansville, Ind.	Stave-machines.	Dec. 20, 1859.
24128	Little, Jesse.	Chambersburgh, Pa.	Harvesting-machines.	May 24, 1859.
25972	Littlefield, S.	Alfred, Me.	Saving-machines.	Nov. 1, 1859.
23091	Littlejohn, Hiram.	Troy, N. Y.	Barrels, machine for crozing and chamfering.	Mar. 1, 1859.
25656	Littlejohn, W. T.	Kalamazoo, Mich.	Mangle.	Oct. 4, 1859.
22880	Littlepage, C. V.	Austin, Texas.	Water-wheel.	Feb. 8, 1859.
25269	Livingston, Charles.	Redwood City, Cal.	Wind-mill.	Aug. 30, 1859.
23849	Lloyd, A. W.	Otis, Mass.	Pumps.	May 3, 1859.



## Patentees for inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22515	Lloyd, Julius S. .... (See McCord, G. W., assignor.)	Philadelphia, Pa.	Gate, approach opening .....	Sept. 20, 1859.
23379	Lobdell, J. F., <i>et al.</i> (See McCord, G. W., assignor.) Lochman, William H. .... Locke, Benjamin F., and C. W. Seely. (See Seely & Locke.)	York, Pa.	Desks, portable writing .....	Mar. 29, 1859.
23691	Lock, David .....	Lexington, Mo.	Brick-machines .....	Apr. 19, 1859.
24471	Locke, Harvey .....	South Boston, Mass.	Cork-machines .....	June 21, 1859.
23476	Lockwood, E. D. ....	Penfield, N. Y.	Vehicles, mode of attaching horses to .....	Apr. 5, 1859.
23591	Lockwood, Henry .....	New York, N. Y.	Lock, alarm .....	Apr. 12, 1859.
23771	Lockwood, William E. ....	Philadelphia, Pa.	Collars and cuffs, ladies .....	Apr. 26, 1859.
26600	Logan, S. M. ....	Richmond, Ind.	Roofing composition .....	Dec. 29, 1859.
24263	Logue, Hugh, assignor to self and Daniel P. Vandergrift.	Laporte, Ind.	Gas-meters, dry .....	May 31, 1859.
22687	Lohage, Franz Anton, assignor to E. L. Benzou .....	Unna, Prussia	Steel, manufacture of .....	Jan. 18, 1859.
23139	Lohage, Franz Anton, assignor to E. L. Benzou .....	Unna, Prussia	Steel, manufacture of .....	Mar. 1, 1859.
24315	Lombaert, H. J. ....	Philadelphia, Pa.	Railroad-axles, compound .....	June 9, 1859.
23992	Lombard, George F. ....	New Orleans, La.	Engines, steam .....	May 10, 1859.
25205	Long, D. L. ....	Dayton, Ohio	Cars, railroad, sleeping-berths for .....	Aug. 23, 1859.
24746	Long, Robert H. ....	Philadelphia, Pa.	Salinometer .....	July 12, 1859.
23098	Long, William H. ....	Lancaster, Pa.	Rakes, horse .....	Mar. 1, 1859.
25341	Longacre, George M. ....	New Orleans, La.	Sugar, steam-pans for clarifying .....	Sept. 6, 1859.
25342	Loomis, Justus R. ....	Winsted, Conn.	Lamps .....	Sept. 6, 1859.
23592	Lord, Gilderoy .....	Watertown, N. Y.	Harvesters .....	Apr. 12, 1859.
23928	Lord, John M., <i>et al.</i> (See Thomas, John, assignor.)	Rochester, N. Y.	Plane, bench .....	May 10, 1859.
26275	Lorini, D. B. (See Meucci, Antonio, assignor.)	New York, N. Y.	Valve-gear of steam-engines .....	Nov. 29, 1859.
23929	Loughborough, W. S. ....	Summerville, Mich.	Engine, rotary .....	May 10, 1859.
25904	Lount, Samuel D. ....	Columbus, S. C.	Presses, cotton .....	Oct. 25, 1859.
26072	Lovejoy, Charles N. ....	Boston, Mass.	Composition for detergent purposes .....	Nov. 8, 1859.
23692	Lovis, A., assignor to self and C. E. Hodges .....	Galena, Ill.	Shingle-machine .....	Apr. 19, 1859.
24316	Low, H. H. ....	Albany, N. Y.	Furnace grate-bars .....	June 9, 1859.
26372	Lowber, Charles A. ....	Medina, N. Y.	Cotton seed-hullers .....	Dec. 6, 1859.
23099	Lowe, Henry .....	Belleville, N. J.	Paper made from reeds .....	Mar. 1, 1859.
22881	Lowe, James A. ....	New York, N. Y.	Gun-lock .....	Feb. 8, 1859.
26506	Lowe, James A. ....	New York, N. Y.	Water-traps .....	Dec. 20, 1859.
25572	Lowe, James A. ....	New York, N. Y.	Moulding water-traps .....	Sept. 27, 1859.
25022	Lowe, Samuel W. ....	Philadelphia, Pa.	Milking cows, machines for .....	Aug. 9, 1859.
24811	Lowell, A. Henry .....	Manchester, Me.	Hose-coupling .....	July 19, 1859.
23034	Lowerree, T. W., <i>et al.</i> (See Dennisson, J. N., assignor.)	Pittsburgh, Pa.	Fire-plugs .....	Feb. 22, 1859.
23257	Lowry, Joseph L. ....	New York, N. Y.	Stereoscopes .....	Mar. 15, 1859.
22737	Loyth, M. F., <i>et al.</i> (See Rowell, Teller, & Lowth.)	Lenox, Mass.	Saw-teeth, cutting and setting .....	Jan. 25, 1859.
22506	Lyons, C. G. ....	Detroit, Mich.	Cars, railroad, sleeping .....	Jan. 4, 1859.
22506	Luce, Theodore, and John H. Morrison .....	Detroit, Mich.	Cars, railroad, sleeping .....	Jan. 4, 1859.



24566	Ludlow, William D.	New York, N. Y.	Cans, preserve.	June 28, 1859.
23380	Ludlum, Matthias.	Fairhaven, Vt.	Boat, life.	Mar. 29, 1859.
23447	Ludlum, Matthias.	Fairhaven, Vt.	Marine-safes, lockers, &c.	April 5, 1859.
24648	Ludlum, Matthias.	Fairhaven, Vt.	Water-tight doors for trunks.	July 5, 1859.
24472	Lun, James K.	Shookum Chuck, Wash. Ter.	Windmills.	June 21, 1859.
23100	Lunquest, John M.	Warren, R. I.	Pumps.	Mar. 1, 1859.
24813	Luther, H. H.	Logan, Ohio.	Harvesting-machines.	June 7, 1859.
25516	Lutz, George.	Carthage, N. Y.	Boilers, steam, water-indicator for.	Sept. 20, 1859.
22882	Lyman, L., I. P. Hodgkins, and E. Rawson.	East Hampton, Mass.	Staves from the block, machine for riving.	Feb. 8, 1859.
24317	Lynian, William.	Washington, D. C.	Shoe-sole.	June 7, 1859.
23593	Lynch, Edward.	Auburn, N. Y.	Boilers, steam.	April 5, 1859.
23594	Lyon, Benjamin M., deceased. (See McQuerns & Lyon.)	Seneca Falls, N. Y.	Mills, grinding.	May 3, 1859.
23850	{ Lyon, J. C., and	Auburn, N. Y.	Mills, grinding.	June 21, 1859.
24473	{ H. F. Phillips.	Seneca Falls, N. Y.	Marble, sawing-machines for.	Jan. 11, 1859.
22605	Lyon, James, assignor to J. J. Davis.	New York, N. Y.	Lock and detector.	Sept. 13, 1859.
25428	Lyon, John H.	New York, N. Y.	Propelling and steering apparatus.	May 24, 1859.
24129	Lyon, L. A., et al. (See Durfey, Delectus, assignor.)	Allegheny, Pa.	Steering-apparatus for barges in rivers.	Sept. 13, 1859.
24429	Lytle, Murdick.	Allegheny, Pa.	Watch-cases.	Feb. 22, 1859.
23035	Lytle, Murdick.	New York, N. Y.	Railway, crossings for.	Mar. 1, 1859.
23101	Mabile, Louis.	Philadelphia, Pa.	Life-preserving raft.	July 12, 1859.
23011	Mafferran, Samuel, and S. Kneass.	Rochester, N. Y.	Paper, mode of marking and ornamenting.	Mar. 22, 1859.
24747	Mack, A. G.	Boston, Mass.	Saddle-trees, machine for covering.	Oct. 18, 1859.
23304	Mackenzie, Thomas, and A. Trochler.	Newark, N. J.	Belt, mode of connecting and disconnecting machinery by means of.	May 31, 1859.
25867	Macknight, John L. (See Aregood & Ustick, assignors.)	Terre Haute, Ind.	Vessels, machine for unloading.	Nov. 1, 1859.
24220	Maclure, J., et al. (See Tompkins & Maclure.)	Fernandina, Fla.	Stoves.	Aug. 16, 1859.
25973	Maelure, John, assignor to self, Samuel E. Thomkins, and S. C. Northrup.	Lawrence, Mass.	Hats, ventilating.	May 17, 1859.
24220	Madison, Tendal A.	Philadelphia, Pa.	Musical notation for the blind.	Oct. 4, 1859.
25973	Magee, J. J.	New York, N. Y.	Packing wool, machine for folding and.	June 28, 1859.
25128	Magee, John.	Liverpool, Ohio.	Filter and purifier.	May 17, 1859.
24035	Maginnis, Arthur.	Pottsville, Pa.	Seeding-machines.	Sept. 13, 1859.
25657	Mahoney, Cornelius.	Wooster, Ohio.	Water-wheels, chute for horizontal.	Aug. 30, 1859.
24567	Main, William H.	Etna, N. Y.	Car-axles, railroad.	Nov. 22, 1859.
24036	Maingay, Robert A.	New York, N. Y.	Rudders, anti-friction support for the backs of.	May 17, 1859.
25403	Maize, Jaeb.	Providence, R. I.	Stoves.	Sept. 6, 1859.
25270	Mallery, Isaac.	Philadelphia, Pa.	Locomotives carrying their own railway, traction.	Nov. 22, 1859.
26194	Mallett, Edward J.	Troy, N. Y.	Hemp-brake.	May 31, 1859.
24037	Manchester, Albert H.	Laporte, Ind.	Gases, construction of valves for retarding and arresting the flow of.	Oct. 4, 1859.
25973	Mandel, Emanuel, et al. (See Jenkinson, James, assignor.)	Bristol, Conn.		
24037	Manhattan Fire-arms Manufacturing Company. (See Re-bety, Augustus, assignor.)			
25973	Manhattan Fire-arms Manufacturing Company. (See Gru-ler & Rebet, assignors.)			
25343	Manigle, Edward M.			
25195	Mann, Charles F.			
24264	Mann, Henry F., assignor to self and William I. Walker.			
25558	Manross, Newton S.			
	Mansfield & Sanborn. (See Sanborn & Mansfield.)			
	Mansfield, George A., et al. (See Goodspeed, Isaac, as- signor.)			



## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22660	Mansfield, Joseph	Jefferson, Wis.	Milk-coolers	Jan. 18, 1859.
22661	Mansley, Richard	Philadelphia, Pa.	Hemp-brakes	Jan. 18, 1859.
22662	Mansley, Richard	Philadelphia, Pa.	Oakum, machinery for tarring	Jan. 18, 1859.
26196	Mapes, J. J.	Newark, N. J.	Fertilizers	Nov. 22, 1859.
26507	Mapes, J. J.	Newark, N. J.	Fertilizers	Dec. 20, 1859.
24699	Marble, Lansing, assignor to self and Townsend North	Vassar, Mich.	Baskets, method of manufacturing	July 9, 1859.
25271	Marcy, E. E.	New York, N. Y.	Caoutchouc, curing and treating	Aug. 30, 1859.
25272	Marcy, E. E.	New York, N. Y.	Caoutchouc, curing and treating	Aug. 30, 1859.
25273	Marcy, E. E.	New York, N. Y.	Caoutchouc, curing and treating	Aug. 30, 1859.
26358	Marcy, E. E.	New York, N. Y.	Rubber fabrics, India	Dec. 6, 1859.
26359	Marcy, E. E.	New York, N. Y.	Rubber fabrics, India	Dec. 6, 1859.
26360	Marcy, E. E.	New York, N. Y.	Rubber fabrics, India	Dec. 6, 1859.
24474	Marcy, Perry	Tunckhamock, Pa.	Potato-diggers	June 21, 1859.
23851	Marcellus, Henry	Amsterdam, N. Y.	Harvesting-machines	May 3, 1859.
23930	Marcher, Robert	New York, N. Y.	Metal-leaf, or mouldings, &c., apparatus for laying	May 10, 1859.
24319	Marcher, Robert	New York, N. Y.	Burnishing mouldings	June 7, 1859.
24879	Marcher, Robert	New York, N. Y.	Enameling mouldings, machine for	July 26, 1859.
26508	Margerum, Robert	Trenton, N. J.	Straps, clasp for hitching	Dec. 20, 1859.
23182	Maris, Norris, et al. (See Hamer, James A., assignor.)	Monmouth, Ill.	Cultivators	Mar. 8, 1859.
23183	Markham, Daniel, and A. S. & D. Eldrid.	Monmouth, Ill.	Seeding-machines	Mar. 8, 1859.
25129	Markham, Daniel, and A. S. & D. Eldrid.	Penfield, Mich.	Tuyere	Aug. 16, 1859.
26601	Markham, Joseph P.	Winchester, Ill.	Excavating-machine	Dec. 27, 1859.
26601	Markillie, Thomas R.	Line Lexington, Pa.	Propeller	May 24, 1859.
24130	Markley, Levi H.	Cincinnati, Ohio.	Lamps	Aug. 30, 1859.
25304	Marlow, George, and Michael Ralph, assignors to J. D. Brown, W. C. Valette, and G. Marlow.	Bloomington, Ind.	Music for the blind, apparatus for setting and copying	Dec. 6, 1859.
26361	Marquis, Emanuel	Detroit, Mich.	Gas-retorts	May 17, 1859.
24038	Marsh, Alfred	Detroit, Mich.	Gas-retorts, method of preventing deposition of carbon in	Oct. 11, 1859.
25790	Marsh, Alfred, assignor to John Q. Dudley	New Milford, Conn.	Sewing-machines	Feb. 15, 1859.
22961	Marsh, Clark	Cincinnati, Ohio.	Water-meter	Apr. 26, 1859.
23772	Marsh, Nathan B.	Cincinnati, Ohio.	Hydrants	Oct. 4, 1859.
25660	Marsh, R. L. T., and W. G. Goodale. (See Goodale & Marsh.)	Boston, Mass.	Grain, apparatus for stirring and delivering	Oct. 11, 1859.
25745	Marsh, Sylvester	Washington, D. C.	Fire-arm, breech-loading	Dec. 6, 1859.
26362	Marsh, Samuel W.	New York, N. Y.	Piano-forte actions	Aug. 30, 1859.
25305	Marschall, Theodore, assignor to Lighte & Bradbury	Vicksburgh, Miss.	Printing addresses on newspapers, &c., apparatus for	Nov. 1, 1859.
25974	Marshall, C. K.	Cincinnati, Ohio.	Coffins	Oct. 4, 1859.
25659	Marshall, George E., et al. (See Crocker & Marshall.)	Millbury, Mass.	Fire-arms, breech-loading	Oct. 4, 1859.
25661	Marshall, H.	Lowell, Mass.	Electro-magnetic currents, constant or intermittent, device for making	Aug. 29, 1859.
25023	Marshall, J. Plympton			
25023	Marshall, Moses			



23036	Marshall, Samuel.....	Wilmington, Del.....	Carriages, curtain-lock for.....	Feb. 22, 1859.
24649	Marshall, Simeon, <i>et al.</i> (See Butterfield & Marshall.)	Trenton, N. J.....	Buckles.....	July 9, 1859.
23693	Marshall, William M. (See Kitchen, Pearson B.)	New York, N. Y.....	Mill, cob and grain.....	Apr. 19, 1859.
22963	Marston, John R.....	Lawrence, Mass.....	Stoves.....	Feb. 15, 1859.
22963	Martin, David N.....	Waterbury, Conn.....	Alloys.....	Aug. 23, 1859.
22813	Martin, Eugene.....	Louisville, Ky.....	Barrels, tools for crozing and chamfering.....	Feb. 1, 1859.
23595	Martin, Henry.....	Louisville, Ky.....	Boat, life, folding.....	April 12, 1859.
22814	Martin, J. B.....	Wilmington, N. C.....	Furnaces, apparatus for increasing the draft of.....	Feb. 1, 1859.
22965	Martin, James F., and Henry C. Nicholson.....	Mount Washington, Ohio.....	Staves, preserve.....	Feb. 15, 1859.
23562	Martino, John, assignor to D. Stuart and Richard Peterson.....	Philadelphia, Pa.....	Stoves.....	Sept. 6, 1859.
22564	Marvin, John.....	Bellport, N. Y.....	Carpenters, taper-gauge for.....	Jan. 11, 1859.
23478	Marx, Jacob.....	New York, N. Y.....	Refrigerator.....	April 5, 1859.
23883	Maseher, John F.....	Philadelphia, Pa.....	Clocks, alarm.....	Feb. 8, 1859.
22344	Mason, Alvin C.....	Springfield, Vt.....	Wiring the joints of clothes-pins, machines for.....	Sept. 6, 1859.
22663	Mason, Benjamin A.....	Newport, R. I.....	Horse-shoe nail machine.....	Jan. 18, 1859.
26441	Mason, Benjamin A.....	Newport, R. I.....	Cutting railway-bars, machine for.....	Dec. 13, 1859.
24475	Massey, James.....	Thomasville, Ga.....	Mills, cotton-gins, &c., construction of driving-shafts for.....	June 21, 1859.
24784	Masury, John W.....	New York, N. Y.....	Paint-cans, &c.....	July 5, 1859.
24519	Mathews, S. R. C., <i>et al.</i> (See Race & Mathews.)	Boston, Mass.....	Gauges for steam-boilers, water.....	June 21, 1859.
26550	Mathewson, C. A., <i>et al.</i> (See Cogswell & Mathewson.)	New York, N. Y.....	Piano-forte action.....	Dec. 20, 1859.
24131	Mathushek, Frederick, assignor to self and Wellington Wells.....	York, Pa.....	Handles, plough, method of forming.....	May 25, 1859.
23596	Mathew, David, <i>et al.</i> (See Cameron & Matthew.)	New York, N. Y.....	Carpet-bags.....	April 12, 1859.
26115	Mathews, George W.....	Meriden, Conn.....	Piteher, beer.....	Nov. 15, 1859.
23103	Mathews, I. M.....	Boston, Mass.....	Caoutchouc.....	Mar. 1, 1859.
22508	Mathews, William J. (See Johnson, Hezekiah.)	Conrad's Store, Va.....	Harvesters, corn.....	Jan. 4, 1859.
22507	Mattson, Morris.....	Philadelphia, Pa.....	Alarm, railway.....	Jan. 4, 1859.
23746	Mauck, R. C.....	Danville, Pa.....	Planters, seed.....	Oct. 11, 1859.
23305	Maule, Henry.....	New Carlisle, Ind.....	Motive-power.....	Mar. 22, 1859.
23597	Maurer, Andreas.....	New York, N. Y.....	Lath, metallic.....	April 12, 1859.
25662	Maus, Charles.....	Indianapolis, Ind.....	Prisons, construction of.....	Oct. 4, 1859.
26363	Mauterstock, Joseph W.....	Indianapolis, Ind.....	Sanding painted surfaces, apparatus for.....	Dec. 6, 1859.
24812	May, Edwin.....	Beverly, N. J.....	Separators, grain.....	July 19, 1859.
22884	May, Edwin. (See MeLean, James W., assignor.)	Columbus, Ga.....	Paddle-wheels.....	Feb. 1, 1859.
22964	May, Franklin I.....	Janesville, Wis.....	Wind-mills.....	Feb. 15, 1859.
22965	May, John M.....	Janesville, Wis.....	Wind-mills.....	Feb. 15, 1859.
23207	May, John M.....	Janesville, Wis.....	Pumps.....	Aug. 23, 1859.
23208	May, John M.....	Janesville, Wis.....	Pumps.....	Aug. 23, 1859.
22606	Mayall, Thomas J., assignor to self and George N. Davis.....	Roxbury, Mass.....	Emery-wheels and steks, manufacture of.....	Jan. 11, 1859.
22607	Mayall, Thomas J., assignor to self and Benjamin F. Cooke.....	Roxbury, Mass.....	Draw-car and bumper, elastic.....	Jan. 11, 1859.
23773	Mayall, Thomas J.....	Roxbury, Mass.....	Rubber, vulcanized, treatment of.....	April 26, 1859.
24039	Mayall, Thomas J.....	Roxbury, Mass.....	Composition for emery-sticks and wheels.....	May 17, 1859.
24221	Mayall, Thomas J.....	Roxbury, Mass.....	Sinks, water-tight.....	May 31, 1859.
24476	Mayall, Thomas J.....	Roxbury, Mass.....	Drainage-pipe.....	June 21, 1859.
25747	Mayall, Thomas J.....	Roxbury, Mass.....	Cautehouse, method of combining emery with.....	Oct. 11, 1859.



*Patentees of inventions and designs, 1859.*

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25841	Mayall, Thomas J	Roxbury, Mass.	Composition of emery for grinding and polishing tools	Oct. 18, 1859.
26197	Mayall, Thomas J	Roxbury, Mass.	Seythe-rifles	Nov. 2, 1859.
26276	Mayall, Thomas J	Roxbury, Mass.	Hose, manufacture of water-proof.	Nov. 29, 1859.
26277	Mayall, Thomas J	Roxbury, Mass.	Steels	Nov. 29, 1859.
26278	Mayall, Thomas J	Roxbury, Mass.	Packing and tubing, manufacture of	Nov. 29, 1859.
26503	Mayall, Thomas J	Roxbury, Mass.	Rubber-belt, apparatus for forming.	Dec. 27, 1859.
24813	Maydole, James H	Eaton, N. Y.	Stoves, foot	July 19, 1859.
24814	Mayor, Isaac C	Jersey, N. J.	Skins, machines for turning	July 19, 1859.
23931	Mayhew, T	Poughkeepsie, N. Y	Railroad-switch	May 10, 1859.
22565	Maynard, Edward	Washington, D. C.	Cartridge-cases, metallic	Jan. 11, 1859.
25663	Maynard, Edward	Washington, D. C.	Fire-arm, back-sight for	Oct. 4, 1859.
25664	Maynard, Edward	Washington, D. C.	Fire-arm, nipples of	Oct. 4, 1859.
26364	Maynard, Edward	Washington, D. C.	Fire-arm, breech-loading	Dec. 6, 1859.
23102	Maynard, Edward	Brooklyn, N. Y.	Carriage-springs	Mar. 1, 1859.
22952	Maynard, Edward, assignor to self, R. K. Slaughter, and Thomas E. Purdy	New York, N. Y.	Electrodes for short distances, submerged spiral, method of covering with fibrous material.	Feb. 8, 1859.
24568	Maynard, Gardiner	Iliou, N. Y.	Cultivator-teeth	June 29, 1859.
24132	Mayo, W. S.	New York, N. Y.	Metallic-pipe	May 25, 1859.
24320	Mayo, W. S.	New York, N. Y.	Bricks, machines for finishing	June 7, 1859.
25975	Mayhofer, John	New York, N. Y.	Process of preparing paper-pulp	Nov. 1, 1859.
25840	Maxson, Frank	San Francisco, Cal	Analgamator	Oct. 18, 1859.
24133	Maxson, William P	Albion, Wis.	Fastener, bag	May 25, 1859.
25130	Maxwell, Rufus	St. George, Va	Raek, towel	Aug. 16, 1859.
26602	Maxwell, V. L.	Wilkesbarre, Pa.	Powder, gun, manufacture of	Dec. 21, 1859.
25131	McAlec, Charles H.	Chambersburg, Pa.	Harvesters, binding-apparatus for	Aug. 16, 1859.
25748	McAlec, Charles H.	Chambersburg, Pa.	Harvesters	Oct. 11, 1859.
23932	McAllister, William	South Reading, Mass	Wind-mills	May 10, 1859.
23184	McAvoy, H. L.	Baltimore, Md.	Refrigerator	Mar. 8, 1859.
24134	McBean, Thomas	Fowlerville, N. Y.	Egg-beater	May 25, 1859.
22738	McBride, William C	Raritan, N. J.	Flax, machinery for scutching	Jan. 25, 1859.
22566	McBurney, Charles	Hope, N. J.	Hose-pipe, India-rubber	Jan. 11, 1859.
23479	McBurney, Charles	Hope, N. J.	Boots and shoes, India-rubber soles for	April 5, 1859.
24222	McBurney, Charles	Hope, N. J.	Hose, suction	May 31, 1859.
24321	McBurney, Charles	Hope, N. J.	Rubber blankets or aprons, used in the printing of fabrics, books, &c., manufacture of India.	June 14, 1859.
24569	McBurney, Charles	Roxbury, Mass.	Pistons, packing for stuffing-boxes in	June 28, 1859.
22567	McCans, Alexander B.	Ashley, Mo.	Shingles from the bolt, machine for sawing	Jan. 11, 1859.
24815	McCarthy, E. J.	Saugerties, N. Y.	Furnace-grates	July 19, 1859.
24223	McClintock, W. H.	Frankfort, Ohio	Churn	May 31, 1859.
25977	McCluer, George, et al. (See Redington & McCluer)	Mobile, Ala.	Ambrotypes, method of mounting	Nov. 1, 1859.
25665	McClure, John S	South Boston, Mass.	Skates	Oct. 4, 1859.
	McColloch, Northrup, et al. (See Cavanaugh, F. P., ass'r.)			



22966	McCollum, H., and F. C. Treadwell. (See Treadwell & McCollum.)	New York, N. Y.	Cracker-machine	Feb. 15, 1859.
23480	McCollum, John	Philadelphia, Pa.	Sandals	April 5, 1859.
25547	McConnell, William	Centralia, Ill.	Sounding-apparatus, deep-sea	Sept. 20, 1859.
	McCord, George W., assignor to self, J. F. Lobdell, and P. V. N. Davis.			
26442	McCorkle, John, <i>et al.</i> (See Paynter, John, assignor.)	Darby Creek, Ohio	Planters, corn	Dec. 13, 1859.
23984	McCune, O. C.	Brooklyn, N. Y.	Stitches, single-thread	May 10, 1859.
24395	McCurdy, James S., assignor to Elias Howe, jr.	Brooklyn, N. Y.	Sewing-machines	June 14, 1859.
26234	McCurdy, James S.	Brooklyn, N. Y.	Sewing-machines	Nov. 22, 1859.
24040	McCurdy, James S., assignor to J. M. Myers.	Brooklyn, N. Y.	Sewing level surfaces, machine for	May 17, 1859.
22976	McDairmid, John	Mott Haven, N. Y.	Dove-tailing machine	Feb. 15, 1859.
25431	McDonald, W. A.	Mott Haven, N. Y.	Dove-tailing machine	Sept. 13, 1859.
25749	McDowell & Leibrandt. (See Neale, Charles, assignor.)			
25750	McDougall, J.	Masonville, Mich.	Belting, India-rubber, mode of forming joints in	Oct. 11, 1859.
25024	McDougall, S. F.	New York, N. Y.	Ticket-holder, traveller's	Oct. 11, 1859.
24041	McEwce, William	Shelbyville, Ind.	Safe, kitchen	Aug. 9, 1859.
25842	McEvoy, Charles A.	Richmond, Va.	Seals, metallic	May 17, 1859.
25507	McEvoy, Charles A.	Richmond, Va.	Seals, for letters, &c., metallic	Oct. 18, 1859.
26279	McFarland, Owen, <i>et al.</i> (See Stemple, Adolph, assignor.)	Brooklyn, N. Y.	Gas-holder, portable	Sept. 27, 1859.
22477	McFarlan, Joseph, assignor to James McFarlan, jr., and E. McFarlan.			
26279	McGaughy, A. E. and S. N.	Bastedo, Minn.	Ploughs, steam	Nov. 29, 1859.
22477	McGeorge, H. D., and D. S. Greer	Morgantown, Va.	Harvesters, corn and cane	June 21, 1859.
22968	McGreevey, D., and P. J. Ankney. (See Ankney & McGreevey.)			
22968	McKay, G.	Boston, Mass.	Printing-presses	Feb. 15, 1859.
24224	McKeena, Robert	Rossville, Tenn.	Time-registers, device for operating the index of	May 31, 1859.
22969	McKenny, Henry H., and F. Gotl	Biddeford, Me.	Fire-arm, repealing	Feb. 15, 1859.
25025	McKenzie & Southworth. (See Monroc, James W.)			
24135	McKinney, E.	Montgomery, Ohio.	Seeding-machine	Aug. 9, 1859.
24322	McKnown, Joseph	Geardstown, Va.	Planters, seed	May 24, 1859.
25751	McLaughlin, Daniel, <i>et al.</i> (See White, Lewis, assignor.)			
26039	McLean, I. W.	Lebanon, Ind.	Harrow, rotary	June 14, 1859.
26397	McLean, James P.	New York, N. Y.	Skates	Oct. 11, 1859.
26604	McLean, James W., assignor to self and Edwin May	New York, N. Y.	Abdominal-corsets	Nov. 1, 1859.
24179	McLendon, William	Indianapolis, Ind.	Ploughs, steam	Dec. 6, 1859.
23744	McLeod, M. N., assignor to Carroll E. Gray.	Greenville, Ga.	Gins, cotton	Dec. 27, 1859.
24749	McLean, Sherman, assignor to American Trades Co.	St. Louis, Mo.	Hose-coupling	May 24, 1859.
25036	McLean, Ward, <i>et al.</i> (See Aincs, Nathan, assignor.)	Royalton, N. Y.	Saw-jointer	April 19, 1859.
26040	McMahon, A. A.	Oxford, Miss.	Augers, earth-boring	July 12, 1859.
26280	McMillan, J. B.	Tipton, Ind.	Planters, seed	Aug. 9, 1859.
22568	McNamee, James	Easton, Pa.	Knife-cleaner	Nov. 9, 1859.
22815	McNeely, James H.	Indianapolis, Ind.	Telegraph-poles, means of climbing	Nov. 29, 1859.
24136	McNeill, Thomas E.	Philadelphia, Pa.	Car-seats, railroad	Jan. 11, 1859.
24225	McNeill, Thomas E.	Philadelphia, Pa.	Cars, sleeping	Feb. 1, 1859.
25905	McNeill, Thomas E.	Philadelphia, Pa.	Cars, sleeping, seats and couches for	May 24, 1859.
23531	McNeven, John	Philadelphia, Pa.	Cars, railroad, seats and couches for	May 31, 1859.
24226	McNiece, William, assignor to Walter Cresson	Brooklyn, N. Y.	Skirt-supporter	Oct. 25, 1859.
	McPherson, John	Conshohocken, Pa.	Saws, hand, gauging device attached to	April 5, 1859.
		Pennington, N. J.	Harvesting-machines	May 31, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23222	McQuerns, Samuel, and W. Lyon, administrator of Benjamin M. Lyon, deceased.	Abbeville, S. C.	Bedstead	Mar. 8, 1859.
25843	McQuinston, Thomas.	Morning Sun, Ohio.	Cultivators	Oct. 18, 1859.
24846	McRea, A. P., et al. (See Decker, James, assignor.)	Philadelphia, Pa.	Cars, railroad, journal-boxes for.	July 19, 1859.
22970	McWilliams, Roberts, assignor to Samuel W. Hoffman	Philadelphia, Pa.	Casters, cruetts or bottles for.	Feb. 15, 1859.
25345	Mead, John O.	Port Byron, N. Y.	Cars, railroad, brakes for.	Sept. 6, 1859.
25573	Mead, Thomas J.	Middletown, N. Y.	Stoves, cooking	Sept. 27, 1859.
23985	Mealey, Daniel P., assignor to self and A. E. II. Johnson.	Washington, D. C.	Ships' boats, device for suspending and liberating.	May 10, 1859.
25844	Mears, John H., and George Cameron.	Oshkosh, Wis.	Car-coupling	Oct. 18, 1859.
24650	Megaw, Jarrett	Wilmington, Del.	Pumps, rotary	July 15, 1859.
23185	Mcigs, Josiah V.	Nashville, Tenn.	Stoves, cooking.	Mar. 8, 1859.
24323	Meigs, M. C., and Samuel J. Recves.	Washington, D. C.	Roofs, bridges, &c., truss for	June 7, 1859.
23481	Melendy, O. H.	Delhi, Iowa	Seeding-machines	April 5, 1859.
	Mellon & Wallace. (See Wallace & Mellon.)			
24227	Melton, Reuben M.	Criglersville, Va.	Cultivators	May 31, 1859.
22533	Mendenhall, Stephen C., assignor to Isaac Lamb	Richmond, Ind.	Looms	Jan. 4, 1859.
24750	Menge, Anton	Pointe a la Hache, La	Dredging-machine	July 12, 1859.
23482	Menzell, Gregor	Milwaukee, Wis.	Boilers, steam	April 5, 1859.
26605	Mercer, James T.	Calais, Ohio	Planters, seed	Dec. 27, 1859.
22816	Merrihew, C. A., and G. L. Patterson.	Frankfort, Ky.	Pots, coffee	Feb. 1, 1859.
	Merrick, Phineas E., et al. (See Everts, Harry H., ass'r.)			
	Merrick, Silas, and John Miner. (See Miner & Merrick.)			
26041	Merrill, A. N.	Batavia, Ill.	Seeding-machines	Nov. 8, 1859.
24396	Merrill, H. T.	Galena, Ill.	Musical instruments	June 14, 1859.
23306	Merrill, James H.	Baltimore, Md.	Cannon, breech-loading	Mar. 22, 1859.
23896	Merrill, James O., assignor to William A. Swain	Chichester, N. H.	Churn	May 10, 1859.
24397	Merrill, Rufus S.	Lynn, Mass.	Lamps	June 14, 1859.
24478	Merriman, A. T.	Chicago, Ill.	Stone, machines for sawing	June 21, 1859.
24354	Merritt, Ira, assignor to self and L. S. Merritt.	Boston, Mass.	Shoe-knives	June 7, 1859.
23810	Mershon, Ralph S., assignor to self and John M. Harper	Philadelphia, Pa.	Time-keepers, regulators for	April 26, 1859.
24265	Messer, Henry, assignor to Charles Rice	Roxbury, Mass.	Threads, machine for cutting India-rubber into	June 7, 1859.
24042	Messenger, Charles	Warren, Ohio	Seeding-machines	May 17, 1859.
24880	Messenger, Charles	Warren, Ohio	Bedsteads	July 26, 1859.
22739	Meucci, Antonio, assignor to D. B. Lorini	Clifton, N. Y.	Candles, manufacture of	Jan. 25, 1859.
23381	Meyer, Charles	Fond-du-Lac, Wis.	Auger, expanding	Mar. 29, 1859.
24945	Meyer, Frederick	Napierville, Ill.	Grain, machine for cutting and binding	Aug. 2, 1859.
26116	Meyer, Louis	Columbus, Ga.	Table, extension	Nov. 15, 1859.
	Migeon, Henry. (See Bandelot, Jean Louis.)			
22750	Milbills, U. D.	Hartford, Wis.	Heating-apparatus	Jan. 25, 1859.
23220	{ Miles, George W., and P. P. Lane, assignors to Lane & Bodley	Michigan City, Ind. Cincinnati, Ohio	Hewing out hubs, machine for	Mar. 8, 1859.
24479	Miles, Purches	New Britain, Conn.	Curtain-fixtures, window	June 21, 1859.
22741	Milhouse, William H.	Sugartown, Pa.	Washing-machine	Jan. 25, 1859.
26509	Millar, Charles	Utica, N. Y.	Screws, wood	Dec. 20, 1859.



24081	Miller, Warren, assignor to self and John Nutt.	Chicago, Ill	Sewing-machines.	May 17, 1855.
23037	Millard, David, <i>et al.</i> (See Bronson, George H., assignor.) Miller, A.	Cleveland, Ohio	Gauge, water, for steam-boilers.	Feb. 22, 1859
25027	Miller, A. (See Cox & Miller.) Miller, Adam.	Mt. Pleasant, Iowa	Draining-machine, underground.	Aug. 9, 1859.
25845	Miller, Adam.	Mt. Pleasant, Iowa	Plough, mole.	Oct. 18, 1859.
25028	Miller, Alexander.	Newbern, N. C.	Mill-stones, drivers for.	Aug. 9, 1859.
25517	Miller, Augustus.	Grafton, Ohio	Soap, method of making.	Sept. 20, 1859.
23852	Miller, Charles.	Belleville, Ill	Engine, rotary.	May 3, 1859.
24355	Miller, Charles, assignor to Henry Danford.	St. Louis, Mo	Gas-burners, spirit.	June 9, 1859.
23645	Miller, Charles, and Thompson W. Decker, assignors to T. W. Decker.	New York, N. Y.	Files, cutting.	April 12, 1859.
26462	Miller, Charles, assignor to George Richards.	New York, N. Y.	Sewing-machines.	Dec. 13, 1859.
23307	Miller, E.	Janesville, Wis	Stamp, post office hammer.	Mar. 22, 1859.
25432	Miller, Edmund and Benjamin. Miller, E. P., <i>et al.</i> (See Whitte, L., assignor.)	Rising Sun, Ind.	Cultivators.	Sept. 13, 1859.
24356	Miller, Felix, and Alois Wirselsing, assignors to Felix Miller and W. H. Hayden.	New York, N. Y.	Photographic cameras, diaphragm for.	June 7, 1859.
26510	Miller, George, and C. M. Andrews.	Providence, R. I.	Leather-washers.	Dec. 20, 1859.
25433	Miller, Henry.	Grafton, Va	Shingle-machine.	Sept. 13, 1859.
25752	Miller, Henry, and J. Reamer. (See Reamer & Miller.)	Irwin, Ohio	Locomotive, horse-power.	Oct. 11, 1859.
25703	Miller, James C.	Union, Ohio	Drains, lining under-ground.	Oct. 4, 1859.
24137	Miller, James C. and S. A., and Gilbert H. Clemens.	Bucyrus, Ohio	Axles, attaching thills to.	May 24, 1859.
26042	Miller, John H., and Samuel Albright.	Grafton, Va	Gas-apparatus, portable.	Nov. 8, 1859.
26567	Miller, Lebbeus B., assignor to A. D. Crane, D. F. Tompkins, L. B. Miller, C. T. Tompkins, and Daniel Holsman.	Newark, N. J.	Forms, machine for turning irregular.	Dec. 27, 1859.
25906	Miller, L. H.	Baltimore, Md.	Iron-safes, doors for.	Oct. 25, 1859.
24700	Miller, Lewis and Jacob, assignors to C. Aultman & Co.	Canton, Ohio	Harvesters.	July 5, 1859.
26281	Miller, Reuben.	Pittsburg, Pa	Engine, steam, cut-off apparatus for.	Nov. 30, 1859.
23853	Miller, Warren P.	Marysville, Cal	Ploughs, &c., locomotive for propelling.	Nov. 3, 1859.
24946	Miller, Warren P.	Marysville, Cal	Excavating and grading machine.	Aug. 2, 1859.
22885	Miller, William K.	Canton, Ohio	Harvesters.	Feb. 8, 1859.
25753	Milliken, George F.	Somerville, Mass	Alarm, burglar, electro-magnetic.	Oct. 11, 1859.
24651	Millington, Norman, <i>et al.</i> (See Simmons, George W. and George H., assignors.)	Lancaster, Ohio	Car-couplings, railroad.	July 5, 1859.
24570	Mills, Temple, & Stout. (See Temple, John, assignor.)	New York, N. Y.	Pulverizing minerals, machines for.	June 28, 1859.
22817	Mills, Samuel and George E.	Galesburg, Mich.	Clover-pickers.	Feb. 1, 1859.
24430	Mills, William T.	Cincinnati, Ohio	Spinning-tops.	June 14, 1859.
26282	Millward, Francis, assignor to Henry Homan, William L. Thomas, and Dexter H. Hardy.	New Brighton, Pa.	Cars, railroad.	Nov. 29, 1859.
24398	Milward, J. F. (See Bennett, Richard, assignor.)	Hartford, Conn	Carriage bodies, hanging.	June 14, 1859.
22971	Miner, John, and Silas Merrick.	Meadville, Pa.	Axles, preventing friction on.	Feb. 15, 1859.
26043	Minnis, Theodore S., and Thomas S.	New York, N. Y.	Skirts.	Nov. 8, 1859.
26365	Minzsheimer, Charles.	Jackson, Tenn.	Car-brakes, mode of operating.	Dec. 6, 1859.
26511	Mitchell, George W.	Jackson, Tenn.	Sewing-machines, shuttles for.	Dec. 20, 1859.
26366	Mitchell, George W.	Jackson, Tenn.	Sewing-machines.	Dec. 6, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23186	Mitchell, Jeremiah	Gosport, N. Y.	Churn	Mar. 8, 1859.
23104	Mitchell, John G.	Collington, Md.	Motive-power	Mar. 1, 1859.
23382	Mitchell, John G.	Collington, Md.	Planters, corn	Mar. 29, 1859.
25434	Mitchell, Jonathan H.	Germanstown, Tenn.	Cotton-scrapers	Sept. 13, 1859.
25033	Mitchell, Mathew	Altona, Ill.	Planters, corn	Aug. 9, 1859.
24571	Mitchell, N. O. (See Elwell, William, assignor.)	Lansingburg, N. Y.	Handles, hair-brush, machine for finishing	June 28, 1859.
25132	Mitchell, Thomas	San Francisco, Cal.	Movement, rotary	Aug. 16, 1859.
25666	Mitchell, William Howard	San Francisco, Cal.	Window-sash supporter	Oct. 4, 1859.
25318	Mix, G. I.	Wallingford, Conn.	Iron spoons, manufacture of	Sept. 20, 1859.
24228	Mock, James R.	Elizabethtown, Ky.	Fire-arms, lock for repeating	May 31, 1859.
24138	Moeschlin, John F., et al. (See Teudler, William H., assignor.)	Piqua, Ohio	Threshing-machines	May 24, 1859.
26283	Moffitt, J. R.	Piqua, Ohio	Separators, grain	Nov. 29, 1859.
23933	Moltrup, James C.	Bucyrus, Ohio	Ploughs	May 10, 1859.
25704	Molyneux, James, assignor to the Bordentown Machine Co.	Bordentown, N. J.	Dredging-machine, rotary	Oct. 4, 1859.
23934	Monach, James	Rahway, N. J.	Hats, manufacture of felt	May 10, 1859.
25606	Monaghan, Peter	Canak, Ga.	Cultivators, cotton	Dec. 27, 1859.
25209	Monier, Hyppolyte	Paris, France	Gas-burners, argand	Aug. 23, 1859.
22742	Monroe, B. F. S.	Utica, N. Y.	Bed-bottom	Jan. 25, 1859.
23694	Monroe, James F. and	Fitchburg, Mass.	Egg-beater	April 19, 1859.
22664	E. P. Monroe, assignors to E. P. Monroe.	New York, N. Y.	Lamps, holders for	Jan. 11, 1859.
23039	Monson, Charles	Brooklyn, N. Y.	Separators, grain	Feb. 22, 1859.
23038	Montgomery, Henry, and Simcon Howes	New York, N. Y.	Pavement, corrugated-iron	Feb. 22, 1859.
23105	Montgomery, James	New York, N. Y.	Vessels, steam, construction of	Mar. 1, 1859.
23188	Montgomery, James	New York, N. Y.	Pavement, iron	Mar. 8, 1859.
23189	Montgomery, James	New York, N. Y.	Pavement, iron	Mar. 8, 1859.
23598	Montgomery, James	New York, N. Y.	Propeller, screw	April 12, 1859.
24947	Montgomery, John A.	Williamsport, Pa.	Journal-boxes	Aug. 2, 1859.
24229	Montgomery, Richard	New York, N. Y.	Beams, corrugated, manufacture of	May 31, 1859.
25210	Montgomery, Richard	New York, N. Y.	Bridges, corrugated-iron	Aug. 23, 1859.
22565	Montgomery, Richard	New York, N. Y.	Pavement and railroad-track, mode of constructing combined street.	Jan. 18, 1859.
23599	Montgomery, Richard	New York, N. Y.	Metal plates, machine for corrugating	April 12, 1859.
23774	Montgomery, Richard	New York, N. Y.	Metal, machine for corrugating sheet	April 26, 1859.
24043	Montgomery, Richard	New York, N. Y.	Excavator, screw	May 17, 1859.
24480	Montgomery, Richard	New York, N. Y.	Metallic sheets, corrugating	June 21, 1859.
24882	Montgomery, Richard	New York, N. Y.	Metal plates, waved and corrugated, machines for manufacturing	July 26, 1859.
24883	Montgomery, Richard	New York, N. Y.	Metal plates, waved and corrugated, machines for manufacturing	July 26, 1859.
26367	Montgomery, Richard	New York, N. Y.	Ships, iron	Dec. 6, 1859.



26607	Montgomery, Richard.	New York, N. Y.	Rolling corrugated metal.	Dec. 27, 1859.
23133	Montjoy, George I., and J. B. Sawyer.	Houston, Tex.	Engine, rotary steam.	Aug. 16, 1859.
24324	Moody, James S.	Cincinnati, Ohio	Sewing-machines.	June 9, 1859.
	Moore & Dunklee. (See Dunklee & Moore.)			
25211	Moore, Benjamin F.	New York, N. Y.	Bustles, ladies.	Aug. 16, 1859.
24399	Moore, Eli.	Slabtown, S. C.	Ploughs.	June 14, 1859.
24520	Moore, H. K., assignor to A. W. Adams, G. W. Dane, and W. G. Howe.	Malden, Mass.	Gauges for steam boilers, water.	June 21, 1859.
23775	Moore, Hiram W.	Jersey City, N. J.	Locomotive-wheels, mode of chilling-rims for.	April 26, 1859.
23383	Moore, J. A., and A. H. Patch.	Louisville, Ky.	Harvesters.	Mar. 29, 1859.
24230	Moore, Mordecai R.	Philadelphia, Pa.	Lumber, apparatus for seasoning.	May 31, 1859.
25029	Moore, Samuel C.	Providence, R. I.	Skirts, hoops for skeleton.	Aug. 9, 1859.
25907	Moore, Thomas.	Minneapolis, Min.	Steam, apparatus for generating.	Oct. 25, 1859.
23258	Moore, Willis E.	Crawfordsville, Ind.	Ordnance, loading.	Mar. 15, 1859.
23259	Moore, Willis E.	Crawfordsville, Ind.	Car-brakes.	Mar. 15, 1859.
25030	Moran, Oliver P.	Haynesville, Mo.	Fence, portable, device for holding together the pannels of.	Aug. 9, 1859.
26044	Moran, Oliver P.	Haynesville, Mo.	Planters, corn.	Nov. 8, 1859.
24751	More, F. O.	Bellefontaine, Ohio	Cans, preserve.	July 12, 1859.
26512	Moray, Amos B.	St. Louis, Mo.	Scales, platform.	Dec. 20, 1859.
25754	Morgan, B. S.	Delhi, Iowa.	Cultivator.	Oct. 11, 1859.
22569	Morgan, George.	Brooklyn, N. Y.	Stone-cutting machine.	Jan. 11, 1859.
23260	Morgan, George W.	Prattsburg, N. Y.	Motive-power, mode of applying springs as a.	Mar. 15, 1859.
23187	Morgan, William F.	Rochester, N. Y.	Shearing sheep.	Mar. 8, 1859.
24652	Morrel, Z. N.	Cameron, Tex.	Planting cotton seed, machines for.	July 5, 1859.
24752	Morrel, Z. N.	Cameron, Tex.	Oven, portable.	July 12, 1859.
24816	Morrel, Z. N.	Cameron, Tex.	Excavating and grading machines.	July 19, 1859.
25574	Morrel, Z. N.	Cameron, Tex.	Fertilizers, machines for distributing.	Sept. 27, 1859.
23384	Morret, Samuel.	West Penusborough, Pa.	Cans, preserve.	Mar. 29, 1859.
22972	Morrill, A. R.	Northfield, Vt.	Carriges, railroad wheels for.	Feb. 15, 1859.
26368	Morrill, Oscar F.	Boston, Mass.	Broiling apparatus.	Dec. 6, 1859.
24884	Morris, Daniel.	Bangor, Maine.	Shirt-studs.	July 26, 1859.
	Morris, S. B., <i>et al.</i> (See Goolman, W. P., assignor.)			
26463	Morrison, E. R., assignor to S. C. Hills.	Brooklyn, N. Y.	Shingle-machine.	Dec. 13, 1859.
25846	Morrison, John.	De Witt, Ill.	Plough, mole.	Oct. 18, 1859.
	Morrison, John H., and Theodore Luce. (See Luce & Morrison.)			
26198	Morrison, William.	Carlisle, Pa.	Harvesters.	Nov. 22, 1859.
25435	Morrison, William.	Carlisle, Pa.	Planters, corn.	Sept. 13, 1859.
25755	Morrison, William A.	Mott Haven, N. Y.	Brush and scraper, boot and shoe.	Oct. 11, 1859.
25847	Morrison, William Henry.	Nottingham, England.	Bonnet, cap-fronts, &c., machine for manufacturing.	Oct. 18, 1859.
	Morrison, Simeon, <i>et al.</i> (See Robbins & Morrison.)			
23064	Morse, A. W., assignor to self and R. V. Robie.	Eaton, N. Y.	Bed-bottom.	Feb. 22, 1859.
24357	Morse, Jedediah, assignor to S. Ruggles, and Power-press Manufacturing Company.	Canton, Mass.	Printing-presses, power.	June 9, 1859.
24881	Morton, Joseph W.	Plainfield, N. J.	Sewing-machines.	July 26, 1859.
23660	Moseley, Thomas W. H.	Cincinnati, Ohio.	Roofing, attaching-iron.	April 12, 1859.
26045	Moses, Austin W., and Joseph H. Springer.	Philadelphia, Pa.	Casting car-wheels.	Nov. 8, 1859.
23935	Mosher, Eli.	Flushing, Mich.	Plant-protectors.	May 10, 1859.
23385	Mosher, H. W., and J. A. Comboie.	New York, N. Y.	Bristles, apparatus for cleansing.	Mar. 29, 1859.
23530	Mosher, James H., assignor to self and Anson T. Colt.	New York, N. Y.	Gauge, steam-pressure.	April 5, 1859.
	Mosher, Noah. (See Dutcher, J. J., assignor.)			
	Mosher, S. F., and John D. Buckley. (See Buckley & Mosher.)			



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25346	Mosher, William, and Isaac H.	Greene, N. Y.	Tire, wagon, machine for bending.	Sept. 6, 1859.
24653	Moss, A. A.	Philadelphia, Pa.	Roller, elastic friction.	July 5, 1859.
25032	Moss, A. A.	Philadelphia, Pa.	Hydro-carbon vapor-apparatus.	Aug. 9, 1859.
	Motley, T., and Thomas Champion & Motley.)			
	Moulton, E. S., and J. Critcherson & Moulton.)			
24044	Moulton, Joel.	Boston, Mass.	Ladder, extension.	May 17, 1859.
25031	Mowry, Samuel.	Womelsdorf, Pa.	Cultivators.	Aug. 9, 1859.
25575	Mowby, George M.	Greenpoint, N. Y.	Distilling oils from coal, process of.	Sept. 27, 1859.
25034	Mozart, Don J.	Yellow Springs, Ohio	Escapement, dead-beat, arrangement of.	Aug. 9, 1859.
	Mudge & Tuttle. (See Farrington, D. W. C., assignor.)			
24948	Mudge, and Jarvis, T.	Philadelphia, Pa.	Washing-machine.	Aug. 2, 1859.
	Mulholland, J. H. (See Leffel & Mulholland.)			
23936	Mulligan, James	New York, N. Y.	Roasters.	May 10, 1859.
23776	Mulliner, Enoch E.	New York, N. Y.	Sails, reefing.	April 26, 1859.
26117	Mumma, David, jr.	Harrisburg, Pa.	Cars, railroad, mode of operating brakes on.	Nov. 15, 1859.
26046	Mumma, Jacob H.	Harrisburg, Pa.	Straw-cutters.	Nov. 8, 1859.
25576	Munger, George.	New Haven, Conn.	Writing-tablet.	Sept. 27, 1859.
23040	Munger, L. F.	Rochester, N. Y.	Locks.	Feb. 22, 1859.
23987	Munroe, James W., assignor to Southworth & McKeuzie.	Fall River, Mass.	Leather, factitious enamelled.	May 10, 1859.
25758	Munroe, William	West Auburn, Me.	Sole-cutting machines.	Oct. 11, 1859.
23937	Munson, John	San José, Cal.	Pump-boxes.	May 10, 1859.
	Murphey, John, et al. (Sec Allison, William, assignor.)			
23695	Murphey, John D.	Baltimore, Md.	Carriage-wheel, iron.	April 19, 1859.
25134	Murphey, Willis G.	Seguin, Texas.	Planters, seed.	Aug. 16, 1859.
24045	Murphy, Jacob.	Half Moon, Pa.	Metal-drills.	May 24, 1859.
	Murphy, John, et al. (See Allison, William C., assignor.)			
24046	Murphy, Thomas H.	New Orleans, La.	Cotton-bagging, machines for rolling and measuring.	May 24, 1859.
25212	Murray, Daniel	Fairfield, N. C.	Measuring grain, mode of.	Aug. 23, 1859.
25213	Murray, William	Baltimore, Md.	Stamping-machines for crushing ores, &c.	Aug. 23, 1859.
24910	Murrill, James H., assignor to Egerton, Dougherty, Woods & Co.	Baltimore, Md.	Sugar-cracking machine.	July 26, 1859.
24949	Myers, E. T. D., and C. F. Thomas.	Washington, D. C.	Water or gas mains, apparatus for tapping.	Aug. 2, 1859.
	Myers, J. M. (See McCurdy, James S., assignor.)			
24047	Naeher, Jacob	North Orange, N. J.	Corn, machines for husking.	May 17, 1859.
24654	Naramore, J. W.	Derby, Conn.	Pin-sticking machine.	July 9, 1859.
	Nash, William, et al. (See Greene, Daniel, assignor.)			
25608	Nash, Jefferson, assignor to self and Alonzo K. Cutts.	Janesville, Wis.	Separators, grain.	Sept. 27, 1859.
25135	Nathurst, R. A., and J. L. Stewart	Nashville, Tenn.	Bridles, safety-rein for.	Aug. 16, 1859.
	Naylor, Peter, et al. (See Stubblefield, Thomas, assignor.)			
23261	Neal, David S.	Lynn, Mass.	Ships, speaking-tube for.	Mar. 15, 1859.
24701	Neal, Chas., assignor to F. Liebraudt, and W. L. McDowell.	Philadelphia, Pa.	Moulding beads on hollow-ware.	July 5, 1859.
23777	Neames, Charles.	New Orleans, La.	Slats on sugar-cane, and bags, &c., carriers, &c., fastening.	April 26, 1859.
23601	Needham, E. P.	New York, N. Y.	Musical-instruments, reed.	April 12, 1859.



24048	Neefus, P. W. (See West, G. D., assignor.)	Albany, N. Y.	Window-blinds, metallic-frames for.	May 17, 1859.
24753	Neer, Charles	Albany, N. Y.	Dynamometer.	July 12, 1859.
25908	Neff, James W.	Sacramento, Cal.	Wind-mills.	Oct. 25, 1859.
25909	Neilson, George	Boston, Mass.	Pots, coffee.	Oct. 25, 1859.
25567	Nelson, D. B., et al. (See Smith, Hamilton E., assignor.)	New York, N. Y.	Gold-washer.	Oct. 4, 1859.
25374	Nelson, L. W., and H. M. Coombs. (See Coombs & Nelson.)	Franklin, N. H.	Mill-stones, machines for picking.	Aug. 30, 1859.
24325	Nesmith, R. D.	New York, N. Y.	Glue, apparatus for drying.	June 7, 1859.
25136	Neubauer, M., and P. Adelmann.	New York, N. Y.	Skirts, skeleton.	Aug. 16, 1859.
25797	Neumann, Casar.	New York, N. Y.	Skirts, skeleton.	Nov. 1, 1859.
26514	Neumann, Casar.	New York, N. Y.	Skirts, skeleton.	Dec. 21, 1859.
25163	Neumann, Casar, assignor to Abner Prince.	New York, N. Y.	Skirts, hooped, machine for making.	Aug. 16, 1859.
24655	Newbury, A., and B.	Windham Center, N. Y.	Printing-presses, hand.	July 5, 1859.
25577	Newbro, S. D.	Lansing, Mich.	Bed-spring.	Sept. 27, 1859.
24481	Newbrough, John B.	St. Louis, Mo.	Adding numbers, instrument for.	June 21, 1859.
24817	Newell, William.	Philadelphia, Pa.	Coffee, machine for scouring and polishing.	July 19, 1859.
26513	Newell, John.	Lowell, Mass.	Nail-plate feeder.	Dec. 20, 1859.
	New England Car Spring Co. (See Beius, Henry W., assignor.)			
24139	Newhall, Timothy.	Lynn, Mass.	Skins, kid, machine for dressing.	May 24, 1859.
26515	Newman, Carlton.	Birmingham, Pa.	Cans, preserve.	Dec. 20, 1859.
24885	Newman, Joseph	Baltimore, Md.	Railroad-cars, platform for.	July 26, 1859.
24482	Newman, S. V. R.	Covington, N. Y.	Harvesting beans, machine for.	June 21, 1859.
	New York Rubber Co. (See Porter, Lucius P., assignor.)			
	New York Rubber Co. (See Lee, Benjamin F., assignor.)			
	New York Wire Railway Co. (See Wickersham & Jenkins, assignors.)			
24431	Nicholas, Daniel, assignor, to Charles and Edward Rumley.	Onargo, Ill.	Seeding-machines.	June 14, 1859.
23041	Nichols, Parker, et al. (See Holden, Stoughton B., assignor.)	Hartford, Conn.	Screw-plate.	Feb. 22, 1859.
24911	Nichols, Putnam D.	Easthampton, Conn.	Coffin-screws.	July 26, 1859.
26299	Nichols, W. H., assignor to Markham, Nichols & Strong.	Lima, Ohio.	Pumps, cattle.	Dec. 6, 1859.
23936	Nichols, Warren, assignor to self and Thomas Ghormley.	Floyd County, Ga.	Ploughs.	May 10, 1859.
	Nichols, Williamson.			
22973	Nicholson, Henry C., et al. (See Martin & Nicholson.)	Allegheny, Pa.	Distilling oil from coal, retorts for.	Feb. 15, 1859.
23778	Nicholson, John.	Boston, Mass.	Railroads, rails for street.	April 26, 1859.
23814	Nicholson, Samuel.	Chicago, Ill.	Egg-beater.	April 26, 1859.
	Nicolai, John L., assignor to self, S. E. Knott and R. F. Farrell.			
24572	Nicolas, M. H., and L. J. Champagne.	Thibodeaux, La.	Sugar-juices, defecating.	June 28, 1859.
22570	Niel, Antoine.	Brooklyn, N. Y.	Chimneys, apparatus for increasing draft of.	Jan. 11, 1859.
22571	Niel, Antoine.	Brooklyn, N. Y.	Bridle-bits.	Jan. 11, 1859.
23106	Niven, Robert.	Gates, N. Y.	Potato-diggers.	Mar. 1, 1859.
25756	Nixon, Abel R.	Rhea Springs, Tenn.	Loom, hand.	Oct. 11, 1859.
26199	Nixon, Martin.	Philadelphia, Pa.	Boilers, for treating.	Nov. 23, 1859.
24140	{ Noble, T. A., E. Coy, and J. B. Angell.	Akron, Ohio.	Smut-machines.	May 25, 1859.
22572	Noel, Theodore.	Allegheny, Pa.	Spectacle-frames.	Jan. 11, 1859.
23696	Norcross, Isaac W., and Fredrick M.	Memphis, Tenn.	Skates.	April 19, 1859.
23107	Nordyke, A. H.	Lowell, Mass.	Printing the address on newspapers, machine for.	Mar 1, 1859.
24656	Nordyke, Ellis & Addison.	Richmond, Ind.	Bolts, flour.	July 5, 1859.
26608	Norpel, Conrad.	Richmond, Ind.	Car-coupling, railroad.	Dec. 27, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
26609	Norris, A. B.	St. Louis, Mo.	Saw-mill blocks, mode of operating.	Dec. 27, 1859.
23483	North, Albert H.	Hartford, Conn.	Lamps.	April 5, 1859.
22666	North, H. S., and E. Savage.	Middletown, Conn.	Fire-arms, revolving.	Jan 18, 1859.
24573	North, H. S., and John O. Couch.	Middletown, Conn.	Trap, animal.	June 28, 1859.
23221	North, John, assignor to self and D. Appleton & Co.	Middletown, Conn.	Paper, register for sheets of.	Mar. 8, 1859.
22886	Northrup, McCulloch, Aiken, <i>et al.</i> (See Cavanah, F. O., assignor.)	Greene, N. Y.	Stoves.	Feb. 8, 1859.
25035	Northrup, Nelson W.	Boston, Mass.	Skates.	Aug. 9, 1859.
24049	Northrup, S. C., <i>et al.</i> (See Maelure, John, assignor.)	Farmington, Me.	Mop-handles.	May 24, 1859.
35036	Norton, H., and J. S. B.	Troy, N. Y.	Stamps, post marking.	Aug. 9, 1859.
23939	Norton, Joel W., <i>et al.</i> (See Potter, Austin, assignor.)	Huntsville, Ala.	Bridles.	May 10, 1859.
25275	Norvell, R. B.	New York, N. Y.	Gas, illuminating, apparatus for manufacturing.	Aug. 30, 1859.
25519	Nowlan, Samuel.	Worcester, Mass.	Carpet-fastener.	Sept. 20, 1859.
24358	Noyes, George G.	West Newbury, Mass.	Comb-teeth, machinery for cutting.	June 7, 1859.
22974	Noyes, William, Jr., assignor to S. C. Noyes & Co.	Brooklyn, N. Y.	Bullets, &c., machine for making.	Feb. 15, 1859.
25520	Nugent, Edward.	Susquehanna Depot, Pa.	Railroad-chairs.	Sept. 20, 1859.
25520	Nugent, William A.			
23940	Nutt, John, <i>et al.</i> (See Millar, Warren, assignor.)	New Orleans, La.	Bales, cotton, iron ties for.	May 10, 1859.
24152	Nuttall, James.	Allegheny, Pa.	Serew-cutting, chuck for.	May 24, 1859.
24153	Nuttall, R., and John Kirkpatrick.	Allegheny, Pa.	Screws, machine for cutting.	May 24, 1859.
23941	Nuttall, R., and John Kirkpatrick.	South Amherst, Mass.	Clothes-frame.	May 10, 1859.
25578	Nutting, Henry A.	Randolph, Vt.	Wire-cloth, manufacture of.	Sept. 27, 1859.
25578	Nutting, Rufus.			
23108	Oakley, E. H. A., and James M. Day. (See Day & Oakley.)	South Rutland, N. Y.	Roofing-cement.	Mar. 1, 1859.
23484	Oaks, Oscar S.	Logansport, Ind.	Wooden patterns for cog-wheels, &c., machine for making.	April 5, 1859.
25791	Obenchain, Washington.	Salem, Ohio.	Tenons, round, tools for cutting.	Oct. 11, 1859.
25791	O'Bryan, Charles, assignor to self and Joseph S. Haldeman.			
25791	O'Connor, Thomas J., <i>et al.</i> (See Williams, William L., assignor.)			
22573	O'Hara, James.	Pittsburg, Pa.	Distilling oils from coal, retort for.	Jan. 11, 1859.
25469	O'Key, Joseph B., assignor to self and W. H. Kendrick.	Indianapolis, Ind.	Straw-eutters.	Sept. 13, 1859.
23109	Olcott, Anson.	Lakc Port, N. Y.	Shingle-machine, rotary.	Mar. 1, 1859.
24326	Oldman, William.	Buffalo, N. Y.	Boilers, steam.	June 7, 1859.
23042	Oliver, Henry.	Philadelphia, Pa.	Brooches, ear-rings, &c.	Feb. 22, 1859.
23697	Oliver, William G.	Buffalo, N. Y.	Dental operations, applying electricity in.	April 19, 1859.
26516	Olmstead, D. G.	Vieksburgh, Miss.	Gins, cotton.	Dec. 20, 1859.
22509	Olney, Nathan, and Charles H. Kellogg.	Amherst, Mass.	Spoke-machine.	Jan. 4, 1859.
22667	O'Neil, John K.	Kingston, N. Y.	Wash-board.	Jan. 18, 1859.
23485	O'Neil, John K.	Kingston, N. Y.	Pumps.	April 5, 1859.
25521	O'Neil, John K.	Kingston, N. Y.	Water-wheel, horizontal.	Sept. 20, 1859.
26200	O'Neil, John K.	Kingston, N. Y.	Lamps, vapor.	Nov. 22, 1859.



24483	O'Neill, Andrew	Portsmouth, Ohio	Stoves and fire-places, fire-back for	June 21, 1859.
25436	O'Neill, William	Pine Level, Ala.	Ploughs	Sept. 13, 1859.
25437	O'Neill, William	Pine Level, Ala.	Ploughs	Sept. 13, 1859.
25668	Orcutt, Nelson	Binghamton, N. Y.	Soap, composition for	Oct. 4, 1859.
22688	Orcutt, Nelson, assignor to self and G. W. Gregory	Binghamton, N. Y.	Paddle-wheels	Jan. 18, 1859.
25910	Orr, Adrian V. B.	Lancaster, Pa.	Nail-machine	Oct. 25, 1859.
26047	Orr, Adrian V. B.	Lancaster, Pa.	Sawing-machine	Nov. 8, 1859.
24266	Osborn & Vincent. (See Davis, Barron, assignor.)	Niagara and Seneca Falls, N. Y.	Mills, grinding	May 31, 1859.
24400	Osborn, James D.	Constantine, Mich.	Grain in bundles, machine for binding	June 14, 1859.
26048	Osbrej, George R.	Providence, R. I.	Heating-apparatus	Nov. 8, 1859.
25848	Osgood, Enoch	Boston, Mass.	Gins, cotton	Oct. 18, 1859.
25914	Osgood, Richard H.	Columbus, Ohio	Saw, reciprocating	Aug. 23, 1859.
22574	Ostrander, Albert	New York, N. Y.	Gas-burners	Jan. 11, 1859.
26118	Oswald, John, et al. (See Andrews & Oswald.)	Springfield, Ohio	Harvesters, potato	Nov. 15, 1859.
25911	Outton, G. F.	Norfolk, Va.	Car-brakes	Oct. 25, 1859.
24657	Overocker, Anthony	McHenry, Ill.	Clover-hullers	July 5, 1859.
24231	Owcn, D. J.	Springville, Pa.	Broom	May 31, 1859.
25037	Owens, Lanc, Dyer, & Co. (See Lane, Clark, assignor.)	Galesburg, Ill.	Cultivators	Aug. 9, 1859.
23386	Packard, Leonard	Philadelphia, Pa.	Hay-mangers	Mar. 29, 1859.
25579	Packer, John	Watertown, N. Y.	Stoves	Sept. 27, 1859.
24051	Paddock, Oscar	West Meriden, Conn.	Bolt, door-signal	May 17, 1859.
26517	Page, Charles	Washington, D. C.	Pipe-coupling	Dec. 20, 1859.
26518	Page, Charles G., and Ralph I. Falconer	Washington, D. C.	Bolts, door	Dec. 20, 1859.
23602	Page, John F.	Philadelphia, Pa.	Spark-arresters	April 12, 1859.
25757	Page, Samuel	Chelsea, Mass.	Varnish	Oct. 11, 1859.
25522	Page, Thomas N., et al. (See Gragg, Moses G., assignor.)	Milan, Ohio	Tanning, composition for	Sept. 20, 1859.
25669	Pagin, Lewis	Elmore, Ohio	Table and clothes-drier, combined	Oct. 4, 1859.
23942	Palamountain, Isaac B.	Tarboro', N. C.	Cultivators	May 10, 1859.
24950	Palmenbury, Joseph R.	New York, N. Y.	Bonnet-stands, branch-holder for	Aug. 2, 1859.
22575	Palmer, B. Frank	Philadelphia, Pa.	Arms, fore, artificial	Jan. 11, 1859.
22576	Palmer, B. Frank	Philadelphia, Pa.	Arm and hand, artificial	Jan. 11, 1859.
26119	Palmer, George F.	Farmington, N. H.	Boxes, wooden, machine for making	Nov. 15, 1859.
26284	Palmer, F. I.	Knoxville, Tenn.	Car-trucks	Nov. 29, 1859.
25978	Palmer, I. E.	St. Louis, Mo.	Block, tackle	Nov. 1, 1859.
24432	Palmer, John S., assignor to self and Charles S. Capron	Providence, R. I.	Metal for jewelry, rolling	June 14, 1859.
25979	Palmer, John W.	Port Republic, Va.	Bee-hives	Nov. 1, 1859.
25868	Palmer, Joseph, et al. (See Holmes, Joseph E., assignor.)	Auburn, N. Y.	Clothes-frame	Oct. 18, 1859.
25868	Palmer, S. W., and J. F., assignors to S. W. and N. Palmer and John Paty	Auburn, N. Y.	Clothes-frame	Oct. 18, 1859.
22818	Palmer, Stephen F.	New York, N. Y.	Dry-docks for canals, floating, discharging water from	Feb. 1, 1859.
24484	Palser, J. B., and G. Howland	Fort Edward, N. Y.	Paper pulp, apparatus for the manufacture of	June 21, 1859.
26292	Palser, J. B., and G. Howland	Fort Edward, N. Y.	Paper-pulp, manufacture of	Nov. 22, 1859.
24912	Parcc, J. Y., assignor to self and D. B. DeLand	Fairport, N. Y.	Hoisting-crane	July 26, 1859.
25670	Pardee, Benjamin S., and Thomas Rawling	Mount Carmel, Conn.	Upholsterer's nail	Oct. 4, 1859.
23603	Parish, James B.	Cleveland, Ohio	Pots, coffee	Apr. 12, 1859.
23854	Parker, Aaron	Coventry, N. Y.	Harness-breeching to wagon-thills, mode of attaching	May 3, 1859.
24232	Parker, George W.	Fitzwilliam, N. H.	Saw-machines, cross-cut	May 31, 1859.
24232	Parker, J. H., and W. H. Bettes. (See Bettes & Parker.)	Fitzwilliam, N. H.	Saw-machines, cross-cut	May 31, 1859.
23308	Parker, J. J.	Marietta, Ohio	Watch-springs, device for equalizing the tension of	Mar. 22, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25038	Parker, J. J.	Marietta, Ohio.	Egg-beater or churn.	Aug. 9, 1859.
25137	Parker, J. J.	Marietta, Ohio.	Valve, steam-slide.	Aug. 16, 1859.
26285	Parker, J. J.	Marietta, Ohio.	Paper-files.	Nov. 29, 1859.
25347	Parker, Jacob.	St. Louis, Mo.	Trunks.	Sept. 6, 1859.
24233	Parker, James Ray.	Sing Sing, N. Y.	Churn.	May 31, 1859.
24780	Parker, Sidney, assignor, and Hugh Herringshaw.	New York, N. Y.	Sewing-machines.	July 12, 1859.
25438	Parkhurst, George T.	Baltimore, Md.	Lamps.	Sept. 13, 1859.
25039	Parkhurst, Horace	DeKalb, Ill.	Clothes-frame.	Aug. 9, 1859.
26236	Parkhurst, Parmenus P.	Princeton, Mass.	Ore-separator.	Nov. 22, 1859.
26443	Parmelee, Chauncey	Wilmington, Vt.	Vegetable-slicer.	Dec. 13, 1859.
23855	Parmelee, Dubois D.	Beverly, Mass.	Caoutchouc, vulcanizing.	May 3, 1859.
24401	Parmelee, Dubois D.	Beverly, Mass.	Caoutchouc, vulcanized.	June 14, 1859.
25040	Parmelee, Dubois D., assignor to John A. Green.	Beverly, Mass.	Uniting solid substances, mode of.	Aug. 9, 1859.
26286	Parmelee, Dubois D., assignor to John A. Green.	Beverly, Mass.	Rubber-goods, manufacture of hollow-doubled.	Nov. 29, 1859.
26519	Parmelee, Dubois D., assignor to John A. Green.	Beverly, Mass.	Rubber articles, manufacture of.	Dec. 20, 1859.
26551	Parmelee, Dubois, D., assignor to John A. Green.	Beverly, Mass.	Rubber hollow-moulded articles, India, manufacture of.	Dec. 20, 1859.
26287	Parmelee, Francis A.	New Haven, Conn.	Twine-spools.	Nov. 29, 1859.
23779	Parmelee, Spencer Thomas	Edinburgh, Scotland.	Elastic-belt, manufacture of.	April 26, 1859.
23856	Parmelee, Nelson	Gardner, Mass.	Cements.	May 3, 1859.
24050	Parmeter, Nelson	Gardner, Mass.	Bricks, manufacture of.	May 17, 1859.
26049	Parr, George. (See Chase, D. G., assignor.)	Lynn, Mass.	Boot and shoe soles, machine for cutting.	Nov. 8, 1859.
22819	Parrott, George W., and Charles K. Bradford.	Boston, Mass.	Pipe, variable exhaust.	Feb. 1, 1859.
23110	Parrott, William P. (See Head, Stephen H., assignor.)	Philadelphia, Pa.	Governor for steam-engines.	Mar. 1, 1859.
23698	Parry, George T., and Stephen H. Head.	Middlefield, N. Y.	Car-coupling, railroad.	April 19, 1859.
23988	Parshall, George W.	Heights town, N. J.	Potatoes, machine for digging and gathering.	May 10, 1859.
26056	Parvin, Jonathan B., assignor to self and Elias Stratton.	Moore's Hill, Ind.	Stump-extractor.	Nov. 8, 1859.
23387	Patch, A. H., and J. A. Moor. (See Moore & Patch.)	New York, N. Y.	Vault-covers, ventilating.	Mar. 29, 1859.
22820	Pate, E. Bird.	Chicago, Ill.	Pipes, variable exhaust.	Feb. 1, 1859.
23190	Patrick, John.	Baltimore, Md.	Harvesters.	Mar. 8, 1859.
23111	Patten, Russell, and A. J. Hall. (See Hall & Patten.)	Birmingham, Pa.	Churn.	Mar. 1, 1859.
24658	Patterson, James W., and L. H. Colborn.	Birmingham, Pa.	Hoes, manufacture of.	July 9, 1859.
25580	Patterson, Andrew	Birmingham, Pa.	Hoes, manufacture of.	Sept. 27, 1859.
25792	Patterson, Andrew	Birmingham, Pa.	Hoes, manufacture of.	Sept. 27, 1859.
25792	Patterson, G. L., et al. (See Merchent & Patterson.)	Birmingham, Pa.	Hoes, manufacture of.	Sept. 27, 1859.
25792	Patterson, Robert, assignor to Horace Vaughn.	Birmingham, Pa.	Hoes, manufacture of.	Sept. 27, 1859.
23388	Patterson, William	Philadelphia, Pa.	Lubricating compound, solution for thinning a.	Oct. 11, 1859.
26520	Patton, William	Constantine, Mich.	Tire, machine for bending.	Mar. 29, 1859.
26520	Patton, Isaac N., and Elias Graham. (See Graham & Patton.)	Constantine, Mich.	Boring-hubs, machine for	Dec. 20, 1859.
26120	Patton, William, et al. (See Lake, Lorenzo, assignor.)	Constantine, Mich.	Boring-hubs, machine for	Dec. 20, 1859.
26120	Patton, John.	Arcadia, Ind.	Washing-machine.	Nov. 15, 1859.
26050	Patty, John, et al. (See Palmer, S. W. & J. F., assignors.)	Arcadia, Ind.	Washing-machine.	Nov. 15, 1859.
26050	Paulsen, Herman G. C.	Fiatlands, N. Y.	Sugar juices, &c., clarifying and refining.	Nov. 8, 1859.



22568	Payn, Benjamin.....	Albany, N. Y.....	Tobacco-stems, coloring and curing.....	Jan. 18, 1859.
23780	Payne, A. W.....	Morris, N. Y.....	Horse-shoes, sharpening the calks of.....	April 26, 1859.
23604	Payne, Frederick C., and Alfred Reid.....	New York, N. Y.....	Beds, wardrobe.....	April 12, 1859.
22629	Payne, Thomas.....	Bridgfield, Conn.....	Clothes-sprinkler.....	Jan. 18, 1859.
23141	Paynter, David E., assignor to self and Israel M. Bissell.....	Philadelphia, Pa.....	Sulphur, manufacture of precipitated.....	Mar. 1, 1859.
24781	Paynter, John, assignor to self and John McCorkle.....	Shelbyville, Ind.....	Mills, sugar.....	July 12, 1859.
23399	Payson, Joseph R.....	Covington, Ky.....	Sash-cord fastener.....	April 19, 1859.
26288	Peabody, G. H.....	Columbus, Ga.....	Cotton-picker's wallets.....	Nov. 29, 1859.
23821	Peabody, John F.....	Salem, Mass.....	Sash-supporter.....	Feb. 1, 1859.
24234	Peabody, John F.....	Salem, Mass.....	Railway, chains for.....	May 31, 1859.
22822	Pearsall, S. W. & W. L.....	New York, N. Y.....	Photographic plate vise.....	Feb. 1, 1859.
25849	Pearson, Sewall.....	Boston, Mass.....	Chain, cabinet.....	Oct. 18, 1859.
26201	Pearson, William.....	Windsor Locks, Conn.....	Sewing-machines.....	Nov. 22, 1859.
25277	Pease, Edwin R., and R. R. Hayman.....	Poughkeepsie, N. Y.....	Peg-cutters.....	Jan. 11, 1859.
22887	Peaslee, W. A.....	Indianapolis, Ind.....	Spark-arrester, soot and.....	Feb. 8, 1859.
26373	Peaslee, W. A., and John O. D. Lilly.....	Indianapolis, Ind.....	Locomotive-engine, spark-arrester and chimneys of.....	Dec. 7, 1859.
22510	Peavey, A. J.....	South Montville, Me.....	Iron, machine for cutting and punching.....	Jan. 4, 1859.
23646	Peavey, T. H., assignor to self and C. G. C. Collins.....	Montville, Me.....	Clothes, machine for wringing.....	April 12, 1859.
24574	Peck, Charles.....	New Haven, Conn.....	Lathes, tool-holders for.....	June 29, 1859.
	Peck, Smith, Manufacturing Co. (See Raymond, Charles H., assignor.)			
22743	Peck, Walter.....	Rockford, Ill.....	Pumps.....	Jan. 25, 1859.
26444	Peckham, William H.....	Hoboken, N. J.....	Spectacle-frame.....	Dec. 13, 1859.
25138	Pedrick, John C.....	Washington, D. C.....	Castors, ball furniture.....	Aug. 16, 1859.
26289	Peck, Simeon T.....	Penfield, Ga.....	Ploughs.....	Nov. 29, 1859.
25041	Peel, Lawson G.....	Preston, Ga.....	Planters, corn.....	Aug. 9, 1859.
24485	Peeler, James.....	Tallahassee, Fla.....	Sowing fertilizers, machines for.....	June 21, 1859.
24486	Peeler, James.....	Tallahassee, Fla.....	Cultivators.....	June 21, 1859.
23486	Peet, John W.....	Troy, N. Y.....	Rope-machinery.....	April 5, 1859.
25439	Peet, Stephen B.....	New York, N. Y.....	Carriage-springs.....	Sept. 13, 1859.
25276	Pein, John H.....	Hoboken, N. J.....	Photograph on uneven surfaces, apparatus to.....	Aug. 30, 1859.
23487	Peirce, Daniel A.....	East Greenwich, R. I.....	Pencil-cases.....	April 5, 1859.
26293	Peirce, Gideon.....	Ercildown, Pa.....	Rakes, horse.....	Nov. 29, 1859.
23389	Peirson, Henry C.....	Philadelphia, Pa.....	Hoop-machine.....	Mar. 29, 1859.
23700	Peirce, Samuel.....	Cambridgeport, Mass.....	Scales, weighing.....	April 19, 1859.
22888	Pemberton, Henry.....	East Tarentum, Pa.....	Alkalies, caustic, process of manufacturing.....	Feb. 8, 1859.
24951	Pemberton, Henry.....	East Tarentum, Pa.....	Salt, manufacturing of common.....	Aug. 2, 1859.
24295	Pemberton, Henry.....	East Tarentum, Pa.....	Oils, coal, refining.....	Aug. 2, 1859.
24754	Pendleton, Charity.....	Galena, Ill.....	Washing-machine.....	July 12, 1859.
26328	Penman, Daniel, and E. Fitzgerald, assignors to William C. Walker and M. Pennau.....	New York, N. Y.....	Ruches, machine for manufacturing.....	Nov. 29, 1859.
26611	Penn, Worden P.....	Bellville, Ill.....	Seeding-machines.....	Dec. 27, 1859.
26612	Penn, Worden P.....	Bellville, Ill.....	Seed-drills.....	Dec. 27, 1859.
25348	Pennie, Henry.....	Buffalo, N. Y.....	Washers, bits for cutting.....	Sept. 6, 1859.
22823	Penniston, G. W..... (See Foreman, Daniel, assignor.)	North Vernon, Ind.....	Hoops, cotton-bale.....	Feb. 1, 1859.
26521	Pepper, Calvin.....	Albany, N. Y.....	Heating-apparatus.....	Dec. 21, 1859.
24659	Percival, John.....	Auburn, N. Y.....	Piano-hammer.....	July 5, 1859.
24328	Perkins, Edward L.....	Roxbury, Mass.....	Paper, machinery for drying.....	June 7, 1859.
25381	Perkins, Edward L.....	Roxbury, Mass.....	Boxes, packing, construction of.....	Sept. 27, 1859.
26271	Perkins, S. M.....	Albany, Ill.....	Whiffletree-hooks.....	Nov. 30, 1859.
24818	Perkins, William.....	Plympton, Mass.....	Car-brakes, railroad.....	July 19, 1859.
24151	Perley, Charles.....	New York, N. Y.....	Seats for churches, schools, &c.....	May 24, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
26292	Perley, Charles.	New York, N. Y.	Cable stopper, chain.	Nov. 29, 1859.
22889	Pearley, Joseph A.	Lynn, Mass.	Heel and spoke-shaves	Feb. 8, 1859.
23701	{ Melzer, James L., and Melzer Burt.	Mansfield, Mass. }	Fluid measure.	April 19, 1859.
26122	Perry, J. R.	Wilkesbarre, Pa.	Tenons, machine for cutting.	Nov. 15, 1859.
23262	Perry, John G.	Kingston, R. I.	Meat-cutter.	Mar. 15, 1859.
24953	Perry, John G.	Kingston, R. I.	Meat-cutter.	Aug. 2, 1859.
25440	Perry, John G.	Kingston, R. I.	Sausage-stuffer.	Sept. 13, 1859.
23702	Perry, Philander.	Troy, N. Y.	Mills for grinding, crushing, &c.	April 19, 1859.
24327	Perry, Stuart.	Newport, N. Y.	Stereoscopic pictures, apparatus for exhibition of.	June 7, 1859.
22824	Persons, Sylvester, and Alfred M. Cone.	Panama, N. Y.	Harvesters.	Feb. 1, 1859.
23578	Pesler, E.	Valencienness, France.	Sugar, manufacture of.	Jan. 11, 1859.
23112	Peters, John K.	New York, N. Y.	Propeller ships.	Mar. 1, 1859.
26290	Peters, William.	Baltimore, Md.	Propeller and paddle-wheel shaft.	Nov. 29, 1859.
23191	Peterson & Stuart. (See Martino, John, assignor.)	Philadelphia, Pa.	Stoves, cooking.	Mar. 8, 1859.
23309	Peterson, Richard.	Philadelphia, Pa.	Envelope.	Mar. 22, 1859.
22511	Pettee, S. E., assignor to North American Paper-bag and Envelope Manufacturing Company.	New Haven, Conn.	Fire-arms, revolving.	Jan. 4, 1859.
25051	Pettegill, C. S. (See Smith, J. A., and S. E. Pettee.)	New York, N. Y.	Range, cooking.	Nov. 8, 1859.
24329	Pettet, William.	Philadelphia, Pa.	Violins, tail-pieces for.	June 7, 1859.
25759	Pfaff, John.	New York, N. Y.	Geer-cutting engines.	Oct. 11, 1859.
22744	Pfarrer, Henry.	Whitneyville, Conn.	Punch and awl, combined.	Jan. 25, 1859.
23605	Pfeghar, F. P., and S. C. Lewis. (See Lewis & Pfeghar.)	Trenton, Mich.	Water-cooler.	April 12, 1859.
25003	Phelps, Augustus H.	Troy, N. Y.	Telegraphic machines.	Nov. 1, 1859.
26613	Phelps, George M., assignor to the American Telegraph Co.	Rochester, N. Y.	Auger.	Dec. 27, 1859.
26203	Phelps, Napoleon B.	Sycamore, Ill.	Horse-power machine.	Nov. 22, 1859.
24755	Phelps, Wm., and W. H. Hanford.	Ghent, N. Y.	Presses, &c., hay, method of operating windlasses when applied to.	July 12, 1859.
24487	Phillipp, Albert.	Maysville, Wis.	Sugar-cane, machines for cutting.	June 21, 1859.
25760	Philippi, Mathieu.	Troy, N. Y.	Piano-fortes, key-beard for.	Oct. 11, 1859.
24702	Phillips, Alfred S., assignor to self and Isaac Adams.	Boston, Mass.	Ships, hawse pipe for.	July 5, 1859.
23857	Phillips, George B.	Albany, N. Y.	Wrench for gas-fitters.	May 3, 1859.
25582	Phillips, Henry F., and J. C. Lyon. (See Lyon & Phillips.)	New York, N. Y.	Muffs.	Sept. 27, 1859.
23532	Phillips, Jane.	Milford, Mass.	Boot-legs, mode of attachings straps to.	April 5, 1859.
25441	Pickering, Julius A., assignor to William Walker.	Lindon, Vt.	Rakes, horse.	Sept. 13, 1859.
23703	{ Pierce, Arthur and Arthur. (See Hall, George N., ass't.) Mason R. Pierce.	New Bedford, Mass. }	Pipes, drain, machines for making.	April 19, 1859.
26614	{ Pierce, Bradford S., and Mason R. Pierce.	Mansfield, Mass. }	Ware, porous, manufacture of.	Dec. 27, 1859.



22670	Pierce, N. O., and L. F. Bingham. (See Bingham & Pierce.)	Troy, N. Y.	Furnaces	Jan. 18, 1859.
23490	Pierce, Samuel	Troy, N. Y.	Boilers, steam	April 5, 1859.
25670	Pierce, Seneca, and F. F. Beardsley	Castle Grove, Iowa	Tanning, composition for	Oct. 4, 1859.
24235	Pirkey, Alexander E.	Bradford, Ill.	Mills	May 31, 1859.
24402	Pitkin, A. P.	Hartford, Conn.	Steam-pressure regulator	June 14, 1859.
24236	Pitkin, A. P.	Hartford, Conn.	Screw-dies	May 31, 1859.
24819	Pitkin, A. P.	Hartford, Conn.	Steam, mode of heating drying-cylinders by	July 19, 1859.
22745	Pitman, G. W.	Bushwick, N. Y.	Fibrous-substances, machinery for twisting	June 18, 1859.
23491	Pittman, G. W., and William C. Boon	Bushwick, N. Y.	Rope, machinery for laying	April 5, 1859.
23858	Place, Thomas	Alfred Centre, N. Y.	Pile-driver, adjustable	May 3, 1859.
24359	Planet, Louis, assignor to self and Joseph Auger	New York, N. Y.	Motion into direct circular motion, machines for converting oscillating	June 7, 1859.
24847	Planer, Louis, assignor to self and Joseph Auger	New York, N. Y.	Sewing-machines	July 19, 1859.
23859	Plant, John	Washington, D. C.	Hinges, latch	May 3, 1859.
24150	Platt, Jonah, and Myron D. Brooks	Akron, Ohio	Boots and shoes, metallic shields for	May 24, 1859.
24703	Platter, Peter, assignor to self and James S. Flemming	More's Hill, Ind.	Planters, corn	July 5, 1859.
22610	Plummer, John T., and John W. Kennedy. (See Kennedy & Plummer.)	Philadelphia, Pa.	Telegraph their own passing at certain stations, method of enabling moving railroad trains to.	June 11, 1859.
25082	Pochin, Henry P., and E. Hunt. (See Hunt & Pochin.)	Hoboken, N. J.	Watch-chains, &c., double-clasp hook for	Aug. 9, 1859.
22839	Pollard, Ezra, assignor to self and Joshua Gray	Albany, N. Y.	Meat-cleaver	Feb. 1, 1859.
23000	Pollard, Ezra, assignor to self and Joshua Gray	Albany, N. Y.	Roof, securing sheet-metal	Feb. 15, 1859.
23606	Pollay, Leonard L.	Worcester, Mass.	Treeling-sticks	April 12, 1859.
25523	Pollock, Collin G.	Cincinnati, Ohio	Boring and mortising machine	Sept. 20, 1859.
23492	Pollock, Thomas H., and Daniel Bliven	Greenville, Conn.	Cheese-cutter	April 5, 1859.
24604	Pomeroy, Charles S. (See Behrens, Henry J., assignor.)	New York, N. Y.	Protecting iron from oxydation, method of	June 28, 1859.
24954	Pomeroy, Charles S. (See Lee, Samuel, assignor.)	Middletown, Ohio	Cement, machine for making roofing	Aug. 2, 1859.
25583	Pomeroy, P., and I. G. Allen	Cleveland, Ohio	Skirts, skeleton, hoops of	Sept. 27, 1859.
25042	Pond, Joseph F.	New Market, Ala.	Filing cotton-gin saws	Aug. 9, 1859.
24976	Pool, Colwell P.	Baltimore, Md.	Casting chilled-plates	Aug. 2, 1859.
25164	Pool, Robert, assignor to self and German H. Hunt	Baltimore, Md.	Veicles, "fifth-wheel" of fire-engines and other	Aug. 16, 1859.
25366	Pool, Robert, assignor to self and German H. Hunt	Baltimore, Md.	Pumps, force	Sept. 6, 1859.
25367	Pool, Robert, assignor to self and German H. Hunt	Baltimore, Md.	Pumps, pistons of	Sept. 6, 1859.
24149	Porter, Luther E.	Lake Mills, Wis.	Grinding, machine for stripping and cutting sugar-cane for.	May 24, 1859.
23001	Porter, Lucius P., assignor to New York Rubber Co.	New York, N. Y.	Toys, elastic	Feb. 15, 1859.
23043	Porter, Rufus	Washington, D. C.	Fastener, blind	Feb. 23, 1859.
24820	Porter, William	Mexico, N. Y.	Saw-gummer	July 19, 1859.
22746	Posz, Michael	Shelbyville, Ind.	Razor-strops	Jan. 25, 1859.
25215	Pott, John L.	Pottsville, Pa.	Hoisting-apparatus	Aug. 23, 1859.
24605	Potter, Austin, assignor to self and Joel W. Norton	Williamson, N. Y.	Separators, grain	June 28, 1859.
25524	Potter, B., jr., et al. (See Dodge & Potter.)	Westerly, R. I.	Printing presses, feeding paper to and from	Sept. 20, 1859.
23390	Potter, C., jr., and C. B. Cottrell	Chicago, Ill.	Railroad coupling-chair	May 29, 1859.
23493	Potter, Ransom S.	Chicago, Ill.	Rail-splicing chair	April 5, 1859.

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22579	Potter, Warren B.	Boston, Mass.	Nursery-bottles	Jan. 11, 1859.
23488	Potter, William L.	Clifton Park, N. Y.	Corn-shellers, separately or jointly, with a fan or cutters, arrangement of machinery for operating.	April 5, 1859.
24660	Potts, Albert.	Philadelphia, Pa.	Buildings, setting gas-meters in the walls of.	July 5, 1859.
23310	Powell, James.	Cincinnati, Ohio.	Faucet.	Mar. 22, 1859.
23349	Powell, James.	Cincinnati, Ohio.	Faucet.	Sept. 6, 1859.
24977	Powell, John B., assignor to self and George B. Fick.	Philadelphia, Pa.	Clocks, device for winding.	Aug. 2, 1859.
25368	Powell, John B., assignor to self and George B. Fick.	Philadelphia, Pa.	Fan, automatic.	Sept. 6, 1859.
23113	Powers, Daniel.	Philadelphia, Pa.	Lock.	Mar. 1, 1859.
23489	Powers, John.	New York, N. Y.	Pumps.	April 5, 1859.
23192	Powers, William.	Youngstown, Ohio.	Bee-hives.	Mar. 8, 1859.
26537	Powers, William.	Youngstown, Ohio.	Sewing-machines, thread tension for.	Dec. 21, 1859.
23429	Pratt, E. L.	Philadelphia, Pa.	Pan, milk.	Mar. 29, 1859.
24521	Pratt, E. L., assignor to self and R. B. Fitts.	Philadelphia, Pa.	Cheese-eover.	June 21, 1859.
25165	Pratt, E. L., assignor to self and R. B. Fitts.	Philadelphia, Pa.	Meat-safe.	Aug. 16, 1859.
25306	Pratt, E. L., assignor to self and R. B. Fitts.	Philadelphia, Pa.	Churns.	Aug. 30, 1859.
24052	Pratt, H. D. J.	Washington, D. C.	Ice, machine for planing or shaving.	May 17, 1859.
22890	Pratt, N. B.	Deep River, Conn.	Carpet-sweeper.	Feb. 8, 1859.
22975	Pratt, N. B.	Deep River, Conn.	Carpet-sweeper.	Feb. 15, 1859.
23114	Pratt, Noah.	Nielolson, Pa.	Vessels, center-board for.	Mar. 1, 1859.
22671	Pratt, Samuel F.	Roxbury, Mass.	Carpet-sweeper.	Jan. 18, 1859.
25043	Pratt, William F.	Bristol, Pa.	Sewing-machines.	Aug. 10, 1859.
25307	Pratt, William F., assignor to E. Carver & Co.	East Bridgewater, Mass.	Gins, cotton.	Aug. 30, 1859.
23704	Pratt, William S.	Brooklyn, N. Y.	Journal-boxes.	April 19, 1859.
22581	Prenatt, Augustus.	Buffalo, N. Y.	Hoops, machine for dressing.	Jan. 11, 1859.
24053	Preston, Asa.	Unionville, Ohio.	Cultivators.	May 17, 1859.
25850	Prentiss, George J.	Fall River, Mass.	Polishing iron.	Oct. 18, 1859.
22582	Prentiss, George M.	Worcester, Mass.	Inkstand.	Jan. 11, 1859.
25672	Prentiss, Josiah W.	Pultney, N. Y.	Restoring raneid butter, mode of.	Oct. 4, 1859.
26615	Prentiss, Josiah W.	Pultney, N. Y.	Seeding-machines.	Dec. 29, 1859.
23391	Priehard, R. M., et al. (See Elmer, Asahel, assignor.)	Bethany, N. Y.	Planters, seed.	Mar. 29, 1859.
23442	Prinnee, Abner. (See Neumann, Cæsar, assignor.)	Bethany, N. Y.	Boilers and steamers.	Sept. 13, 1859.
22762	Prindle, Daniel R.	Coveauty, N. Y.	Vehicles, mode of attaching thills to.	Jan. 18, 1859.
24403	Prindle, R. B.	Coveauty, N. Y.	Ploughs, device for securing the clevis to.	June 14, 1859.
25693	Prindle, R. B.	Coveauty, N. Y.	Fishing-rods, guide-rings for.	Oct. 4, 1859.
22580	Pritchard, Henry.	Brooklyn, N. Y.	Mills, grinding.	Jan. 11, 1859.
23311	Proseus, Alfred.	Philadelphia, Pa.	Engine, rotary.	Mar. 22, 1859.
22512	Prosser, Treat T.	Fond-du-Lac, Wis.	Ditching, grading, &c., machine for.	Jan. 11, 1859.
24955	Provine, William.	Columbus, Mo.	Carriage-hub.	Aug. 2, 1859.
23374	Pruette, Jesse.	Aurora, Ill.	Boiler-feeding apparatus.	Dec. 6, 1859.
25912	Puekett, Nathan.	Deeming, Ind.	Water from wells, &c., apparatus for raising.	Oct. 25, 1859.
25912	Puffer, Elhanaan.	Oxford, N. Y.	Water from wells, &c., apparatus for raising.	Oct. 25, 1859.



25573	Purinton, J., jr.	.....	Lynn, Mass	.....	Oct. 4, 1859.
24148	Pullan, Richard B	.....	Cincinnati, Ohio	.....	May 25, 1859.
23781	Punderford, James	.....	New Haven, Conn	.....	April 26, 1859.
22673	Purdy, Thos. E., et al. (See Maynard, Edward, assignor.)	.....	Liverpool, Ohio	.....	Jan. 18, 1859.
23705	Purley, H., Jesse Harlan, and E. C. Check	.....	Cincinnati, Ohio	.....	April 19, 1859.
26516	Purse, Samuel N	.....	Ashley, Mo	.....	Dec. 29, 1859.
24522	Putnam, Arehibald, and James H., assignors to themselves and Philip F. Geisse.	.....	Wellsville, Ohio	.....	June 21, 1859.
22976	Putnam, C. S.	.....	New York, N. Y	.....	Feb. 15, 1859.
23263	Putman, Henry W.	.....	Cleveland, Ohio	.....	Mar. 15, 1859.
26052	Pye, Edward R	.....	New York, N. Y	.....	Nov. 8, 1859.
25584	Pyle, C. W.	.....	Galveston, Texas	.....	Sept. 27, 1859.
26121	Pyle, Isaac N.	.....	Deeatur, Ind	.....	Nov. 15, 1859.
26123	Pyne, John, and Washington Parr	.....	Harrisburg, Pa.	.....	Nov. 15, 1859.
25277	Queru, Edmond	.....	New York, N. Y	.....	Nov. 30, 1859.
25216	Quigley, John B.	.....	Trenton, N. J.	.....	Aug. 23, 1859.
24661	Quigley, Thomas B.	.....	Galion, Ohio	.....	July 5, 1859.
24756	Quimby, Daniel	.....	Littleton, N. H.	.....	July 12, 1859.
24433	Quimby, E. T., assignor to self and Newton Brooks	.....	New Ipswich, N. H.	.....	June 14, 1859.
25044	Quimby, James M., A. H. Brown, Geo. H. Beuton, and J. Criswell.	.....	Newark, N. J.	.....	Aug. 9, 1859.
23811	Quinn, James E., assignor to John M. Johnston.	.....	Chicago, Ill.	.....	April 26, 1859.
24575	Quinnepiac Company. (See Hall, Wm. D., assignor.)	.....	Norwich, N. Y	.....	June 28, 1859.
23706	Race, George	.....	Seneca Falls, N. Y	.....	April 19, 1859.
25525	Race, Washburn, and S. R. C. Mathews.	.....	New York, N. Y	.....	Sept. 20, 1859.
23193	Ralph, Michael, et al. (See Marlen & Ralph.)	.....	West Middletown, Pa.	.....	Mar. 8, 1859.
23194	Ralston, Andrew	.....	West Middletown, Pa.	.....	Mar. 8, 1859.
23496	Ralston, Andrew	.....	West Middletown, Pa.	.....	April 5, 1859.
23980	Ralston, Walter	.....	Manchester, England	.....	Nov. 1, 1859.
23782	Ramler, David	.....	Union Deposit, Pa.	.....	April 26, 1859.
24147	Ramsay, Robert	.....	Philadelphua, Pa.	.....	May 24, 1859.
25761	Ramsdell, Asa T., et al. (See Tolman, Benj., assignor.)	.....	Indianapolis, Ind	.....	Oct. 11, 1859.
23607	Ramsey, Henry B.	.....	New Wilmington, Pa	.....	April 12, 1859.
23115	Ranck, Daniel	.....	Intercourse, Pa	.....	Mar. 1, 1859.
23533	Rand, Hobbs, & Sellers. (See Hobbs, Sellers, & Rand.)	.....	Boston, Mass.	.....	April 5, 1859.
23989	Randall, Geo. W., assignor to self and Reuben J. Todd	.....	Boston, Mass.	.....	May 10, 1859.
23860	Randall, Geo. W., assignor to Reuben J. Todd	.....	Burnsville, Ala.	.....	May 3, 1859.
23497	Randall, H. W.	.....	Middleburg, Vt	.....	April 5, 1859.
25443	Randall, Silas G.	.....	Middleburg, Vt	.....	Sept. 13, 1859.
23498	Randall, Silas G.	.....	Middleburg, Vt	.....	Sept. 13, 1859.
23498	Ransford, G., et al. (See Landry, Henry A., assignor.)	.....	Lyons, N. Y.	.....	April 9, 1859.
26522	Ransier, J. Clinton.	.....	Albany, N. Y.	.....	Dec. 20, 1859.
26124	Ransom, Albion	.....	United States Navy	.....	Nov. 15, 1859.
	Ransom, Geo. M.	.....		.....	
	Ransom, S. H., & Co. (See Cow, L. E., assignor.)	.....		.....	
	Rathbone & Co. (See Henderson, Joseph C., assignor.)	.....		.....	
	Rawling, Thomas, and B. S. Pardee. (See Pardee & Rawling.)	.....		.....	
	Boots and shoes, machine for lasting	.....		.....	
	Stoves	.....		.....	
	Leather hose, water-proof	.....		.....	
	Rolling and pressing wool	.....		.....	
	Car-couplings	.....		.....	
	Harvesters	.....		.....	
	Railroad turn-tables	.....		.....	
	Caoutchouc, apparatus for vulcanizing	.....		.....	
	Bottle-stopper fastenings	.....		.....	
	Hat and eap linings, sweat-knife for cutting	.....		.....	
	Bales, cotton, securing iron bands on	.....		.....	
	Cultivators	.....		.....	
	Egg-beater or ice-cream freezer	.....		.....	
	Oils, gelatinizing	.....		.....	
	Mains, tapping water	.....		.....	
	Locomotive-engines, device for regulating the exhaust in	.....		.....	
	Boring hubs, machine for	.....		.....	
	Clocks, attachment for alarm	.....		.....	
	Furnace for making iron direct from the ore	.....		.....	
	Pipes, gas and water, joint for	.....		.....	
	Clothes-dryer	.....		.....	
	Hydrants	.....		.....	
	Lamps, vapor, burners for	.....		.....	
	Castings, cleaning	.....		.....	
	Harvesters	.....		.....	
	Bands for binding grain, hemp, &c	.....		.....	
	Fabrics, woven, embossing and finishing	.....		.....	
	Raking hay, machine for	.....		.....	
	Lamps, vapor	.....		.....	
	Harvesters	.....		.....	
	Clothes-frame	.....		.....	
	Harvesters	.....		.....	
	Faucets	.....		.....	
	Cook, basin	.....		.....	
	Presses, cotton	.....		.....	
	Springs, air, keeping supplied with air	.....		.....	
	Seeding-machines	.....		.....	
	Car-couplings	.....		.....	
	Stoves	.....		.....	
	Cannon, apparatus for elevating	.....		.....	

## Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22977	Rawson, David W., <i>et al.</i> (See Colby, Daniel C., assignor.)	Baltimore, Md.	Harvesters	Feb. 15, 1859.
24662	Rawson, E., <i>et al.</i> (See Lyman, Hodgkins, & Rawson.)	Galena, Ill.	Stereotype-plates, apparatus for punching	July 5, 1859.
23707	Ray, B. F.	Alliance, Ohio.	Harvesting-machines	April 19, 1859.
25278	Ray, Samuel, and Moses R. Shalters.	Southington, Conn.	Tinman's machine	Aug. 30, 1859.
25369	Raymond, Charles H., assignor to Peek Smith Manufacturing Company.	Southington, Conn.	Tin-folding machine	Sept. 6, 1859.
24576	Raymond, L., and T. W. Wilson. (See Wilson & Raymond.)	Marlborough, N. H.	Hoops on rails, &c., machine for driving	June 28, 1859.
23392	Raymond, William	Hamilton, N. Y.	Clothes-frame	Mar. 29, 1859.
25045	Read, Daniel	Cold Spring, N. Y.	Tanning, apparatus for	Aug. 9, 1859.
23312	Read, John B.	Philadelphia, Penn.	Boots and shoes, heels for	Mar. 22, 1859.
26054	Read, Joseph.	Boston, Mass.	Stoves, ranges, &c.	Nov. 8, 1859.
22583	Read, Josiah M.	Conrad's Store, Va.	Harvesters, corn	Jan. 11, 1859.
23783	Read, T. N., and E. S. Collins. (See Collins & Read.)	Conrad's Store, Va.	Harvesters, corn	April 26, 1859.
26294	Reamer, Isaac.	Reading, Pa.	Rakes, horse-lay	Nov. 29, 1859.
23944	Reamer, Isaac, and Henry Miller.	Norwich, Conn.	Tools for manufacture of fire-arms	May 10, 1859.
23990	Reazer, Mathias	Norwich, Conn.	Tools for manufacturing pistols	May 10, 1859.
22891	Rebety, Augustus, assignor to Manhattan Fire-arms Manufacturing Company.	Fredonia, N. Y.	Cheese, manufacture of	Feb. 8, 1859.
26125	Rebety & Gruler. (See Gruler & Rebety.)	Indianapolis, Ind.	Lath-machine	Nov. 15, 1859.
22978	Redington, F. A., and George McCluer.	Marshfield, Mass.	Windlass	Feb. 15, 1859.
23499	Redstone, John H., and A. E.	Marshfield, Mass.	Capstan	April 5, 1859.
23494	Reed, G. P. <i>et al.</i> (See Agnew, B. F., assignor.)	Marshfield, Mass.	Shoe-pegs, machine for pointing and splitting	April 5, 1859.
24663	Reed, Jesse	Jersey City, N. J.	Engines, oscillating, trunnion-box lining for	July 5, 1859.
24821	Reed, Jesse	Jersey City, N. J.	Engines, oscillating steam	July 19, 1859.
23784	Reed, John A.	Providence, R. I.	Stove-polish mixer and scraper	April 26, 1859.
23784	Reed, John C.	Pittsburg, Pa.	Rails for street railroads	Dec. 20, 1859.
26523	Reed, John H., and G. W. Ziegler. (See Gurrusey, S. B., assignor.)	Brooklyn, N. Y.	Seat, folding	April 19, 1859.
23708	Reed, W. M. (See Dugdale, Thomas A., assignor.)	Brooklyn, N. Y.	Seat, folding	April 19, 1859.
23708	Reese, Abraham	Hartleton, Pa.	Clover-hullers	May 31, 1859.
24227	Reese, John L., jr., <i>et al.</i> (See Beach, Waldren, assignor.)	Rogersville, Ind.	Stumps and raising heavy weights, mode of applying power for extracting	April 12, 1859.
23708	Reeve, T., and M. B. Swezey.	Rogersville, Ind.	Stumps and raising heavy weights, mode of applying power for extracting	April 12, 1859.
24227	Reeves, Samuel J., <i>et al.</i> (See Meigs & Reeves.)	Hartleton, Pa.	Clover-hullers	May 31, 1859.
23608	Reid, Alfred, <i>et al.</i> (See Payne & Reid.)	Rogersville, Ind.	Stumps and raising heavy weights, mode of applying power for extracting	April 12, 1859.
24227	Reif, Christian	Hartleton, Pa.	Clover-hullers	May 31, 1859.
23608	Reiman, Henry, jr.	Rogersville, Ind.	Stumps and raising heavy weights, mode of applying power for extracting	April 12, 1859.
24227	Reinhard, F., and C. Kesler. (See Kesler & Reinhard.)	Hartleton, Pa.	Clover-hullers	May 31, 1859.
23608	Reinhard, F., and C. Kesler. (See Kesler & Reinhard.)	Rogersville, Ind.	Stumps and raising heavy weights, mode of applying power for extracting	April 12, 1859.



24577	Remington, E., and Sons, <i>et al.</i> (See Rider, Joseph, assignor.)	Cincinnati, Ohio.....	Ranges, cooking.....	June 28, 1859.
25526	Remson, W. (See Joslin & Eaton, assignors.)	New York, N. Y. } Brooklyn, N. Y. }	Insect powder-blower.....	Sept. 20, 1859.
26055	Renshaw, D., and C. J. Rooney. (See Rooney & Renshaw.)	New York, N. Y. } Brooklyn, N. Y. }	Insect powder-blower.....	Nov. 8, 1859.
22892	Renton, George H., <i>et al.</i> (See Quimby, Brown, and others.)	Ogden, Ind.....	Saw-gates, device for preventing tremulous vibrations of.....	Feb. 8, 1859.
23943	Renwick, H. B., and W. E. Worthen. (See Worthen & Renwick.)	East Bethel, Vt.....	Rakes, horse-hay.....	May 10, 1859.
26400	Resor, William..... (See Tuesdale & Sennett, assignors.)	New York, N. Y.....	Valves for steam-engines, cut-off.....	Dec. 6, 1859.
22747	{ Reynard, Peter, and. Victor Varim.....	Buffalo, N. Y.....	Trusses, belt.....	Jan. 25, 1859.
23394	{ Reynard, Peter, and. Victor Varim.....	Indianapolis, Ind.....	Mills, flour, friction bolt for.....	Mar. 29, 1859.
23393	{ Reynard, Peter, and. Victor Varim.....	Manchester, N. H.....	Loom-harness needles, machines for filling.....	Mar. 29, 1859.
24488	Reynolds, David.....	Stockport, N. Y.....	Looms, power, brakes for.....	June 21, 1859.
23709	Reynolds, George S.....	Baltimore, Md.....	Railroads, snow-ploughs for.....	April 19, 1859.
	Reynolds, George H., assignor to Caleb Barstow and D. D. Badger.			
22747	Reynolds, Hiram H.....			
23394	Reynolds, L. Simpson.....			
23393	Reynolds, Lewis L.....			
24488	Reynolds, Rensselaer and Gordon B.....			
23709	Rhoads, Willard.....			
	Rhodes, I., <i>et al.</i> (See Brown, Cyril E., assignor.)			
	Ricards, Thomas W., and J. Creamer. (See Creamer & Ricards.)			
23495	Ricardo, George. (See Griffin, Caleb, assignor.)	Clinton, Mass.....	Air-engines.....	April 5, 1859.
26617	Rice, Benjamin F.....	New York, N. Y.....	Carpet-fastener, stair.....	Dec. 27, 1859.
24578	Rice, Charles. (See Messer, Henry, assignor.)	Detroit, Mich.....	Crushing ores, mode of lifting stamps for.....	June 26, 1859.
	Rice, Clinton.....			
	Rice, Delos E.....			
	Rice, Henry G., administrator. (See Hathaway, John H., deceased.)			
22825	Rice, J. E.....	Oneida, Ill.....	Mills, fanning.....	Feb. 1, 1859.
22826	Rice, Nathan F.....	New Orleans, La.....	Filtering-apparatus.....	Feb. 1, 1859.
26126	Rice, Nathan F.....	New Orleans, La.....	Ovens, baker's.....	Nov. 15, 1859.
24489	Rice, William.....	Philadelphia, Pa.....	Filters.....	June 21, 1859.
24054	Rich, Reuben.....	South Easton, Pa.....	Water-wheels.....	May 17, 1859.
22584	Richard, Albert C.....	Newtown, Conn.....	Gum, vulcanized, method of detaching paper from.....	Jan. 11, 1859.
26127	Richard, Albert C.....	Newtown, Conn.....	Envelope, letter.....	Nov. 15, 1859.
22980	Richards, Amos A.....	Urbana, Ohio.....	Locks.....	Feb. 15, 1859.
22827	Richards, John W.....	New York, N. Y.....	Ships, fire and ventilating apparatus for.....	Feb. 1, 1859.
24757	Richards, P. D., and F. N. Thayer.....	New Orleans, La.....	Register of count, pocket.....	July 12, 1859.
24404	Richards, Joseph, and Joseph Hoffacker..... (See Griffin, Caleb H., assignor.)	New York, N. Y.....	Piano-fortes, keys, &c., of.....	June 14, 1859.
22537	Richardson, Charles E. H.....	Philadelphia, Pa.....	Coffins.....	Jan. 4, 1859.
26204	Richardson, Francis B.....	Boston, Mass.....	Syringes, elastic énama.....	Nov. 23, 1859.
23002	Richardson, G. W., and R. Glover, assignors to themselves and John J. Tanquerly.	Grayville, Ill.....	Motion, converting rectilinear into rotary.....	Feb. 15, 1859.
24434	Richardson, G. W., and J. W. White, assignors to themselves and George M. Weed.	Grayville, Ill.....	Harvesters, corn.....	June 14, 1859.

Patentees of inventions and designs, 1859.

No.	Name of patentec.	Residence.	Invention or discovery.	Date.
22772	Richardson, G. W., and Robert Glover, assignors to themselves, J. B. Williams, and William A. Horrall.	Grayville, Ill.	Harvesters.	Jan. 25, 1859.
23812	Richardson, G. W., assignor to self and John P. Williams.	Grayville, Ill.	Seeding-machines.	April 26, 1859.
24848	Richardson, G. W., assignor to self and George M. Weed.	Grayville, Ill.	Harvesting-machines.	July 19, 1859.
25370	Richardson, G. W., and R. Glover, assignors to themselves, J. B. Williams, and William A. Horrall.	Grayville, Ill.	Harvesting-machines.	Sept. 9, 1859.
24758	Richardson, John.	New York, N. Y.	Pen and pencil cases.	July 12, 1859.
25762	Richardson, L. B.	Athol, Mass.	Lasting-pincers.	Oct. 11, 1859.
24330	Richardson, Samuel M.	New York, N. Y.	Hinges, cutting out strap.	June 7, 1859.
26375	Richardson, Samuel M.	New York, N. Y.	Hinges.	Dec. 6, 1859.
23945	Richardson, Sylvanus.	Jerico, Vt.	Water-wheels.	May 10, 1859.
24055	Richardson, Sylvanus.	Jerico, Vt.	Water-wheels.	May 17, 1859.
25793	Richardson, T. D., assignor to William D. Richardson.	New York, N. Y.	Pen and pencil holder.	Oct. 11, 1859.
	Richmond, E., and A. J. Emlaw. (See Emlaw & Richmond.)			
23044	Richter, Charles W.	Madison, Ga.	Lamps.	Feb. 22, 1859.
26295	Richter, Charles W.	Madison, Ga.	Lamps.	Nov. 29, 1859.
24146	Rickey, R. S. (See Root, A. R., assignor.)			
24579	Rickkon, Richards.	Rochester, N. Y.	Car-couplings.	May 24, 1859.
23861	Rickurt, Alexander	Schoharie, N. Y.	Turning hubs, machine for.	June 29, 1859.
25470	Rider, Joseph.	Newark, Ohio	Fire-arm, revolving.	May 3, 1859.
22674	Rider, Joseph, assignor to self and E. Remington & Sons.	Newark, Ohio	Fire-arm, breach-loading.	Sept. 13, 1859.
24405	Riggs, John W.	New York, N. Y.	Truss-springs.	Jan. 11, 1859.
	Riker, Daniel.	Harlem, N. Y.	Carriage-thills, clip for.	June 14, 1859.
	Riley, E. H., et al. (See Baxter, E. O., assignor.)			
23785	Rineck, Jacob	Easton, Pa.	Rope, machines for laying hemp around wire in making.	April 26, 1859.
23946	Rinehart, John W.	Lexington City, Mo.	Hemp-brake.	May 10, 1859.
24782	Ring, Asa T., assignor to Nathaniel T. Spear and A. J. Robinson.	Newton, Mass.	Thread, device for winding skeins of.	July 12, 1859.
26524	Ringel, Celistin	San Francisco, Cal.	Gold-washer.	Dec. 20, 1859.
24238	Ripley, Ezra.	Troy, N. Y.	Nut-cracker.	May 31, 1859.
22585	Ripley, William	Edgarton, Mass.	Square, framing.	Jan. 11, 1859.
22748	Rison, M. H.	Paris, Tennessee	Photographic plate-vises.	Jan. 25, 1859.
24490	Ritchie, James, et al. (See Alexander, John, assignor.)			
	Ritter, Christian	Reading, Pa.	Presses, cider.	June 21, 1859.
23947	Ritter, S. S.	Philadelphia, Pa.	Trusses, hernial.	May 10, 1859.
24580	Rivers, William I., (See Boynton, Edward S., assignor.)	Sumter, S. C.	Cultivators, cotton.	June 28, 1859.
25046	Robbe, Charles A.	Augusta, Ga.	Gas-retorts.	Aug. 9, 1859.
24822	Robbins, Benjamin.	Machias, Me.	Pumps, apparatus for working.	July 19, 1859.
23609	Robbins, D. F., and Simeon Morrison.	De Witt, Ill.	Plough, mole	April 12, 1859.
23396	Robbins, H. R.	Baltimore, Md.	Stoves.	Mar. 29, 1859.
24887	Robbins, Ira.	Hughesville, Pa.	Railroads, &c., gates for.	July 26, 1859.



2293	Roberts, Albert W.	Hartford, Conn.	Leather, machines for stretching.	Feb. 8, 1859.
25915	Roberts, Albert W.	Hartford, Conn.	Hook, disengaging.	Oct. 25, 1859.
23948	Roberts, Edward A. L., and William Demorset.	New York, N. Y.	Apparatus for vulcanizing.	May 10, 1859.
24893	Roberts, Edward A. L.	New York, N. Y.	Furnace for dental purposes.	July 19, 1859.
25674	Roberts, Edward A. L.	New York, N. Y.	Lath-chuck.	Oct. 4, 1859.
23264	Roberts, E. L.	Brooklyn, N. Y.	Fastening for folding-doors.	Mar. 15, 1859.
24889	Roberts, Hanson.	Mornau Island, Cal.	Gold-washers.	July 26, 1859.
25139	Roberts, J. M., et al. (See Custer, J. D., assignor.)	Allamance, N. C.	Cars, &c., railroad, trucks for.	Aug. 16, 1859.
24759	Robertson, Thomas E.	Brooklyn, N. Y.	Jack, hydrostatic lifting.	July 12, 1859.
23395	Robertson, John.	Washington, D. C.	Cultivators.	Mar. 29, 1859.
25913	Robertson, Thomas A.	New York, N. Y.	Sewing-machines.	Oct. 25, 1859.
26205	Robertson, T. J. W.	New York, N. Y.	Sewing-machines.	Nov. 23, 1859.
22749	Robie, R. V., et al. (See Morse, A. W., assignor.)	Lenox, Pa.	Wagon-brake.	Jan. 25, 1859.
25916	Robins, Henry E., et al. (See Cooley, Almon, assignor.)	Conneautville, Pa.	Mills for crushing sugar-cane.	Oct. 25, 1859.
23295	Robinson, George W.	Boston, Mass.	Steering-apparatus.	Mar. 15, 1859.
26053	Robinson, of Eli, John.	Sharptown, Md.	Turn-table, portable.	Nov. 8, 1859.
23610	Robinson, Luther. (See Gray, William, assignor.)	Gypsum, N. Y.	Dirt-scraper.	April 12, 1859.
25217	Robison, A. J.	New York, N. Y.	Inkstand.	Aug. 29, 1859.
23065	Robjohn, Thomas.	Worcester, Mass.	Blackeng.	Feb. 23, 1859.
26525	Rockwood, L. K., assignor to J. L. Clough.	New York, N. Y.	Stereoscopic-apparatus.	Dec. 21, 1859.
25869	Roche, Thomas C.	Ceralvo, Ky.	Looms, fancy.	Oct. 18, 1859.
26134	Roder, Conrad, assignor to self and J. T. Iler.	New York, N. Y.	Eyelets, machines for inserting.	Nov. 15, 1859.
22979	Rodgers, William H.	Warsaw, Ill.	Match-box, pocket.	Feb. 15, 1859.
24154	Roesler, A., and C. Frey.	Warsaw, Ill.	Buckles.	May 25, 1859.
22513	Roesler, Adolph.	Deep River, Conn.	Combs, hair, machine for pointing the teeth of.	Jan. 4, 1859.
23949	Rogers, C. B.	Pittsburg, Pa.	Grain-shovels.	May 10, 1859.
24888	Rogers, David B.	Pittsburg, Pa.	Car-springs, railroad.	July 26, 1859.
24056	Rogers, David B., and J. A. Wood.	Sacramento, Wis.	Washing-machines.	May 17, 1859.
26618	Rogers, Jacob S. (See Bradley, George, assignor.)	Spring, Pa.	Cultivators.	Dec. 27, 1859.
25763	Rogers, Morgan L.	Philadelphia, Pa.	Umbrella-frances.	Oct. 11, 1859.
26619	Rogers, R. E. (See Bloom, Joseph, assignor.)	Philadelphia, Pa.	Engine, steam, for land-carriages.	Dec. 29, 1859.
25047	Rogers, Robert E.	Wethersfield, Conn.	Planters, seed.	Aug. 9, 1859.
26377	Rogers, Theodore B.	Strasburg Township, Pa.	Churn.	Dec. 6, 1859.
24331	Rohmer, Charles S., and William Gunckel. (See Boyer, Michael, assignor.)	Philadelphina, Pa.	Pan, dust.	June 7, 1859.
23745	Rohrer, Henry.	Newport, Ohio.	Plough, molo.	April 19, 1859.
23266	Rohrman, Joseph Hall.	Albany, N. Y.	Brewers, preparing hop-liquor for distillers and	Mar. 15, 1859.
24704	Roland, H. W., and E. Forbis, assignors to themselves and W. Withrow.	Sinking Springs, Pa.	Threshing-machines.	Sept. 20, 1859.
26620	Rollins, Archelaus S.	Fredricksburg, Va.	Threshing-machines.	July 5, 1859.
24956	Rollman, Joshua.	Baley's Mill, Fla.	Ploughs.	Dec. 27, 1859.
	Rollow, John I., assignor to Charles C. Wellford.	Deposit, N. Y.	Hollow-ware, machine for turning.	Aug. 2, 1859.
	Roney, George W., assignor to self and W. F. Lloyd.			
	Rood, Lumau P.			

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23500	Rooker, Thomas N	New York, N. Y	Printing type-eases	April 5, 1859.
25140	Roome, James H	New York, N. Y	Slicans	Aug. 16, 1859.
25585	Rooney, C. J., and D. Renshaw	New York, N. Y	Hinge, spring	Sept. 27, 1859.
23430	Root, A. R., assignor to R. S. Riekey	Keokuk, Iowa	Seeding-machines	Mar. 29, 1859.
22675	Root, E. K	Hartford, Conn	Cartridges, method of packing	Jan. 18, 1859.
26621	Root, Riley	Galesburg, Ill.	Surveying-instrument	Dec. 27, 1859.
23950	Root, S. E.	Bristol, Conn	Clock-dial	May 10, 1859.
23267	Roots, P. H.	Connerville, N. Y	Water-wheel	Mar. 15, 1859.
25675	Ropp, Christian	MeLean County, Ill.	Planters, corn	Oct. 4, 1859.
25914	Rose, Alfred	Penn Yan, N. Y	Churn-dasher	Oct. 25, 1859.
26057	Rose, Israel M.	New York, N. Y	Sewing-machines	Nov. 8, 1859.
22057	Rose, Timothy	Corlandtville, N. Y	Water-wheel	May 24, 1859.
	Rosebrooks, J. M., and W. A. Wood. (See Wood & Rosebrooks.)			
22536	Rosenerantz, E. D., and W. H. Smith, assignors to Rosen- erantz, and Barton E. Clark.	New York, N. Y	Lamps, vapor, burners for	Jan. 4, 1859.
23862	Rosenkrans, Joseph	Avoea, N. Y	Mills, eider	May 3, 1859.
24239	Rosenkrans, Joseph	Avoea, N. Y	Wagon-brake, self-acting	May 31, 1859.
25586	Ross, Abbott Q	Cincinnati, Ohio	Alarm, burglar's	Sept. 27, 1859.
24240	Ross, Andrew C.	Almont, Mich.	Sawing-machine for resawing boards	May 31, 1859.
24435	Ross, Robert, et al. (See Willard & Ross.)			
	Ross, Robert, assignor to self and George J. Stannard	St. Albans, Vt.	Water-wheel	June 14, 1859.
	Ross, Thomas, and F. M. Strong. (See Strong & Ross.)			
23397	Roux, J. G	Raymond, Miss.	Presses, cotton	Mar. 29, 1859.
25587	Rouse, John	Port Gibson, N. Y	Harness, horses	Sept. 27, 1859.
24144	Roushe, George	Lima, Ohio	Straw-cutters	May 24, 1859.
23884	Rousseau, T. Auguste, assignor to Edward Alexander	Belleville, France	Organs, reed	May 3, 1859.
25981	Rowan, Charles E.	New York, N. Y	Rice, machines for polishing	Nov. 1, 1859.
26638	Rowe, A., jr., et al. (See Howard, A. P., and A. Rowe, jr.)			
23195	Rowe, James, assignor to self and Martin B. Ewing	Cincinnati, Ohio	Sewing-machines	Dec. 27, 1859.
24491	Rowe, John L.	New York, N. Y	Pen-wiper and paper-weight	Mar. 8, 1859.
22894	Rowe, Philip C.	Boston, Mass.	Brush for washing windows	June 21, 1859.
25141	Rowe, William N.	Sharpsburg, Md.	Corn-huskers	Feb. 8, 1859.
23611	Rowell, J. S., D. C. Teller, and M. F. Lowth	Beaver Dam, Wis	Jack, carriage and wagon	Aug. 16, 1859.
23258	Rowley, James L.	Angola, Ind.	Water-wheels	April 12, 1859.
23398	Rowley, James L.	Angola, Ind.	Washing-machine	Mar. 15, 1859.
	Ruby, H., and H. R., et al. (See Goshou, J. G., assignor.)		Railroad cattle-guard	Mar. 29, 1859.
23863	Ruddaell, Washington	Baltimore, Md.	Mail-bags	May 3, 1859.
25048	Rue, James	Englishtown, N. J.	Cultivators	Aug. 9, 1859.
22750	Ruger, Philip P.	New York, N. Y	Wood, machine for splitting	Jan. 25, 1859.
23864	Ruggles, Stephen P.	Boston, Mass.	Punching and stamping-press	May 3, 1859.
23951	Ruggles, Stephen P.	Boston, Mass.	Printing-presses	May 10, 1859.
	Ruggles, S. P., et al. (See Morse, J., assignor.)			
24492	Ruggles, W. G.	Worcester, Mass	Ranges, cooking	June 21, 1859.



23116	Rulofson, Isaac.....	Penn, N. Y.....	Ploughs.....	Mar. 1, 1859.
24824	{ Rundlett, Charles, and John W. Drummond.....	Alden, Me.....	Press, lay.....	July 19, 1859.
23612	Runkel, Mark.....	Winstow, Me.....	Engine, oscillating.....	April 12, 1859.
23711	Rupertus, Jacob.....	New York, N. Y.....	Fire-arm, revolving.....	April 19, 1859.
23952	Rupertus, Jacob.....	Philadelphia, Pa.....	Fire-arms, automatic-primer for.....	May 10, 1859.
25142	Rupertus, Jacob.....	Philadelphia, Pa.....	Fire-arms, percussion-pellet for.....	Aug. 16, 1859.
23313	Russ, Horace P.....	New Market, Md.....	Amalgamator.....	Mar. 29, 1859.
22750	Russell, B. A.....	Seymour, Conn.....	Castors, ball-furniture.....	Jan. 23, 1859.
25219	Russell, C. M., et al. (See Davenport, Jos., assignor.)	Philadelphia, Pa.....	Bonnets, machine for pressing.....	Aug. 23, 1859.
25218	Russell, C. W.....	Philadelphia, Pa.....	Bonnets, method of shaping.....	Aug. 23, 1859.
24241	Russell, Charles W.....	Baltimore, Md.....	Stoves.....	May 31, 1859.
23399	Russell, Isaac S., and Henry R. Matthew, assignor.) Russell, J., Manufacturing Company. (See Chapman, Matthew, assignor.) Russell Manufacturing Company. (See Cooker, Jos. C., assignor.)	New Market, Md.....	Harvesters.....	Mar. 29, 1859.
23269	Russell, J. E.....	Brooklyn, N. Y.....	Railways, cast-iron rails for.....	Mar. 15, 1859.
24058	Russell, John.....	Troy, N. Y.....	Mills, cast-iron grinding.....	May 17, 1859.
22828	Russell, Thomas.....	New York, N. Y.....	Ovens.....	Feb. 1, 1859.
22760	Russell, Wm. G.....	Winchester, Va.....	Whiffle-tree, self-detaehing.....	July 12, 1859.
26622	Ryan, Charles, et al. (See Timkham, Leonard B.)	Charlestown, Mass.....	Presses, hydraulic, retainers for.....	Dec. 27, 1859.
22514	Ryder, H., et al. (See Leonard H., assignor.)	Albany, N. Y.....	Shovels, sifting.....	Jan. 4, 1859.
24493	Ryder, H., and H. Leonard. (See Leonard & Ryder.)	Albany, N. Y.....	Furnaces, door-frame for.....	June 21, 1859.
23117	Rymes, Christopher E.....	New York, N. Y.....	Propeller.....	Mar. 1, 1859.
25444	Sabbaton, Paul A.....	Winchester, Mass.....	Skiving-machine.....	Sept. 13, 1859.
25676	Sabbaton, Paul A., and John W. Chase.....	North Weare, N. H.....	Cheese-vats.....	Oet. 4, 1859.
24082	Sage, O.....	Wellington, Ohio.....	Mills, corn and cob.....	May 17, 1859.
23710	Sailor, Wm., assignor to self and Wm. L. and H. K. Boyer.	Philadelphia, Pa.....	Tempering and moulding materials, machines for.....	April 19, 1859.
26296	Salisbury, Silas C.....	New York, N. Y.....	Bolt-cattel.....	Nov. 29, 1859.
24143	Salisbury, William.....	Wheeling, Va.....	Scales, platform.....	May 24, 1859.
25220	Saltzman, Jacot, & Co. (See Jacot, C. E., assignor.)	St. Johnsbury, Vt.....	Engines, rotary.....	Aug. 23, 1859.
23045	Sampson, Elnathan.....	New York, N. Y.....	Ship-board, stalls for horses on.....	Feb. 22, 1859.
25917	Sampson, George R., et al. (See Taggart, John, assignor.)	Brooklyn, N. Y.....	Sails, reefing, fore and aft.....	Oet. 25, 1859.
24664	Sampson, Wm. S., et al. (See Badger & Sampson.)	Brooklyn, N. Y.....	Railroad-frogs, elastic.....	July 8, 1859.
25548	Samuel, Augustin P.....	New Haven, Conn.....	Books, machines for shaping and finishing the backs of.....	Sept. 20, 1859.
26297	Samuels, Samuel.....	Boston, Mass.....	Cultivator, teeth.....	Nov. 30, 1859.
26376	Samuels, Samuel.....	Portland, Me.....	Harvesters.....	Dec. 7, 1859.
22829	Sanborn, George P., and Willis Mansfield.....	Utica, N. Y.....	Mills, grinding and crushing.....	Jan. 4, 1859.
22981	Sanborn, G. H., and John E. Coffin, assignors to G. H. Sanborn.....	Taylor, Ill.....	Mills, burr-stone.....	Feb. 1, 1859.
25528	Sanborn, R. S., et al. (See Harsha, Mortimer S., assignor.)	Poughkeepsie, N. Y.....	Engine, steam.....	Feb. 15, 1859.
	Sanders, Henry.....	Poughkeepsie, N. Y.....	Horse-power machines.....	Sept. 20, 1859.
	Sands, A. B., et al. (See Dwyer, Robert D., assignor.)	Poughkeepsie, N. Y.....		
	Sanford, D.....	Poughkeepsie, N. Y.....		
	Sanford, Gelston.....	Poughkeepsie, N. Y.....		
	Sanford, Gelston.....	Poughkeepsie, N. Y.....		
	Sanford, Gelston.....	Poughkeepsie, N. Y.....		
	Sanford, Gelston.....	Poughkeepsie, N. Y.....		

*Patentees of inventions and designs, 1859.*

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22895	Sanford, N. C.	Meriden, Conn.	Skates	Feb. 8, 1859.
23501	Sangster, James, and Amos W. Sankey, James M., <i>et al.</i> (See Gray, Thomas, assignor.) Sargent, Charles G., <i>et al.</i> (See Calvert & Sargent.) Sargent, Ezra D. Sargent, Nathan Saterly, William R. Sauerbier, Henry Sauerbier, Henry Sauerbier, Henry Savage, E. (See North & Savage.) Savage, Elliot, and William A. Fosket. (See Fosket & Savage.) Savage, Silas T. Savage, Silas T. Sawtell, John N. Sawyer, Charles B. Sawyer, Charles B. Sawyer, Charles B. Sawyer, Charles B. Sawyer, Irvin P., and T. Alsop. Sawyer, J. B., <i>et al.</i> (See Montjoy & Sawyer.) Sawyer, William, <i>et al.</i> (See Kimball & Sawyer.) Saxton, Joseph Saxton, Joseph Schafer, L. B. Schaffer, Francis C. Scharfenburg, T., <i>et al.</i> (See Squire & Scharfenburg.) Scheeper, John Schelly, Joel T. Schenkl, John P., assignor to self and E. A. Dana. Scherr, Emilius N. Schevenell, Richard S. Schieferdecker, C. C. Schlanke, E. Schmidt, August, assignor to self, C. E. and H. Schmidt Schmidt, August, assignor to self, C. E. and H. Schmidt Schmidt, J. W. Schnebly, William and Thomas Schnebly, William and Thomas Schneider, Peter. (See Borron, K., assignor.) Schott, George, and John Loudon Schott, Charles, and James C. Baldwin Schradler, Charles E., <i>et al.</i> (See Dewatt & Schradler.) Schroder, J. F. (See Schultze, C., and J. F. Schroder.)	Buffalo, N. Y. Indianapolis, Ind. Charlestown, Mass. Setauket, N. Y. Newark, N. J. Newark, N. J. Newark, N. J. Albany, N. Y. Albany, N. Y. Chicopee, Mass. Fitchburgh, Mass. Fitchburgh, Mass. Springfield, Ill. Washington, D. C. Washington, D. C. Baltimore, Md. Brooklyn, N. Y. New York, N. Y. Hereford, Pa. Worcester, Mass. Philadelphia, Pa. Athens, Ga. Baltimore, Md. Buffalo, N. Y. New York, N. Y. New York, N. Y. Philadelphia, Pa. Haekensack, N. J. Haekensack, N. J. New York, N. Y. Nashville, Tenn.	Skates Pegging-machines Cars, railroad, seats and couches for. Tables, tops for Sails, reefing fore and aft. Hoes, machine for making. Boot and shoe-soles, tool for planing and finishing the edges of Planes, edge. Pavement, cast-iron Coal-sieves Flyers, specder and stretcher. Furnaces and stoves Heating, cooking and ventilating, apparatus for. Furnace and ventilator. Sewing-machines Sealing-letters, &c., mode of. Presses, seal. Pumps Carriage-tops Stoves. Carriage-wheels, attaching spokes of. Ordinance and other fire-arms, chamber of Beil-ringer, automatic. Trusses, hernial. Stoves. Forging-machine Gas from wood, apparatus for making. Gas from resin, apparatus for making. Sawing-machines. Harvesting-machines. Harvesting-machines Bedstead-bottoms, spring. Excavating-machine	Feb. 8, 1859. April 5, 1859. Aug. 9, 1859. Sept. 20, 1859. Nov. 1, 1859. April 5, 1859. June 21, 1859. July 19, 1859. Feb. 8, 1859. July 12, 1859. June 14, 1859. June 9, 1859. June 28, 1859. Aug. 30, 1859. Oct. 25, 1859. Feb. 15, 1859. Feb. 22, 1859. Mar. 22, 1859. Sept. 13, 1859. Aug. 16, 1859. Dec. 13, 1859. April 19, 1859. Mar. 1, 1859. Dec. 27, 1859. Nov. 8, 1859. Mar. 29, 1859. Sept. 27, 1859. Sept. 27, 1859. July 12, 1859. June 21, 1859. June 21, 1859. June 7, 1859. April 19, 1859.



24523	Schroder, L., assignor to John H. Schroder & Co.	Cincinnati, Ohio.	Lock-guard.	June 21, 1859.
23315	Schuffnecker, John F.	Keokuk, Iowa.	Brick-machines.	Mar. 22, 1859.
23781	Schuh, George.	Madison, Ind.	Newspapers, &c., machine for addressing.	April 26, 1859.
23714	Schultz, C. A.	New York, N. Y.	Valves, steam.	April 19, 1859.
25530	Schultz, Casper, and J. F. Schroder.	Covington, Ky.	Straw-cutters.	Sept. 20, 1859.
23991	Schumacher, Elbert. (See Johnson, William, assignor.)	Philadelphia, Pa.	Mouldings, rotary cutters and mode of operating them for.	May 10, 1859.
26059	Schutte, Friedrich, assignor to self and Philip P. Weis.	Adams, N. Y.	Sewing-machines.	Nov. 8, 1859.
23712	Schutte, F., et al. (See Weis & Schutte.)	Trumbull, Conn.	Carriage-seats, attaching the rails of.	April 19, 1859.
26235	Scudder, A., and G. Hall. (See Hall & Scudder.)	Portland, Me.	Bed-bottom spring.	Nov. 22, 1859.
22586	Seofield, Charles.	Richmond, Ind.	Locomotives, machinery for oiling the journals of.	July 11, 1859.
23671	Seofield, Cornelius.	Syracuse, N. Y.	Harvesters.	April 12, 1859.
25313	Seoville, Ives, assignor to self and W. H. Scoville.	Chicago, Ill.	Turnpike roads, &c., machines for breaking stones for.	Sept. 6, 1859.
25446	Seoville, Thaddeus S.	Rochester, N. Y.	Level, spirit.	Sept. 13, 1859.
25919	Sebury, Thomas S., assignor to R. B. Gorsuch.	Stony Brook, N. Y.	Piano-forte, action.	Oct. 25, 1859.
26206	Seenan, John A.	St. Louis, Mo.	Kegs or casks, machine for chamfering and crozing.	Nov. 22, 1859.
29676	Seenan, John F.	Clyde, N. Y.	Seeding-machines.	Jan. 22, 1859.
29626	Sears, J. Hunter.	Brandford, Canada West.	Fire-arm, breech-loading.	Dec. 20, 1859.
24334	Sedgebeer, Joseph.	Cincinnati, Ohio.	Mills, grinding.	June 7, 1859.
25677	Seebold, Jacob.	New Berlin, Pa.	Separators, grain.	Oct. 4, 1859.
26445	Seely, Charles A.	New York, N. Y.	Electrical machines from moisture, method of preserving.	Dec. 13, 1859.
24335	Seeley, H. H., and P. Griswold. (See Griswold & Seeley.)	Wellington, Ohio.	Planes, bench, manner of securing the bits of.	June 7, 1859.
25764	Seely, William.	Chillicothe, Ill.	Cultivators.	Oct. 11, 1859.
25678	Selbert, Samuel R.	Munising, Mich.	Surveying-instruments.	Oct. 4, 1859.
24407	Seitz, Noah.	Melmore, Ohio.	Ventilating corn-houses, method of.	June 14, 1859.
23503	Selden, L. K.	Haddam, Conn.	Umbrellas.	April 5, 1859.
24142	Selden, L. K.	Haddam, Conn.	Cradle, folding.	May 24, 1859.
24665	Selleck, Thaddeus.	Greenwich, Conn.	Protecting surfaces of articles of iron.	July 5, 1859.
26378	Sellers, George H., I. W. Hobbs, and A. W. Rand. (See Hobbs, Sellers & Rand.)	New York, N. Y.	Hands, artificial.	Dec. 6, 1859.
23431	Selpho, William, and James Walker.	Philadelphia, Pa.	Mills, grinding.	Mar. 29, 1859.
23953	Selser, George, assignor to self, J., and W. Cook.	Williamsport, Pa.	Pumps.	May 10, 1859.
24336	Selser, John.	Philadelphia, Pa.	Cars, railroad, mode of switching-off from one track to another.	June 7, 1859.
23715	Sempie, M.	Fredericksburg, Va.	Pots, tea and coffee.	April 19, 1859.
23786	Sener, J. W.	Springfield, Ohio.	Bed-bottom spring.	April 26, 1859.
26207	Sennett & Tuesdale. (See Tuesdale & Sennett.)	New York, N. Y.	Sewing-machines, guides for.	Nov. 22, 1859.
23716	Senter, E. P., et al. (See Sherwood, Allen, assignor.)	Baltimore, Md.	Stoves.	April 19, 1859.
25280	Sergeant, Isaac A.	New York, N. Y.	Ore-concentrator.	Aug. 30, 1859.
23765	Serrell, Lemuel W.	Syracuse, N. Y.	Spoons, making.	Oct. 11, 1859.
26527	Severson, Abram, jr. (See Wagoner & Severson.)	Coventry, N. Y.	Butter, working.	Dec. 20, 1859.
23716	Sexton, S. B.	Lancaster, Pa.	Mills, apple, grinding, cylinders for.	Aug. 9, 1859.
25280	Seymour, Edward R.	Gettysburg, Pa.	Stairs, machine for making hand-rails for.	July 12, 1859.
25765	Seymour, George H., et al. (See Dunbar, W. B.)			
26527	Seymour, Joseph.			
	Seymour, Josiah.			
	Seymour, M. S., and J. S. Thompson. (See Thompson & Seymour.)			
25050	Shaefer, John.			
24763	Shaeffer, Cornelius R.			



*Patentees of inventions and designs, 1859.*

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24764	Shaler, Reuben	Madison, Conn	Safe, confectionery.	July 12, 1859.
22840	Shaler, Reuben, assignor to Ira W. Shaler. Shalters, Moses R., et al. (See Ray & Shalters.)	Madison, Conn	Trap, fly.	Feb. 1, 1859.
24890	Shank, Isaac R.	Buffalo, Va.	Biscuit-board.	July 26, 1859.
24337	Shank, Peter	Liberty, Ohio	Water, machine for raising.	June 7, 1859.
23717	Shannon, A.	New York, N. Y.	Rubber, India, treatment of.	April 19, 1859.
23788	Sharkey, Patrick	Brownsville, Miss.	Cotton-scraper.	April 26, 1859.
26128	Sharp, George D.	New York, N. Y.	Billiard-table, cushion.	Nov. 15, 1859.
23954	Sharp, Theodore	Bloomington, Ill.	Horse-powers, shafting for endless chain.	May 10, 1859.
22752	Sharps, Christian	Philadelphia, Pa.	Fire-arms, breech-loading.	Jan. 25, 1859.
22753	Sharps, Christian	Philadelphia, Pa.	Fire-arms, breech-loading, repeating.	Jan. 25, 1859.
24141	Shattuck, John Smith	Malden, Mass.	Soles, machines for cutting.	Jan. 24, 1859.
23196	Shaver, Archibald G.	New Haven, Conn.	Pencil-sharpener, eraser and.	May 24, 1859.
23119	Shaw, D. P., and F. C. Brown	Rochester, N. Y.	Smut-machines.	Mar. 8, 1859.
24765	Shaw, George F.	Woburn, Mass.	Corn-huskers.	Mar. 1, 1859.
24360	Shaw, Thomas, assignor to self and John C. Bailey	Philadelphia, Pa.	Glass, moulds for pressing.	July 12, 1859.
25549	Shaw, Thomas, assignor to self and John C. Bailey	Philadelphia, Pa.	Stoves.	June 7, 1859.
23789	Shaw, Thomas.	Philadelphia, Pa.	Sewing-machines.	Sept. 20, 1859.
22516	Shaw, William F.	Boston, Mass.	Lamps.	Apr. 26, 1859.
23504	Shaw, William W.	Troy, N. Y.	Pencils, lead, rubber-head for.	Jan. 4, 1859.
23614	Shaw, Winthrop D.	Tanworth, N. H.	Shoe-pegs from the block, machine for splitting.	April 5, 1859.
26624	Sheaver, Leander	Duncannon, Pa.	Railroad-chairs.	Apr. 12, 1859.
23831	Sheek, Albert	Smith Grove, N. C.	Mill-stones, dressing.	Dec. 28, 1859.
25766	Sheldley, H. O.	Republic, Ohio.	Bedstead, invalid.	Feb. 1, 1859.
24582	Sheldon, Philo B., assignor to self and J. T. Upson	Prattsburgh, N. Y.	Broom-clasp.	Oct. 11, 1859.
25281	Sheldon, Philo B.	Prattsburgh, N. Y.	Composition for destroying insects injurious to fruit trees.	June 28, 1859.
26446	Shepard, Andrew J.	Buffalo, N. Y.	Nut-machines.	Aug. 30, 1859.
24826	Shepard, Merrill A.	Bridgeport, Ill.	Hydraulic-motor.	Dec. 13, 1859.
23885	Shepard, William, jr., assignor to Thomas Holmes and Van Wyck Foster.	Brooklyn, N. Y.	Valves for steam-engines.	July 19, 1859.
25308	Sherwin, Win., et al. (See Taylor, Goodloe H., assignor.) Sherwood & Douglas. (See Lamoreux D., assignor.) Sherwood, Allen, assignor to E. P. Senter, A. H. Goss, W. Hills, and Ameretta Sherwood.	Auburn, N. Y.	Grain-binding machines.	Aug. 30, 1859.
25051	Sherwood, John P.	Fort Edward, N. Y.	Nail-plate feeders.	Aug. 9, 1859.
22677	Shelter, Solomon	Allegheny City, Pa.	Horse-shoe machine.	Jan. 18, 1859.
23865	Shields, James H., et al. (See Windall, Thos., assignor.)	Philadelphia, Pa.	Corn and cob cutter.	May 3, 1859.
25144	Shian, Samuel B.	Mount Vernon, Ohio.	Mills, portable iron-husk grist.	Aug. 17, 1859.
25282	Shipley, Henry W., and Zohar Blair.	Yorkville, N. Y.	Letter-file.	Aug. 30, 1859.
25331	Shipman, J. H.	New Haven, Conn.	Needles, sewing-machine, machines for making.	Sept. 20, 1859.
25679	Shipman, William W.	East Vernon, Pa.	Harvesters, dividers for.	Oct. 4, 1859.
25679	Shireman, J. H.	East Vernon, Pa.	Skates.	Apr. 12, 1859.
23615	Shirley, D. H.	Boston, Mass.	Photographs, instrument for enlarging.	Mar. 22, 1859.
23316	Shive, David.	Philadelphia, Pa.	Saw-set.	June 14, 1859.
24408	Shoemaker, Alexander, assignor to James G. Hunt.	Carey, Ohio		



24957	Shogren, Andrew	Chicago, Ill.	Harvesters, sickle-guards for	Aug. 2, 1859.
24983	Shone, George	St. Louis, Mo.	Punching railway-bars, machine for	Feb. 15, 1859.
24059	Short, Thomas	Danville, Ill.	Seeding-machines	May 17, 1859.
23866	Shostrom, Olof	Alton, Ill.	Washing-machine	May 3, 1859.
22754	Shreiner, Philip	Columbia, Pa.	Stoves	Jan. 25, 1859.
25767	Shrote, John H.	Baltimore, Md.	Cakes, cutting and panning	Oct. 11, 1859.
23401	Shuler, Isaac C.	Amsterdam, N. Y.	Coffins	Mar. 29, 1859.
23616	Shuler, Isaac C.	Amsterdam, N. Y.	Coffins, metallic	April 12, 1859.
24409	Shuler, Isaac C.	Amsterdam, N. Y.	Coffins, constructing sheet-metal	June 14, 1859.
24635	Shuler, Isaac C.	Amsterdam, N. Y.	Coffins, construction of sheet-metal	July 5, 1859.
25350	Shuler, Isaac C.	Amsterdam, N. Y.	Coffins, sheet-metal, construction of	Sept. 6, 1859.
26379	Shuler, Isaac C.	Amsterdam, N. Y.	Coffins, sheet-metal	Dec. 6, 1859.
23505	Shull, Thomas E.	Millersburg, Pa.	Fire-arm, breech-loading	April 5, 1859.
24060	Shunk, Christian	Washington, D. C.	Iron in the hearth of a blast-furnace, refining	May 17, 1859.
24766	Shunk, Christian	Canton, Ohio	Iron, refining	July 12, 1859.
26129	Shurtleff, S. A.	North Carver, Mass.	Fore-iron, for the use of shoemakers	Nov. 15, 1859.
24583	Siddall, A.	Ranson, Mich.	Corn-huskers	June 28, 1859.
24767	Siddall, Joseph H.	Philadelphia, Pa.	Threshing-machines	July 12, 1859.
24525	Siever, Robert W., assignor to William Lilley	Upper Holloway, England	Iron, smelting-furnace for	June 21, 1859.
23647	Sigler, John I., assignor to self and W. M. Griffiths & Co.	Martin's Ferry, Ohio	Threshing-machines	Apr. 12, 1859.
23790	Silmsen, M., and Wm. Jolunson. (See Johnson & Silmsen.)	Philadelphia, Pa.	Governor for regulating the speed of steam-engines	April 26, 1859.
26329	Silver, Thomas	Prescott, Wis.	Boot and shoe tip	Jan. 14, 1859.
25471	Silverthorn, Newman, assignor to James M. Allen	New Orleans, La.	Sewing-machines	Sept. 13, 1859.
24410	Silvy, Joseph C., assignor to Thomas J. Dobyus	Nora, Ill.	Sewing-machines	June 14, 1859.
24063	Simmons, Andrew	Bennington, Vt.	Cruet or bottle, vinegar	May 17, 1859.
23867	Simmons, George W. and George H., assignors to themselves and Norman Millington	Baldwinsville, N. Y.	Roasters, coffee	May 3, 1859.
23403	Simmons, J. P.	Ira, Ill.	Seeding-machines	Mar. 29, 1859.
23617	Simon, Henry	Providence, R. I.	Studs, shirt, fastening for	April 12, 1859.
24891	Simon, Henry	Providence, R. I.	Studs, shirt	July 26, 1859.
25532	Simpson, George B.	Washington, D. C.	Electrical heating apparatus	Sept. 20, 1859.
22897	Sins, William	Dayton, Ohio	Refrigerator	Feb. 8, 1859.
26448	Singletary, G. B.	Greenville, N. C.	Manure-drills	Dec. 13, 1859.
26130	Singer, E. C.	Port Lavaca, Texas	Sewing-machines	Nov. 15, 1859.
22517	Singer, Isaac M.	New York, N. Y.	Sewing-machines	Jan. 4, 1859.
24892	Singer, Isaac M.	New York, N. Y.	Sewing-machines	July 26, 1859.
25920	Singer, Isaac M.	New York, N. Y.	Carriages	Oct. 25, 1859.
25680	Sink, Thomas P.	Fairton, N. J.	Oyster-dredges	Oct. 4, 1859.
23506	Sinker, E. T., et al. (See Gates, Joseph R., assignor.)	Providence, R. I.	Portfolio	April 5, 1859.
25052	Sisson, Henry T.	Plaquemine, La.	Evaporating-pans, apparatus for heating	Aug. 9, 1859.
24584	Skelly, Evan	Louisville, Ky.	Press, power pulley	June 29, 1859.
24585	Skene, William and Robert	Louisville, Ky.	Press, power gear	June 29, 1859.
25935	Slagle, George W., assignor to self and O. A. Dailey	Washington, D. C.	Paints, composition for mixing with	Oct. 25, 1859.
23120	Slason, William N.	South Reading, Mass.	Washing-machine	Mar. 1, 1859.
24338	Slater, Dexter C.	Lawrens, N. Y.	Power, dog, operating machinery by	June 7, 1859.
26528	Slater, George W.	New Haven, Conn.	Stoves, ships?	Dec. 20, 1859.
25053	Slaughter, R. R., et al. (See Maynard, Edward, assignor.)	Madison, Ind.	Teeth, securing artificial	Aug. 9, 1859.
25447	Slaymaker, S. R. (See Ernst, John G., assignor.)	Franklin, Ind.	Seeding-machines	Sept. 13, 1859.
25705	Sloan, Henry	Pittsburg, Pa.	Distilling-apparatus, construction of	Oct. 4, 1859.



Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25870	Sloan, William D., assignor to A. B. Chapman	New York, N. Y.	Skirts, skeleton, clasp for	Oct. 18, 1859.
23402	Smalley, John	Bound Brook, N. J.	Cultivators	Mar. 29, 1859.
23618	Smalley, John	Bound Brook, N. J.	Harvesters	April 12, 1859.
23270	Smart, James	Mansfield, Ohio	Sugar-juices, apparatus for evaporating	Mar. 15, 1859.
22984	Smead, E. A.	Tioga, Pa.	Motion, converting reciprocating into rotary	Feb. 15, 1859.
24242	Smith, A. Thomas. (See Cook, Truman, assignor.)	New York, N. Y.	Carpet-fastener	May 31, 1859.
26529	Smith, Albert M.	Niagara Falls, N. Y.	Engines, steam, surface-condensers for	Dec. 21, 1859.
24411	Smith, Ananias	Westfield, Ohio	Cultivators	June 14, 1859.
22679	Smith, Benjamin F.	New York, N. Y.	Lead, manufacture of white	Jan. 18, 1859.
23718	Smith, Benjamin R.	Philadelphia, Pa.	Fogs, &c., ascertaining the directions of sounds in	April 19, 1859.
25448	Smith, C. A.	Piermont, N. Y.	Car-seats, railroad	Sept. 13, 1859.
24243	Smith, Charles E.	Philadelphia, Pa.	Belting, manufacture of	May 31, 1859.
25768	Smith, Charles R.	Haverhill, N. H.	Fence-posts, device for bracing and ventilating	Oct. 11, 1859.
23868	Smith, D. F.	Manchester, N. H.	Spinning-flyers	May 3, 1859.
24958	Smith, D. W. (See Walker, Sylvanus.)	Tecumseh, Mich	Corn-huskers	Aug. 2, 1859.
23955	Smith, Daniel C.	Springfield, Vt.	Planters, seed	May 10, 1859.
24154	Smith, David M.	Plainville, Conn.	Window-sash, spring-balance for	May 25, 1859.
26625	Smith, F. H.	Portland, Maine	Telegraphing-apparatus, electric	Dec. 27, 1859.
24636	Smith, Francis O. J.	Hartford, Conn	Cooler, butter	July 5, 1859.
23197	Smith, G. W.	Brooklyn, N. Y.	Cradle-wagon	Mar. 8, 1859.
26530	Smith, George	New York, N. Y.	Pipe-nippers	Dec. 20, 1859.
25611	Smith, George	Rochester, N. Y.	Hydro-oxygen light, apparatus for the production of	Sept. 27, 1859.
25221	Smith, George Hand, assignor to Silas O. Smith.	Lowell, Mass.	Mortising-machine	Aug. 23, 1859.
22689	Smith, Hamilton E., assignor to self, D. B. Nelson, and John L. Myers.	Philadelphia, Pa.	Fan, grain and corn sheller	Jan. 18, 1859.
25851	Smith, Hiram M.	Richmond, Va.	Truss for relieving piles	Oct. 18, 1859.
24666	Smith, Horace, and D. B. Wesson	Springfield, Mass	Fire-arms, revolving	July 5, 1859.
23198	Smith, Horace W.	Hartford, Conn	Cocks for water-basins	Mar. 8, 1859.
23619	Smith, Horace W.	Hartford, Conn	Cocks for water-basins	April 12, 1859.
24351	Smith, Jacob J., assignor to self and J. Henry Pugh	Philadelphia, Pa.	Bedstead-fastening, plug	June 7, 1859.
23620	Smith, James S.	New York, N. Y.	Epaulettes	April 12, 1859.
22898	Smith, Jeremiah P.	Hummelstown, Pa.	Corn-sheller	Feb. 8, 1859.
22899	Smith, Joel	Whitinsville, Mass.	Throstle-frames, regulating the twist in	Feb. 8, 1859.
25533	Smith, John Joseph Charles	Covington, Ky.	Matrices, &c., mode of constructing	Sept. 20, 1859.
24180	Smith, John W., assignor to self and Walter W. Berry	Washington, D. C.	Sole, water-proof	May 25, 1859.
24524	Smith, John W., assignor to self and Jesse H. Whitehurst.	Washington, D. C.	Gas-retorts	June 21, 1859.
24497	Smith, Jonas	Westport, Conn.	Water-wheel	June 21, 1859.
24498	Smith, Joseph, and G. B. Griffin	Cincinnati, Ohio.	Faucets, measuring	June 21, 1859.
23869	Smith, Joseph D.	Madison, Wis	Harvesting-machines	May 3, 1859.
23956	Smith, Matthew	Lancaster, Ohio	Engines, rotary steam	May 10, 1859.



25449	Smith, P. M., and T. T. Collier	Laveria, Texas	Planters, cotton-seed	Sept. 27, 1859.
25621	Smith, Philip	Fall River, Mass	Grates	April 12, 1859.
22986	Smith, Robert, and C. L. Crowell. (See Crowell & Smith.)	Brooklyn, N. Y.	Trap, fly	Feb. 15, 1859.
26298	Smith, S. E., et al. (See Barnett, Oliver D., assignor.)	New York, N. Y.	Stoves, cooking	Nov. 29, 1859.
24913	{ Smith, S. W., and H. Bigelow	Philadelphia, Pa.	Sawing-machine	July 26, 1859.
25681	Smith, Samuel R., and Philander P. Lane, assignors to Lane & Bodley.	Cincinnati, Ohio		
25054	Smith, Seymour	Saratou, Conn	Saw-set	Oct. 4, 1859
22678	Smith, Solomon P.	Creseent, N. Y.	Straw-cutters	Aug. 9, 1859.
23271	Smith, Stephen Wm.	Brooklyn, N. Y.	Sweeping-machine	Jan. 18, 1859.
24227	Smith, Stephen Wm.	Brooklyn, N. Y.	Freezing cream, &c., machines for	Mar. 15, 1859.
22985	Smith, T. Briggs	Marietta, Ohio	Metallic-bung	July 19, 1859.
23791	Smith, T. Briggs	New York, N. Y.	Wooden-screws, method of burning the threads on	Feb. 15, 1859.
	Smith, Walter C	Georgetown, D. C.	Cars, railroad, detective register for doors of	April 26, 1859.
	Smith, W. H., and E. D. Rosenerantz. (See Rosenerantz & Smith, assignors.)			
23719	Smith, William. (See Hiller & Bullock, assignors.)	Pittsburg, Pa.	Retorts, coal-oil	April 19, 1859.
23317	Smith, William H.	Philadelphia, Pa.	Casting and annealing articles made of scoria	Mar. 22, 1859.
23720	Smith, William H.	Newport, R. I.	Stoves	April 19, 1859.
23870	Smith, William H.	Newport, R. I.	Planing-machine, rotary	May 3, 1859.
25283	Smith, William H.	Newport, R. I.	Hose-coupling	Aug. 30, 1859.
24155	Snell, Jasper, and John R. Deihm	Pottsville, Pa.	Coal-screen	May 24, 1859.
24959	Snider, John S.	Lancaster, Ohio	Seeding-ploughs	Aug. 2, 1859.
25682	Snider, Leonard	Indianapolis, Ind.	Coffins, covering	Oct. 4, 1859.
25769	Snow, H. D.	Rochester, N. Y.	Governors for steam and other engines	Oct. 11, 1859.
25983	Snow, Nathaniel, jr.	Boston, Mass.	Steering-apparatus	Nov. 1, 1859.
24586	Snyder, M. D., and S. A.	Clarendon, N. Y.	Carpet-fastener	June 28, 1859.
23199	Snyder, Symon P., and George W. Cook	Minneapolis, Minn.	Propeller	Mar. 8, 1859.
22987	Snyder, Watson	Newark, N. J.	Sewing-machines	Feb. 15, 1859.
22580	Solze, Ferdinand M.	Columbus, Ga.	Horse-power	Jan. 18, 1859.
25131	Solze, Ferdinand M.	Macon, Ga.	Register, billiard	Nov. 15, 1859.
25145	Solze, Henry	Columbus, Pa.	Butter-worker	Aug. 16, 1859.
25372	Solliday, Daniel H., assignor to Edward H. Ashcroft	Philadelphia, Pa.	Gas-burners	Sept. 6, 1859.
22587	Solomon, Lewis	New York, N. Y.	Treating auriferous and argentiferous pyrites	Jan. 11, 1859.
24828	Solomon, Lewis	New York, N. Y.	Furnaces	July 19, 1859.
23272	Soltman, Heinrich	New York, N. Y.	Electro-magnetic medical apparatus	Mar. 15, 1859.
24589	Souter, Joseph	Chicago, Ill.	Grau, apparatus for drying	June 28, 1859.
	Southworth & McKeuzie. (See Monroe, James W., ass'n. Southland, S. E., et al. (See Weathershead, David S., assignor.)			
24829	Spafford, M. B.	Warsaw, N. Y.	Ploughs, snow	July 19, 1859.
23047	Spalding, Henry C.	Brooklyn, N. Y.	Curtain-fixture	Feb. 22, 1859.
23048	Spalding, Henry C.	Brooklyn, N. Y.	Stand, treadle	Feb. 22, 1859.
22983	Spangenburg, John	New York, N. Y.	Saccharine juices, defecating and clarifying	Feb. 15, 1859.
24156	Spaulding, Edward	Westborough, Mass.	Pulleys, friction	May 25, 1859.
25588	Sparon, John	Portland, Me.	Punching-machine, steam	Sept. 27, 1859.
23318	Spear, James	Philadelphia, Pa.	Stoves, gas-burning	Mar. 22, 1859.
24657	Spear, James	Philadelphia, Pa.	Ranges or stoves	July 5, 1859.
25284	Spear, James	Philadelphia, Pa.	Stove-runs	Aug. 30, 1859.

*Patentees of inventions and designs, 1859.*

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
26299	Spear, Nathaniel T., and A. J. Robinson. (See Ring, Asa T., assignor.)	West Manchester, Pa.	Engines, steam, water-heater for	Nov. 29, 1859.
25871	Speers, James, assignor to self, Alexander Postley, and John Wible.	West Manchester, Pa.	Paddle-wheel	Oct. 18, 1859.
25222	Spence, George S. G.	Boston, Mass.	Stoves	Aug. 23, 1859.
24590	Spence, George S. G.	Boston, Mass.	Heating-buildings, apparatus for	June 28, 1859.
25655	Spencer, Abel, jr.	Southport, N. Y.	Mortising-machine	Aug. 9, 1859.
23319	Spencer, Charles F.	Rochester, N. Y.	Carpet-fastener	Mar. 22, 1859.
23404	Spencer, Charles F.	Rochester, N. Y.	Bedstead-spring	Mar. 29, 1859.
25770	Spencer, C. M.	Manchester, Conn.	Labels to spools, &c., apparatus for cutting and attaching.	Oct. 11, 1859.
26298	Spencer, Daniel	Cortlandt, N. Y.	Separators, grain	Nov. 22, 1859.
24061	Spencer, James C.	Phelps, N. Y.	Sewing-machines	May 17, 1859.
25285	Spencer, Lorenzo, and H. Stowell. (See Stowell & Spencer.)			
25285	Spencer, V. O., et al. (See Hoard & Spencer.)			
25285	Sperry, A. L.	Auburn, Ind.	Churns	Aug. 30, 1859.
25285	Sperry, E. W., et al. (See Cooley, Almon, assignor.)			
26531	Spicer, Nathan	St. Paul, Min.	Time-pieces, lever-escapement for	Dec. 20, 1859.
24705	Spink, Wm., assignor to Oliver A. Washburn, jr.	Providence, R. I.	Nails and spikes, machine for pointing	July 5, 1859.
25984	Spoford, N.	Haverhill, Mass.	Bit-stock	Nov. 1, 1859.
24412	Spooner, John M.	Springfield, Mass.	Sled-runners, construction of	June 14, 1859.
23320	Sprague, A. M.	Mobile, Ala.	Boilers, steam, apparatus for skimming the surface of the water in.	Mar. 22, 1859.
23507	Sprague, A. M.	Mobile, Ala.	Steamers, side-wheel	April 5, 1859.
25852	Sprague, J. W.	Rochester, N. Y.	Bridges, tubular, connections of	Oct. 18, 1859.
23957	Spring, Charles and Andrew	Boston, Mass.	Lathes for turning irregular forms	May 10, 1859.
23957	Springer, Joseph H., and A. W. Moses. (See Moses & Springer.)			
25985	Sprinkle, E. N.	Marion, Va.	Churns	Nov. 1, 1859.
24830	Squire, Obed S.	North Haven, Conn.	Lasts	July 19, 1859.
22830	Squire, Samuel S., and T. Scharfenburg	Brooklyn, N. Y.	Hinge	Feb. 1, 1859.
25683	Stacy, Charles L.	Cincinnati, Ohio.	Hydrants	Oct. 4, 1859.
25350	Stafford, David G.	Syracuse, N. Y.	Stoves	Sept. 6, 1859.
26449	Stafford, Stephen	Carrlton, Mo.	Hemp-breaking machines	Dec. 13, 1859.
23273	Stamm, Frederick	Lauplter, Pa.	Jacks, lever	Mar. 15, 1859.
22588	Stanford, Otis W.	Cincinnati, Ohio.	Mills, grinding surfaces for	Jan. 11, 1859.
24960	Stanley, George A.	Cleveland, Ohio.	Candles, machine for moulding	Aug. 2, 1859.
23792	Stannard, George J., et al. (See Ross, Robert, assignor.)	Malden, Mass.	Pipe-cutter, gas	April 26, 1859.
23405	Starwood, Joseph C.	Troy, N. Y.	Mills, smut	Mar. 29, 1859.
26209	Starbuck, G. H., and L. D. Gilman	Greensburg, Pa.	Composition for protecting and ornamenting the surface of wood.	Nov. 22, 1859.
23274	Stark, John F.			
23274	Starkweather, George	Hartford, Conn.	Stave-machine	Mar. 15, 1859.



22529	Starr, M. A., <i>et al.</i> (See Doble & Starr.)	Walnut Grove, Ill.	Hammers, foot, trip	Jan. 11, 1859.
22529	Stabler, C. V. and G. W. Wilson	Philadelphia, Pa.	Watches, stop, method of operating independent second-hands of.	Sept. 27, 1859.
23121	Stout, S. H., jr., <i>et al.</i> (See Walters, Ferdinand, assignor.)	Smieksburg, Pa.	Water-wheels	Mar. 1, 1859.
23534	Stear, Jacob	Lowell, Mass.	Lightning-conductors, making	Sept. 20, 1859.
24668	Stearns, Charles	Manchester, N. H.	Looms, power, picker, motion for	July 5, 1859.
24606	Stearns, William	Boston, Mass.	Engines, steam, apparatus for oiling the cylinders and the pistons of.	June 28, 1859.
23721	Stebbins, Charles A., assignor to self and Reuben J. Todd.	Chicopee, Mass.	Cocks, stop	April 19, 1859.
25986	Stebbins, Erastus	Philadelphia, Pa.	Lamps, vapor, construction of burners for	Nov. 1, 1859.
25234	Steel, Robert	San Francisco, Cal.	Mills, quartz	Aug. 23, 1859.
25335	Steen, Edward T., assignor to self and B. S. Nichols	Lancaster, Pa.	Rakes, horse	Sept. 20, 1859.
23793	Steffe, Theo. J.	Dausville, N. Y.	Car-couplings	April 26, 1859.
26300	Steinhart, F.	New York, N. Y.	Piano-fortes	Nov. 29, 1859.
26532	Steinway, Henry, jr.	New York, N. Y.	Thimble	Dec. 29, 1859.
23450	Steinway, Henry, jr.	Brooklyn, N. Y.	Trace-trimmer	Sept. 13, 1859.
25706	Steirly, J. C. R.	Newark, N. J.	Rails for replacing cars on the track, adjustable	Oct. 4, 1859.
25771	Stempel, Adolph, assignor to self and Owen McFarland	Lafayette, Ind.	Wharves, constructing	Oct. 11, 1859.
23122	Stephan, Joseph A.	Baltimore, Md.	Cordage-machinery	Mar. 1, 1859.
24244	Stephenson, Alexander	Northfield, Ind.	Staves, machine for jointing	May 31, 1859.
24499	Stephenson, George	Buffalo, N. Y.	Cars, horse, brakes for	June 21, 1859.
26626	Stephenson, J. G.	New York, N. Y.	Watch-keys	Dec. 27, 1859.
26450	Stephenson, John	San Francisco, Cal.	Harvesters	Dec. 13, 1859.
23508	Sterling, John F.	Baltimore, Md.	Harvesting-machines	April 5, 1859.
24062	Stetson, W. S.	Baltimore, Md.	Envelopes, safety	May 17, 1859.
25590	Stetson, W. S.	Baltimore, Md.	Harvesting-machines	Sept. 27, 1859.
24063	Stetson, W. S., and R. F. Maynard	Baltimore, Md.	Car-couplers	May 17, 1859.
23321	Stetson, W. S., and R. F. Maynard	New York, N. Y.	Cheese-cutter	June 7, 1859.
24339	Stevens, Charles E.	Newark, N. J.	Power, machinery for accumulating and transmitting	April 26, 1859.
23794	Stevens, De Witt	Barnet, Mass.	Gas-burners, construction of	Sept. 27, 1859.
25591	Stevens, Enos	New York, N. Y.	Tenoning blind-slats, machines for	Aug. 9, 1859.
25056	Stevens, George P., <i>et al.</i> (See Learned, Chas., assignor.)	Elmira, N. Y.	Cars, railroad, axle-box for	May 31, 1859.
24245	Stevens, H. S. (See Crosby, Addison, assignor.)	Fitchburg, Mass.	Cars, railroad, brakeheads for	April 19, 1859.
23722	Stevens, John, and John Johnson	Kcene, N. H.	Sails for fore-and-aft-rigged vessels	May 24, 1859.
24157	Stevens, John, and John Johnson	Cambridge, Md.	Preparing bones for fertilizing purposes, method of	Oct. 11, 1859.
24245	Stevens, Lafayette	Annapolis, Md.	Distillation of coal, retorts for	June 28, 1859.
23722	Stevens, Levi	East Boston, Mass.	Stoves, cooking	Jan. 18, 1859.
25591	Stevens, N. F. (See Kemp, John P., assignor.)	Troy, N. Y.	Fence-post, cast-iron	Mar. 1, 1859.
23722	Stevens, Nathan P.	Troy, N. Y.	Stoves, cooking, cover-lifters for	April 12, 1859.
24157	Stevenson, R., and Abijah Taylor. (See Butterfield, Tyrannus P., assignor.)	Troy, N. Y.	Stoves	April 12, 1859.
24157	Stevenson, R., and E. H. Jones. (See Jones & Stevenson.)	Annapolis, Md.		
25772	Stewart, A. Washington	Cambridge, Md.		
24587	Stewart, David	Annapolis, Md.		
22681	Stewart, J. L., and R. A. Nathurst. (See Nathurst & Stewart.)	East Boston, Mass.		
23140	Stewart, John L.	Troy, N. Y.		
23622	Stewart, P. P.	New Lebanon, N. Y.		
23622	Stewart, Philemon, assignor to Auchampaugh, Brothers	Troy, N. Y.		
23625	Stewart, Philo P.	Troy, N. Y.		

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23123	Stewart, Philo P. (See Barnes, William, assignor.)	Legonier, Pa.	Iron, hearth for working and refining	Mar. 1, 1859.
22590	{ Stewart, R. L., J. Christophler, and R. Forward	Somerset, Pa.	Cane-juice, defecating and clarifying	Jan. 11, 1859.
24961	Stewart, Richard A.	St. Bernard, La.	Sugar, defecating	Aug. 2, 1859.
25057	Stewart, Stephen	Philadelphia, Pa.	Alarm, burglar's	Aug. 9, 1859.
25708	Stewart, William F.	Patuxent Forge, Md.	Car-brakes, railroad	Oct. 4, 1859.
25853	Stekney, David H.	Cincinnati, Ohio.	Cocks	Oct. 18, 1859.
25707	Stiles, David L., assignor to John M. French & Co	Rochester, N. Y.	Moulding stove-covers	Oct. 4, 1859.
25747	Stillman, O. M., and S. Wilcox, jr.	Westerly, R. I.	Boilers, steam, thermostat for	April 19, 1859.
24962	Stillman, H. W.	Port Washington, Wis.	Brick-machines	Aug. 2, 1859.
23723	Stillson, George D.	Rochester, N. Y.	Excavating-machines	April 19, 1859.
23509	Stimpson, H. H.	Boston, Mass.	Ranges, cooking	April 5, 1859.
25060	Stimpson, James	Baldwinsville, Mass.	Box-joints, machines for making	Nov. 8, 1859.
23200	Stimpson, James II	Baltimore, Md.	Pitcher, ice	Mar. 8, 1859.
24413	Stimson, Enos	Plainfield, Vt.	Seeding-machine	June 14, 1859.
24591	Stipher, A. G.	Richmond, Ind.	Harvesting-machines	June 28, 1859.
23406	St. John, R. H.	Bellefontaine, Ohio.	Wash-maker's lathe	May 29, 1859.
23795	Stock, Francis and John	San José, Cal.	Pump boxes	April 25, 1859.
24671	Stock, John	New York, N. Y.	Photographic-cameras	July 5, 1859.
24672	Stockbridge, Eliam.	Houston, Texas	Presses, cotton and hay	July 5, 1859.
24158	Stockwell, Alden B. (See Wheeler, John W.)	Medway, Ohio	Planters, seed	May 24, 1859.
24064	Stoddard, Frederick S.	Litchfield, Conn.	Power-machine, foot	May 20, 1859.
23407	Stoddard, J. C.	Worcester, Mass.	Cultivators	Mar. 20, 1859.
23408	Stoddard, J. C.	Worcester, Mass.	Potatoes, digging, machines for	Mar. 29, 1859.
24065	Stoddard, J. C.	Worcester, Mass.	Planters, potato	May 24, 1859.
24500	Stoddard, J. C.	Worcester, Mass.	Cultivators	June 21, 1859.
24588	Stoddard, J. C.	Worcester, Mass.	Hay, machines for making	June 28, 1859.
25592	Stoddard, J. C.	Worcester, Mass.	Chamber-utensil	Sept. 27, 1859.
26380	Stoddard, J. C.	Worcester, Mass.	Hay-making machine	Dec. 7, 1859.
24159	Stoddard, James A.	Worcester, Mass.	Speed, mechanism for varying	May 24, 1859.
25223	Stoddard, Orange N.	Milford, Mass.	Sewing-machines	Aug. 23, 1859.
26533	Stoddard, Oren	Oxford, Ohio	Shingle-machines, device for feeding the bolt in	Dec. 20, 1859.
22989	Stoddard, Oren	Busti, N. Y.	Churn	Feb. 15, 1859.
24066	Stoddard, Worden E.	Horton, N. Y.	Valves of steam-engines, slide	May 17, 1859.
25145	Stoddard, David	San Francisco, Cal.	Valve gear for steam-engines	Aug. 16, 1859.
26301	Stoddard, David	San Francisco, Cal.	Bottles and jars, tools for forming lugs in the mouths of	Nov. 29, 1859.
23623	Stone, Amasa	Philadelphia, Pa.	Steam, apparatus for superheating	April 12, 1859.
23958	Stone, George A.	Roxbury, Mass.	Shafts, rotating, thrust-bearings for	May 10, 1859.
25921	Stone, George A. (See Whipple, J. A., assignor.)	Roxbury, Mass.		Oct. 25, 1859.



24501	Stone, Giles M	Fredericksburg, Va	Clocks to indicate the comparative time in all longitudes, panoramic attachment for.	June 21, 1859.
22900	Stonecipher, Nathan, <i>et al.</i> (See Hughes & Stonecipher.)	Bennington, Ill.	Weighers, grain	Feb. 8, 1859.
24831	Stoner, John B	New Britain, Conn	Meat-masher	July 19, 1859.
24414	Storer, George	New York, N. Y.	Fire-arm, breech-loading	June 14, 1859.
25147	Storm, William M	New York, N. Y.	Generator, steam	Aug. 16, 1859.
23724	Stott, R.	Baton Rouge, La	Mills, sugar, governors for	April 19, 1859.
25286	Stoughton, A. B., assignor to Ransford, F. G. (See Landry, Henry A., assignor.)	Boston, Mass.	Planing-cutters, rotary	Aug. 30, 1859.
24160	Stout, Temple, & Mills. (See Temple, John, assignor.)	Placerville, Cal.	Jaeks, portable-wagon	May 24, 1859.
23124	Stover, Henry D., and J. W. Bicknell	Carlisle, Pa.	Hogs, apparatus for slaughtering	Mar. 1, 1859.
24669	Stowell, Henry, and Lorenzo Spencer	Bangor, Me	Scales for weighing	July 5, 1859.
26210	Stoy, G. W. B.	Brooklyn, N. Y.	Water in pipes, apparatus for regulating the pressure of	Nov. 22, 1859.
24670	Stratton, James	Philadelphia, Pa.	Gas-retorts	July 5, 1859.
25536	Stratton, William	Boonsboro', Md.	Hominy-mills	Sept. 20, 1859.
24162	Stratton, George	Brandon, Vt.	Scales, platform	May 24, 1859.
25148	Streat, Robert F., and Oliver Lindsay. (See Lindsay & Streat.)	Brandon, Vt.	Scales, weighing	May 24, 1859.
23510	Strong, Francis M., and Thomas Ross	Brandon, Vt.	Scales, weighing	Aug. 16, 1859.
22518	Strong, Francis M., and Thomas Ross	Birmingham, Pa.	Soap, resin, manufacture of	April 5, 1859.
23624	Strong, Francis M., and Thomas Ross	Philadelphia, Pa.	Stoves, Franklin	Jan. 4, 1859.
25451	Strong, Francis M., and Thomas Ross	Philadelphia, Pa.	Stoves	April 12, 1859.
25684	Strong, Nicholas, and Markham. (See Nicholas, W. H., assignor)	Wytheville, Va.	Stoves, cooking	Sept. 13, 1859.
23201	Strunz, Stephen	Millington, Md.	Belts, method of attacking sabers to	Oct. 4, 1859.
24502	Stuart & Peterson. (See Martino, John, assignor.)	Fayette County, Tenn	Planters, seed	Oct. 4, 1859.
23624	Stuart, David	Boston, Mass.	Presses, cotton	Mar. 8, 1859.
25685	Stuart, David	Columbus, Ga.	Printing-press, lithographic	Jan. 4, 1859.
23201	Stuart, James E. B.	Dublin, Ind.	Cock, stop	April 26, 1859.
22519	Stuart, Uriah T., and Calvin E. Stewart	Attleborough, Mass	Churn	July 5, 1859.
23796	Stubblefield, Thomas, assignor to self and Peter Naylor	Augusta, Me.	Pen, pencil, knife, toothpick, &c., combined, case for	June 21, 1859.
24673	Stubbs, Josiah	Boston, Mass.	Shingle-machines	Nov. 29, 1859.
24502	Sturdy, John F.	Boston, Mass.	Shoe-pegging machines, blank for	Aug. 16, 1859.
26302	Sturdy, J. E.	Charlestown, Va.	Lathe-attachment for cutting veneers	Dec. 27, 1859.
25149	Sturtevant, B. F.	New York, N. Y.	Washing-machine	Aug. 9, 1859.
26627	Sturtevant, B. F.	East Avon, N. Y.	Engines, condensing steam	May 31, 1859.
25058	Suddith, William A. and J. F.	New York, N. Y.	Sleds, running gear of	June 14, 1859.
24246	Sullivan, A., <i>et al.</i> (See Sullivan & Gragg.)	Utica, N. Y.	Chair, folding	Sept. 13, 1859.
24415	Summers, John W. (See Fichett & Summers.)	Utica, N. Y.	Paper together, mode of fastening sheets of	Mar. 22, 1859.
25452	Sutton, John, assignor to self and De Witt C. Van Tuyl	Buflalo, N. Y.	Stone-saws	Aug. 30, 1859.
23322	Sutton, Noah, and Ambrose Foster. (See Foster & Sutton.)			
	Sutton, R.			
	Swain, William A. (See Merrill, James O., assignor.)			
	Swan, J. H.			
	Swartwout, Edwin L.			
	Sweet, M. T., <i>et al.</i> (See Baxter, E. O., assignor.)			
	Sweet & Co. (See Dunham, Daniel, assignor.)			
	Sweeney, Peter			

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25288	Sweetser, Joseph Sweetzer, Moses, <i>et al.</i> (See Dixon, Francis, assignor.) Swerringen, G. W., <i>et al.</i> (See Foreman, Daniel, assignor.) Swezey, M. B., <i>et al.</i> (See Reeve, T., and M. B. Swezey.)	Biddeford, Me.	Shingles.	Aug. 30, 1859.
25922	Swift, F.	Hudson, Mich.	Separators, grain.	Oct. 25, 1859.
23871	Swift, George W.	Oxford, Miss.	Horse-powers, portable.	May 3, 1859.
26303	Swift, Joseph R.	Montgomery, Ala.	Car-couplings, railroad.	Nov. 29, 1859.
25224	Swops, Zuriel	Lancaster, Pa.	Traps, animal.	Aug. 23, 1859.
26061	Sykes, Chester W.	New York, N. Y.	Carving-knife.	Nov. 8, 1859.
22591	Symmes, H. K.	Newton, Mass.	Gas retorts.	Jan. 11, 1859.
25225	Symmes, H. K.	Newton, Mass.	Gas retorts.	Aug. 23, 1859.
25686	Symmes, H. K.	Newton, Mass.	Gas retorts, construction of.	Oct. 4, 1859.
26000	Symmes, H. K., assignor to self and R. W. Holman.	Newton, Mass.	Oil, coal, apparatus for manufacture of.	Nov. 1, 1859.
23725	Taft, George C.	Worcester, Mass.	Wrench.	April 19, 1859.
23798	Taft, George C.	Worcester, Mass.	Wrench.	April 26, 1859.
24247	Taft, George C.	Worcester, Mass.	Wrenches, manufacture of.	May 31, 1859.
23432	Taggart, John, assignor to self and George R. Sampson.	Roxbury, Mass.	Propeller, marine.	Mar. 29, 1859.
24893	Taggart, John	Roxbury, Mass.	Balls, nine-pin.	July 26, 1859.
24963	Taggart, Samuel.	Indianapolis, Ind.	Packers, flour.	Aug. 2, 1859.
24674	Tagliabuc, Guisepe.	New York, N. Y.	Barometers, mercurial.	July 5, 1859.
26534	Tallaut, C. L.	New York, N. Y.	Couch, invalid.	Dec. 29, 1859.
24592	Tait, A. H., assignor to George B. Hartson.	New York, N. Y.	Sugar juices, defecating.	June 26, 1859.
25773	Talbot, I., <i>et al.</i> (See Burnish, Talbot, & Yeardley.)	Berlin, Wis.	Safe, milk.	Oct. 11, 1859.
25774	Tambling, William H.	Berlin, Wis.	Washing-machine.	Oct. 11, 1859.
25059	Tanqueray, John J., <i>et al.</i> (See Richardson & Glover, assignors.)	Bristol, Conn.	Sewing-machines.	Aug. 9, 1859.
26381	Tapley, G. S.	Searcy, Ark.	Saw-mills.	Dec. 6, 1859.
24416	Tarver, Samuel.	New Lebanon, Conn.	Cock, stop.	June 14, 1859.
26535	Tate, Isaac C.	New Lebanon, Conn.	Mast-scraper.	Dec. 21, 1859.
23202	Tate, Robert N.	Brooklyn, N. Y.	Shot, manufacture of.	Mar. 8, 1859.
23959	Tatham, Charles B.	Salem, Ind.	Harvesting-machines, attachment for.	May 10, 1859.
24166	Tallock, George	Palmyra, Mo.	Chair, rocking.	May 24, 1859.
24248	Talow, Thomas H., jr.	Palmyra, Mo.	Seeding-machines.	May 31, 1859.
24248	Talow, Thomas H., jr.	New York, N. Y.	Candles, manufacture of.	Jan. 11, 1859.
22592	Tatum, Joel H.	New York, N. Y.	Candles, manufacture of.	Jan. 11, 1859.
	Taylor, Abijah, and R. Stevenson. (See Butterfield, Tyrannus P., assignor)			
23323	Taylor, Charles.	Little Falls, N. Y.	Press, cheese.	Mar. 22, 1859.
25226	Taylor, Charles.	Little Falls, N. Y.	Ticket-holder for railroads.	Aug. 23, 1859.
26628	Taylor, Charles F.	New York, N. Y.	Spinal curvature, apparatus for relieving.	Dec. 29, 1859.
25289	Taylor, De Witt C., <i>et al.</i> (See Howell, Levi T., ass'or.) Taylor, George, and George H. Burger.	Worthington, Ohio.	Auger for cutting round tenons.	Aug. 30, 1859.





Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
25290	Thompson, Joseph B.	Warrenton, Ga.	Boilers, steam, feed-water apparatus for.	Aug. 30, 1859.
23410	Thompson, J. S., and M. S. Seymour.	Glenn's Falls, N. Y.	Heating barrels, cresset for.	Mar. 29, 1859.
23324	Thompson, Nathan	Bridgeport, Conn.	Paddle-wheel.	Mar. 22, 1859.
23513	Thompson, Petatiah	Springfield, Ohio.	Bedstead	April 5, 1859.
26629	Thomson, William.	Buffalo, N. Y.	Brush for finger-nails.	Dec. 29, 1859.
25855	Thorn, Elijah.	Selma, Ohio.	Ploughs, mole, portable-crab for.	Oct. 18, 1859.
	Thornburg, W., sr., and R. Hussey. (See Hussey & Thornburg, sr.)			
26536	Thorne, Joseph.	New York, N. Y.	Sewing-machines.	Dec. 20, 1859.
24250	Thorp, Joseph W.	Hillsboro', N. H.	Tailor's pressing-machines.	May 31, 1859.
22755	{ Thorp, Stulman, and Wesley	Portland, Me.	Loat-beels	Jan. 25, 1859.
26382	Thorp, Thomas	New York, N. Y.	Cigars, machine for making.	Dec. 7, 1859.
25291	Thoss, William H.	San Francisco, Cal.	Iron, fire-plating.	Aug. 30, 1859.
25352	Tiberi, Joseph	St. Louis, Mo.	Grates	Sept. 6, 1859.
23872	Tice, Isaac P.	Baltimore, Md.	Wooden carved-mouldings, machine for cutting.	May 3, 1859.
24163	Tice, Isaac P.	Baltimore, Md.	Forms, machine for cutting irregular.	May 24, 1859.
26383	Tice, I. P.	Baltimore, Md.	Cutter-head, rotary.	Dec. 6, 1859.
24341	Tichenor, Alfred.	Newark, N. J.	Printing bank-notes, method of.	June 7, 1859.
	Tidball, Jos. W., and F. H. Bogar. (See Bell, Henry, assignor.)			
24505	Tiffany, George S.	Palmyra, Mich.	Potatoes, machine for digging.	June 21, 1859.
25687	Tiffany, George S.	Palmyra, Mich.	Tile-machines	Oct. 4, 1859.
26305	Tift, S. H.	Morrisville, Vt.	Elevating water, apparatus for.	Nov. 29, 1859.
26538	Tigner, G.	Covington, La.	Pistols, repeating.	Dec. 21, 1859.
22593	Tilghman, B. C.	Philadelphia, Pa.	Fatty substances, hardening.	Jan. 11, 1859.
23325	Tillers, Louis	West Morrisania, N. Y.	Filter	Mar. 22, 1859.
22594	Tilton, Jeremiah C.	Sanbornton Bridge, N. Y.	Looms, temples for.	Jan. 11, 1859.
23813	Tinkham, Leonard B., assignor to self and Charles Ryan.	Lawrence, Mass.	Bed-bottom.	Apr. 26, 1859.
	Tisdale, George P., et al. (See Leach, William, assignor.)			
23799	Tobey, S. B. (See Greene, J. F., assignor.)	St. Louis, Mo.	Mills, grinding	Apr. 26, 1859.
	Todd, George			
	Todd, Reuben J., et al. (See Randall, George W., assignor.)			
	Todd, Reuben J. (See Randall, George W., assignor.)			
	Todd, Reuben J., et al. (See Stebbins, Chas. A., assignor.)			
25353	Todd, William S.	Mechanicsville, Iowa	Joiner's clamps	Sept. 6, 1859.
23962	Toleman, George W.	Augusta, Ky.	Harrow, rotary	May 10, 1859.
22520	Tolhurst, George W.	Liverpool, Ohio.	Cultivators	Jan. 4, 1859.
23276	Tolhurst, George W.	Liverpool, Ohio.	Washing-machine	Mar. 15, 1859.
25455	Tolhurst, George W.	Liverpool, Ohio.	Washine-machine	Sept. 13, 1859.
25688	Tolhurst, George W.	Liverpool, Ohio.	Corn-shellers	Oct. 4, 1859.
26346	Tolhurst, George W.	Liverpool, Ohio.	Soap, composition for making	Nov. 29, 1859.
26384	Tolman, Benjamin, assignor to self and A. T. Ramsdell.	Liverpool, Ohio.	Washing-machine	Dec. 6, 1859.
23927	Tolman, Benjamin, assignor to self and A. T. Ramsdell.	Pembroke, Mass.	Spoke-shave.	May 10, 1859.
24526	Tolman, Benjamin, assignor to self and Asa T. Ramsdell.	Pembroke, Mass.	Boots and shoes, edge-plane for.	June 21, 1859.



22841	Tompkins, C. B., et al. (See Herald & Tompkins.)	Newark, N. J.	Harness saddle-trees	Feb. 1, 1859
23111	Tompkins, C. B., and James Giles. (See Giles & Tompkins.)	Newark, N. J.	Saddles	Mar. 29, 1859.
24342	Tompkins, C. B., and Jno. Herald. (See Herald & Tompkins.)	Bangor, Me.	Bee-hive	June 7, 1859.
26385	Tompkins, C. B., and C. T., et al. (See Miller, L. B., assignor.)	Oxford, Ga.	Trees, machine for girdling and felling	Dec. 6, 1859.
26397	Torrey, Ruggles S.	Ellicott's Mills, Md	Car-brakes, railroad.	Nov. 29, 1859.
25456	Tourent, Alfred T.	Neshonoe, Wis.	Seeding-machines.	Sept. 13, 1859.
24503	Tourtellet, M. L.	New York, N. Y.	Clothes-pin	June 21, 1859.
26133	Towers, William H.	Brenham, Texas	Ploughs	Nov. 15, 1859.
24167	Townsend, J. T.	Newburyport, Mass.	Sails, reefing fore and aft.	May 24, 1859.
26630	Townsend, James L.	Vernon, N. Y.	Cultivators, seeding.	Dec. 27, 1859.
25794	Tracy, Appleton, & Co. (See Biglow, John K., assignor.)	Alton, Ill.	Valve for steam-engines, regulator	Oct. 11, 1859.
25775	Traver, Morris, et al. (See Billings, Orson, assignor.)	New York, N. Y.	Crackers, mode of making cylindrical strips of dough in the manufacture of.	Oct. 11, 1859.
25873	Travis, Nathan C., assignor to self, Nathan Johnson, and R. Emerson.	Windham, Conn.	Signals for firemen.	May 3, 1859.
24833	Treadwell, T. C., and H. McCollum.	Elmira, N. Y.	Stoves	July 19, 1859.
24833	Treadwell, John G.	Albany, N. Y.	Stoves	Nov. 15, 1859.
25776	Treadwell, John G.	Albany, N. Y.	Ventilating railroad ears, apparatus for	Oct. 11, 1859.
25987	Treadwell, John G.	Albany, N. Y.	Stoves	Nov. 1, 1859.
26308	Treadwell, John G.	Albany, N. Y.	Stoves	Nov. 29, 1859.
26539	Treadwell, John G.	Albany, N. Y.	Gridiron	Dec. 20, 1859.
26631	Treadwell, John G.	Albany, N. Y.	Stoves	Dec. 27, 1859.
23127	Treadwell, Joseph N.	Redding, Conn.	Grain, scouring and hulling, machine for	Mar. 1, 1859.
25593	Treadwell, Joseph N.	Redding, Conn.	Buckwheat, machine for scouring and hulling.	Sept. 27, 1859.
24575	Tregre, Louis.	Parish of St. John the Baptist, La.	Furnaces, Bagasse.	July 5, 1859.
25354	Tregre, Louis.	Parish of St. John the Baptist, La.	Cane-juice boxes, construction of.	Sept. 6, 1859.
25472	Tripp, Seth D., assignor to self and Luther Hill.	Stoneham, Mass.	Pegs, apparatus for feeding.	Sept. 13, 1859.
26213	Tripp, Thomas	Buffalo, N. Y.	Propeller-wheel.	Nov. 22, 1859.
24763	Troensler, A., and Thomas Mackensie. (See Maekensie & Trochsler.)	Mt. Vernon, Ill.	Fire-arms, lock for.	July 12, 1859.
23514	Tromly, Michael.	Sinclairville, N. Y.	Staves, machine for jolting.	Apr. 5, 1859.
23726	Trowbridge, Barstow, & Knapp. (See Knapp, A. H., assignor.)	Washington, D. C.	Sea-sounding, apparatus for deep, and method of conveying and paying-out line for other purposes.	Apr. 19, 1859.
22904	True, D. M.	Rockland, Me.	Lasts.	Feb. 8, 1859.
24958	Truedell, L. E.	Warren, Mass.	Bridges, truss, connecting together the braces of.	May 17, 1859.
26062	Trumbull, Harvey	Central College, Ohio.	Straw-cutters.	Nov. 8, 1859.
25030	Trumbull, Horace.	Jersey City, N. J.	Ores, after being pulverized, machine for washing and separating.	Aug. 9, 1859.
24678	Truox, Jacob W.	Richford, Vt.	Saw-mills, head blocks for.	July 5, 1859

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24677	Tschus, Marianus X. Tueker, John, <i>et al.</i> (See Lechange, John J., assignor.) Tueker, Joseph C. (See Dyar & Augustus, assignors.) Tueker, R. H., jr. Tueker, Stephen D., assignor to R. M. Hoe, R. Hoe, and P. S. Hoc.	Bloomington, Ill.	Bridle-reins, spring snaps for.....	July 5, 1859.
25026	Tueker, William. Tuesdale, Charles, and A. J. Sennett, assignors to William and Jacob Resor.	Wisasset, Me.	Vessels, construction of navigable.....	Apr. 12, 1859.
24634	Tufts, Otis	New York, N. Y.	Printing-presses, mode of operating the fingers of.....	Sept. 6, 1859.
23412	Tupper, Freeman E. Tupper, H., <i>et al.</i> (See Van Vleck & Tupper.)	Blackstone, Mass.	Bits in the stock, method of securing.....	Mar. 22, 1859.
26132	Turnbull, Andrew, assignor to self and James D. Frary	Cincinnati, Ohio.	Casting stove-covers, patterns for.....	June 21, 1859.
25473	Turner, Alfred R.	Boston, Mass.	Elevators or hoisting apparatus for hotels, &c.....	Aug. 9, 1859.
23800	Turney, William C.	Clarkson, Mich.	Stove-pipes, elbows for.....	July 19, 1859.
23315	Turrel, Nelson, <i>et al.</i> (See Fitts, Harrison, assignor.)	Nashua, N. H.	Stoves.....	Mar. 29, 1859.
25151	Tuttle & Mudge. (See Farrington, D. W. C., assignor.)	New York, N. Y.	Hat-bodies, pouncing.....	Nov. 15, 1859.
25856	Tuttle, Eben C.	West Meriden, Conn.	Scales.....	Sept. 13, 1859.
23355	Tuttou, A. P.	Malden, Mass.	Pen-holders.....	Apr. 26, 1859.
23727	Twiford, William B.	St. Louis, Mo.	Syrup-charging apparatus.....	Apr. 5, 1859.
25062	Tyer, Henry George	Fairfield, Conn.	Telegraph cables, laying submarine.....	Aug. 16, 1859.
23369	Tylee, Felix	Naugatuck, Conn.	Hoes, manufacture of.....	Oct. 18, 1859.
25063	Tyler, Charles N.	Brooklyn, N. Y.	Hot-air registers.....	Sept. 6, 1859.
24506	Tyler, H. P., <i>et al.</i> (See Durfey, Delectus, assignor.)	Reading, Pa.	Car-brake, railroad.....	Apr. 19, 1859.
22991	Tyler, John.....	Chincoteague, Va.	Washing-machine.....	Jan. 25, 1859.
25064	Tyler, Lorenzo	Chincoteague, Va.	Wagon, dumping.....	Aug. 9, 1859.
23413	Tyler, Samuel W.	Andover, Mass.	Composition for soles and heels of shoes and boots, veneers, packing, and other purposes.	Nov. 29, 1859.
24183	Tyler, Stephen G., assignor to himself. G. I. Laage, and I. W. Barium.	Cleveland, Ohio	Bed-bottoms, spring.....	Aug. 9, 1859.
24678	Tyler, S. G., and Daniel Barnum. (See Barnum & Tyler.)	Washington, D. C.	Gas, manufacture of.....	June 21, 1859.
24594	Tyng, Levi Bartlett.	Providence, R. I.	Ice-tongs.....	Feb. 15, 1859.
25487	Udell, C. G.	Havana, N. Y.	Sowing fertilizers, machine for.....	Aug. 9, 1859.
25689	Ullman, Louis S.	Greenwich, N. Y.	Harvesters.....	Mar. 29, 1859.
23279	Ullmer, Philip	Quincy, Ill.	Sewing-machines, circular-clamps for.....	May 24, 1859.
25550	Umholtz, Philip	Lowell, Mass.	Wheels, railroad, cast-iron tires for.....	July 5, 1859.
26452	Underhill, E., <i>et al.</i> (See Etiekemeyer, R., assignor.)	Morris, Ill.	Planters, corn.....	June 28, 1859.
23280	Underhill, A. T., assignor to C. R. Underhill	Nashville, Tenn.	Hygrometer.....	Sept. 13, 1859.
	Underhill, T. S.	New York, N. Y.	Bed-bottom, spring.....	Oct. 4, 1859.
	Upton, James S.	Fremont, Pa.	Car, railroad, journal boxes.....	Mar. 15, 1859.
		New York, N. Y.	Motion, converting reciprocating into rotary.....	Sept. 20, 1859.
		St. Johnsville, N. Y.	Bee-hives.....	Dec. 13, 1859.
		Battle Creek, Mich.	Horse-power.....	Mar. 15, 1859.



23327	Ustick, Stephen. (See Aregood & Ustick.) Ustick, Thomas W., et al. (See Burrige, Thomas H., assignor.) Utica Screw Manufacturing Company. (See Griggs, Ira, assignor.)	Fond-du-Lac, Wis.	Shingle-machine.	Mar. 22, 1859.
23963	Valentine, William P.	Cincinnati, Ohio.	Stoves	May 10, 1859.
25923	Valette, W. C., et al. (See Marlow & Ralph, assignors.) Van, John, and H. V. Barringer Van Antwerp, Peter Van Bergen, H., and Joseph Ditto. (See Ditto & Van Bergen.)	New York, N. Y.	Locks, keys for	Oct. 25, 1859.
23964	Van Camp, Edward	Readington, N. J.	Ploughs, hill-side	May 10, 1859.
23728	Van De Bogert, Michael	Binghamton, N. Y.	Washing-machine	Apr. 10, 1859.
23129	Vanderburg, Matthias Vandergrift, Daniel P., et al. (See Logue, Hugh, ass'r.) Van Deventer, T. Van Duzer, David H. Van Deursen, R. D., and J. B. Gibbs. (See Hunt, F., assignor.)	Newark, N. J. New Brunswick, N. J. Sugar Loaf, N. Y.	Skates Printing paper-hangings, rollers for Bridges.	Mar. 1, 1849. Dec. 6, 1859. Sept. 20, 1859.
23328	Vanduzen, Benjamin C.	Cincinnati, Ohio	Bolts, machine for heading.	Mar. 22, 1859.
26386	Van Deusen, Hiram, assignor to self and Hiram Rockefeller.	Phelps, N. Y.	Clapboard-gauge	Dec. 6, 1859.
25872	Van Hagen, Stephen F., assignor to George Kilbourne. Van Honten, P. G., and J. H. Butler (See Butler & Van Honten.)	Albany, N. Y.	Banjo	Oct. 18, 1859.
26632	Van Horn, W. J., and William Alexander	Louisiana, Mo.	Tobacco, plug, chewing, machine for preparing	Dec. 27, 1859.
25458	Van Horn, John	Magnolia, Ill.	Weighing grain, machine for	Sept. 13, 1859.
26310	{ Vankirk, I. T., and William M. Fulton	Frankfort, Pa.	Lamps	Dec. 6, 1859.
23204	Van Riswick, John	Cranberry, N. J.	Brick-machines	Mar. 8, 1859.
22595	Vant, A. B., and A. M. Cook	Washington, D. C.	Corn-shellers	Jan. 11, 1859.
23128	Van Trump, A.	Milford, Mass.	Mills, sugar-cane	Mar. 1, 1855.
23729	Van Tuyl, De Witt C., et al. (See Sutton, John, assignor.)	Lancaster, Ohio	Furnaces, grates for	Apr. 19, 1859.
25065	Van Veltoven, Richard Van Vleck, G. H., and H. Tupper	Philadelphia, Pa. Buffalo, N. Y.	Hose-coupling	Aug. 9, 1859.
25690	Varin, Victor, and P. Reynard. (See Reynard & Varin.)	Oxford, Miss	Planters, corn	Oct. 4, 1859.
24965	{ Vaughn, Horace, and W. Hutton, assignors to Horace Vaughn.	Providence, R. I.	Lubricating compounds	Aug. 2, 1859.
23965	Vaughn, Horace. (See Patterson, Robert, assignor.) Vaughn, James	Baltimore, Md.	Separators, grain.	May 10, 1859.
24419	Vaux, C., and Lewis W. Leeds. (See Leeds & Vaux.)	Magnolia, Ill.	Seeding-machines	June 14, 1859.
24507	Veal, Franklin	Hallettsville, Texas	Cultivators	June 21, 1859.
24508	Veal, Franklin	Hallettsville, Texas	Propeller, screw	June 21, 1859.
25292	Vergne, J. J. B.	Paris, France	Henup-brake	Aug. 30, 1859.
25694	Vertrees, William A.	Winchester, Mo.	Furnaces	Oct. 4, 1859.
23966	Vinton, John J., and Edward John	Ironton, Ohio	Meat-slicer	May 10, 1859.
24679	Vine, William	Hartford, Conn.	Railroads, mode of propelling locomotive engines on	July 5, 1859.
24680	Viridin, William W.	Baltimore, Md.	Railroads, mode of braking locomotive engines on	July 5, 1859.
25692	Vogel, William W.	Baltimore, Md.	Sewing-machines	Oct. 4, 1859.
23130	Vogt, Kasimir Vogt, George	Chelsea, Mass. Philadelphia, Pa.	Piano-fortes	Mar. 1, 1859.

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23131	Von Schmidt, Alexy W.	San Francisco, Cal.	Water-meter	Mar. 1, 1859.
24509	Von Schutenback, A.	St. Petersburg, Russia	Lamps, fluid	June 21, 1859.
25927	Voorheis, J. S.	Catlettsburg, Ky.	Shelves, portable	Oct. 25, 1859.
25135	Vose, William T.	Newtonville, Mass.	Pump, portable	Nov. 15, 1859.
23648	Vosmus, O. D., assignor to self and Edward W. Serrell	Boston, Mass.	Galvano-electro helices, method of arranging, for magnetizing the driving-wheels of locomotives.	Apr. 12, 1859.
23627	Wade, S. M.	Andover, Ohio	Harrows, rotary	Apr. 12, 1859.
23833	Wade, William W.	Long Meadow, Mass.	Sewing-machines	Feb. 1, 1859.
24595	Wagner, Thomas F.	Trenton, N. J.	Grain, machine for hulling and scouring.	June 28, 1859.
23311	Wagner, D. S.	Penn Yan, N. Y.	Separators, grain.	Nov. 29, 1859.
22992	Wager, John L.	Deposit, N. Y.	Lanterns, railroad signals	Feb. 15, 1859.
22682	Waggoner, W. M.	Baltimore, Md.	Grain into gavels, devices for gathering	Jan. 18, 1859.
24511	Wagner, F. F., and P. P. Dickinson	Harrisburg, Pa.	Car-seats and couches, railroad	June 21, 1859.
23416	Wagner, John	Pittsburg, Pa.	Sausage-stuffer	Mar. 29, 1859.
25691	Wagner, John	Philadelphia, Pa.	Lee, machine for hoisting	Oct. 4, 1859.
23628	Wagner, Paul	Buffalo, N. Y.	Water-wheels	Apr. 12, 1859.
25152	Wagoner, John, and Abram Severson, jr.	Guilderland Centre, N. Y.	Washing-machine	Aug. 16, 1859.
25777	Waite, Isaac	Watertown, N. Y.	Grain-cleaners	Oct. 11, 1859.
22683	Wakeman, L. B.	Baltimore, Md.	Sails, devices for reefing	Jan. 18, 1859.
22905	Walber, James. (See Selpho & Walber.)	New York, N. Y.	Fire-arm, revolving	Feb. 8, 1859.
24510	Walch, John	Providence, R. I.	Gas-retorts	June 21, 1859.
23059	Walcott, Edward	Burlington, Iowa	Watchmakers' lathes, chuck for	Feb. 22, 1859.
22834	Walden, G. H.	Port Jervis, N. Y.	Saws, machine for grinding	Feb. 1, 1859.
23329	Walker, George	Hartford, Vt.	Odometer	Mar. 22, 1859.
25778	Walker, Haskel, assignor to self and Benjamin P. Driggs	Sunbury, Ohio	Saving-machine, locomotive cross-cut	Oct. 17, 1859.
25538	Walker, John	Roxbury, Mass.	Looms, take-up for trimming	Sept. 20, 1859.
26633	Walker, Samuel	Kingston, Ga.	Ploughs	Dec. 27, 1859.
24251	Walker, Samuel	Somerville, Tenn.	Bee-hives	May 31, 1859.
24251	Walker, Simon H.	Somerville, Tenn.	Bee-hives	May 31, 1859.
26552	Walker, William. (See Pickering, Julius A., assignor.)	Boston, Mass.	Boot-strap fastener	Dec. 20, 1859.
23874	Walker, Sylvenus, assignor to D. W. Smith	Pontiac, Mich	Water-wheels	May 3, 1859.
24069	Walker, William C., and M. Penman. (See Penman & Fitzgerald, assignors.)	New York, N. Y.	Propeller	May 17, 1859.
23205	Wall, Charles R. M. (See Maun, Henry F., ass'r.)	North Sewickley, Pa.	Grain-cleaning machine	Mar. 8, 1859.
25459	Wallace, Hugh, and William Melton	Cameron, Ill.	Raking and loading hay, machines for	Sept. 13, 1859.
24362	Wallace & Sons. (See Doolittle, John H., assignor.)	New York, N. Y.	Hooks for vest chains	June 7, 1859.
25214	Wallace, Thomas J.	Garrettsville, N. Y.	Washing-machine	Nov. 22, 1859.
24268	Wallach, Anthony, assignor to self and Adolph Wallach	Covington, Ky	Mill-drivers	May 31, 1859.
25214	Walling, David	Covington, Ky	Mill-drivers	May 31, 1859.
24268	Walters, Ferdinand, assignor to C. F. Walters and S. H. Stout, jr.	Covington, Ky	Mill-drivers	May 31, 1859.
25779	Walworth, Caleb C.	Boston, Mass.	Screw-threads on pipe-fittings, cutting	Oct. 11, 1859.
25779	Wandel, Hiram, et al. (See Louis, Peter, assignor.)	Boston, Mass.	Screw-threads on pipe-fittings, cutting	Oct. 11, 1859.



22595	Wansbrough, James	Southwark, England	Hydrofuse-fabrics, manufacture of	Jan. 11, 1859
24968	Warburton, William F.	Philadelphia, Pa.	Hats, manufacture of	Aug. 2, 1859
25551	Warburton, William F., and William B. Aikin, assignors to William F. Warburton.	Philadelphia, Pa.	Hat-bodies, machinery for perforating	Sept. 20, 1859
24512	Ward, Ambrose	Altoona, Pa.	Cars, railway, body-bolsters for	June 21, 1859
23051	Ward, J. L. G.	Adrian, Mich.	Roofs, cementing	Feb. 22, 1859
24769	Ward, J. L. G.	Adrian, Mich.	Stone, artificial	July 12, 1859
25594	Ware, Richard	Edinburg, Ind.	Smut-machines	Sept. 27, 1859
23529	Ware, Elijah	South Boston, Mass.	Valve-gear for steam-engines	April 12, 1859
22521	Warner, Alonzo and Cyrus A.	Bristol, Conn.	Drapery, catch for hanging	Jan. 4, 1859
22835	Warner, Chapin	New York, N. Y.	Pavement, cast-iron	Feb. 1, 1859
23281	Warner, Chapman	New York, N. Y.	Bands of iron, clasps for the ends of	Mar. 15, 1859
24168	Warner, Chapman	New York, N. Y.	Moulding-machine	May 24, 1859
25695	Warner, Chapman	New York, N. Y.	Clothes-clamps	Oct. 4, 1859
23132	Warner, Russell	Brattleboro', Vt.	Harvesters	Mar. 1, 1859
23516	Warren, Albert	Jefferson, Ohio	Boots and shoes, machine for cutting soles of	April 15, 1859
24835	Warren, Albert	Jefferson, Ohio	Boots and shoes, machine for cutting heels and soles for	July 10, 1859
25066	Warren, Amsey	West Port, Conn.	Cultivators	Aug. 9, 1859
24420	Warren, David	Gettysburg, Pa.	Car-couplings, railroad	June 14, 1859
24513	Warren, David	Gettysburg, Pa.	Gates, turn, method of opening and closing	June 21, 1859
24834	Washburn, George J.	Worcester, Mass.	Boring-tool	July 26, 1859
26388	Washburn, Nahum	Bridgewater, Mass.	Dental-apparatus for relief of pain while operating	Dec. 6, 1859
23414	Washburn, Nathan	Worcester, Mass.	Rolling wheel-tire, machine for	Mar. 29, 1859
22757	Washington, Oliver A., jr. (See Spink, William, assignor.)	Baltimore, Md.	Boilers, steam, method of blowing off	Jan. 25, 1859
25595	Wasterburg, Swan Johan	Altona, Ill.	Planters, seed	Sept. 27, 1859
25293	Waterbury, Nathaniel	Fond-du-Lac, Wis.	Shingle-machine	Aug. 30, 1859
26067	Waterbury, Nathaniel	Fond-du-Lac, Wis.	Gates	Nov. 8, 1859
25062	Waterhouse, James F.	Germanatown, Pa.	Knitting-machines	Aug. 9, 1859
22993	Waterman, Lawrence B.	Chicago, Ill.	Clothes-frame	Feb. 15, 1859
23517	Waterman, Nathaniel	Boston, Mass.	Pan, egg	April 5, 1859
25474	Waters, O. H., assignor to Alfred Hunter	Baltimore, Md.	Clothes-dryer	Sept. 13, 1859
24837	Watrous, George W.	Hartford, Conn.	Bedstead drapery, fastening for	July 19, 1859
22906	Watson, Augustus	Walnut Run, Ohio	Plough, underground-drain	Feb. 8, 1859
24963	Watson, Augustus	Walnut Run, Ohio	Plough, mole	Aug. 2, 1859
26639	Watson, Charles S., assignor to self, Albert S. Ashmead, and E. W. Carr.	Philadelphia, Pa.	Register, portable	Dec. 27, 1859
22522	Watson, Daniel	Walnut Run, Ohio	Ploughs, drain, mode of operating	Jan. 4, 1859
24343	Watson, William S.	Madison, Ind.	Brick-machine	June 7, 1859
23206	Watt, George	Richmond, Va.	Planters, seed	Mar. 8, 1859
24169	Wattles, Joseph W.	Canton, Mass.	Spinning-frame, ring-traveller	May 24, 1859
24681	Wattles, Joseph W.	Canton, Mass.	Spinning-mechanism, ring and traveller	July 5, 1859
24596	Watts, H. L.	Chester, Mass.	Horse shoe-machine	June 28, 1859
24252	Waugh, John	Elmira, N. Y.	Boring-machine	May 31, 1859
23415	Way, E. B.	Jerseyville, Ill.	Clod-crushers	Mar. 29, 1859
23433	Weatherhead, Davis L., assignor to self and S. E. Southland.	Philadelphia, Pa.	Gas-retorts	Mar. 29, 1859
25597	Weathered, Thomas W., et al. (See Cherery, Edmund B., assignor.)	Carthage, Ind.	Abdominal-supporter	Sept. 27, 1859
24770	Weaver, A. B.	Dover, Ky.	Cans, preserving	July 12, 1859
24895	Weaver, Oliver N.	Savannah, Ga.	Railroad, construction of	July 26, 1859

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24436	Webb, Henry, assignor to S. L. Welder	Cincinnati, Ohio	Railroad-bars	June 14, 1859.
23417	Webber, William and John	Rockton, Ill.	Harvesting-machines	Mar. 29, 1859.
22907	Webster, A. H.	Hudson, N. Y.	Hydro-carbons, with oxygen, apparatus for supplying,	Feb. 8, 1859.
23967	Webster, Thomas K.	Lawrence, Mass.	Lock	May 10, 1859.
	Weed, George M., et al. (See Richardson & White, assignor.)			
	Weed, George M., et al. (See Richardson, George W., assignor.)			
25227	Weeden, Stephen R.	Providence, R. I.	Candle-wicks, preparation of	Aug. 23, 1859.
26238	Weeks, E. T., assignor to S. H. Babcock	Franconia, N. H.	Shoe-peg machine	Nov. 23, 1859.
25154	Wehle, Julius	New York, N. Y.	Measures, hat	Aug. 17, 1859.
25294	Werner, Peter L.	Lebanon, Pa.	Metal pipe, machine for coiling	Aug. 30, 1859.
	Weiner, Sol., et al. (See Pollok, Morris.)			
23054	Weis, Philip P., and F. Schutte	Philadelphia, Pa.	Sewing-machine, feeding mechanism for	Feb. 22, 1859.
	Weis, Philip P., et al. (See Schutte, Frederick, assignor.)			
	Weiskopf, Henry, et al. (See Fletcher, D. G., assignor.)			
	Wellford, Charles C. (See Kollow, John I., assignor.)			
26145	Wellington, D., assignor to C. Wellington	Boston, Mass.	Closets, water, cocks for	Nov. 15, 1859.
23335	Wellington, Darius, assignor to Charles A. Wellington	Boston, Mass.	Closet, water	Mar. 22, 1859.
25857	Wells, Benjamin F.	Georgetown, D. C.	Naval architecture	Oct. 18, 1859.
	Wells, Charles, and William Douglass	Monrocton, Pa.	Water-wheels	Mar. 8, 1859.
23207	Wells, Clinton G.	Bradford County, Pa.	Bands on cotton bales, fastening iron	April 5, 1859.
23518	Wells, Francis F.	Galveston, Tex.	Pessaries	Feb. 22, 1859.
23052	Wells, Henry	Texana, Tex.	Cultivators	June 21, 1859.
24514	Wells, John H.	Walnut Grove, Ill.	Chair, rocking	Nov. 29, 1859.
26312	Wells, Lemuel T.	Brooklyn, N. Y.	Printing-presses	Sept. 6, 1859.
25357	Wells, Moses D.	Cincinnati, Ohio	Seeding-machines	April 19, 1859.
23630	Wells, Moses D.	Morgantown, Va.	Washing-machines	Nov. 23, 1859.
26215	Wells, William	Morgantown, Va.	Corr-shellers	Jan. 4, 1859.
22523	Wells, Wellington, et al. (See Mathuskek, F., assignor.)	Boston, Mass.	Cars for railroads, hand	Dec. 13, 1859.
26453	Welsch, Anthony	Chicago, Ill.	Harvesters	Apr. 19, 1859.
23730	Wemple, J. V. A.	Chicago, Ill.	Fences, field	Oct. 25, 1859.
25925	Wentworth, John J.	Spread Eagle, Pa.	Car, railroad-coupling	Mar. 15, 1859.
23282	Wentworth, Noah H., and Martin L. Ames	Somersworth, N. H.	Acids, fatty, lining tanks for	Nov. 22, 1859.
26221	Wert, Michael	Cincinnati, Ohio	Post-holes in the earth, machine for boring	July 5, 1859.
24682	Wertz, John S.	Middletown, Iowa	Skirts, skeleton	Sept. 6, 1859.
25374	Wesley, Joseph, assignor to Joseph B. Wesley	Providence, R. I.	Fire-arm, breech-loading	Oct. 25, 1859.
	Wesson, D. B., and H. Smith. (See Smith & Wesson.)		Boots and shoes, machine for channeling and edging soles of	May 24, 1859.
25926	Wesson, F., and N. S. Harrington	Worcester, Mass.	Fences, field, method of locking and supporting the panels of	Feb. 15, 1859.
24182	Wesson, Martin, assignor to self and D. B. Wesson	Ogden, N. Y.	Valve, motion of oscillating steam-cylinders	April 5, 1859.
22994	West, Elisha	Brandywine Hundred, Del.	Planters, corn	July 5, 1859.
23519	West, G. D., assignor to P. W. Neefus	Hillsboro, Ohio	Bee-hives	Feb. 8, 1859.
24683	West, J. W.	Elmira, N. Y.		
22908	West, William L.			



22968	Westbrook, Leonardo	New York, N. Y.	Churn	May 10, 1859.
23053	Weston, Charles	Salem, Mass.	Hides, apparatus for handling.	Feb. 22, 1859.
23444	Weston, T. F.	Salem, Mass.	Leather, machine for finishing.	June 7, 1859.
25153	Wethered, Samuel	Baltimore, Md.	Carding-machines.	Aug. 16, 1859.
23631	Wetherill, Joseph	Manchester, Conn.	Quilting-frame	Apr. 12, 1859.
22758	Wetherill, Samuel	Bethlehem, Va.	Distilling zinc, furnaces for.	Jan. 25, 1859.
23731	Wetmore, J. W.	Erie, Pa.	Railroad-chairs.	Apr. 19, 1859.
26634	Wetmore, J. W.	Erie, Pa.	Railroad-chairs.	Dec. 27, 1859.
25228	Wetmore, J. W.	Erie, Pa.	Railroad-chairs.	Aug. 23, 1859.
24771	Wharton, Loren	Tioga County, Pa.	Trap for animals.	July 12, 1859.
26454	Wharton, William, jr.	Philadelphia, Pa.	Railroads, dispensing with switches on.	Dec. 13, 1859.
22909	Wheat, Sylvanus A.	Franklin, N. Y.	Water, apparatus for drawing.	Feb. 8, 1859.
	Wheeler, A., <i>et al.</i> (See Hull, Liveras, assignor.)			
25295	Wheeler, Asa	Brattleborough, Vt.	Skates.	Aug. 30, 1859.
23209	Wheeler, C. S.	Flowerfield, Mich.	Evaporating fluids, apparatus for.	Mar. 8, 1859.
24070	Wheeler, Calvin D.	New York, N. Y.	Needle-ease and index.	May 17, 1859.
26313	Wheeler, Calvin D.	New York, N. Y.	Cleaning animals, machine for.	Nov. 15, 1859.
24253	{ Wheeler, David, and Isaac Little }	Fairfield, Conn.	Gas-regulators	May 31, 1859.
25499	Wheeler, Eli	Bridgport, Conn.	Car-seats, railroad	Sept. 20, 1859.
24706	Wheeler, George C., assignor to self and George Calvert.	Elmira, N. Y.	Gold, machine for washing and amalgamating.	July 5, 1859.
24181	Wheeler, John W., assignor to Alden B. Stockwell.	Graysville, Ga.	Brooms, splint.	May 24, 1859.
26223	Wheeler, Sylvester P., assignor to Moses H. Wheeler & Co.	Cleveland, Ohio	Nitrate of silver crayons, manufacture of.	Nov. 22, 1859.
24684	Wheeler, William	Bridgport, Conn.	Cards, manufacturing machine and animal.	July 5, 1859.
25858	Wheeler, William	West Poutney, Vt.	Carpet-strecher.	Oct. 18, 1859.
22759	Wheelock, Jesse	West Poutney, Vt.	Boat for transporting railroad cars.	Jan. 25, 1859.
	Whipple File Company. (See Whipple, Milton D., ass'or.)	Lancaster, N. Y.		
25696	Whipple, A. L.	Elmira, N. Y.	Paper, wall, machine for trimming.	Oct. 4, 1859.
23732	Whipple, Cullen	Providence, R. I.	Fibrous materials, machines for combing	April 19, 1859.
26073	Whipple, James A., assignor to self and G. A. Stone.	Boston, Mass.	Piles, method of driving.	Nov. 8, 1859.
23993	Whipple, James A., assignor to James Whipple and Benjamin F. Cooke.	Boston, Mass.	Engine, steam	May 10, 1859.
25924	Whipple, John L.	Detroit, Mich.	Bed-spring	Oct. 25, 1859.
22842	Whipple, Milton D., assignor to the Whipple File Co.	Charlestown, Mass.	Files, machines for cutting	Feb. 1, 1859.
	Whitcher, G. H., and W. A. Kenrich. (See Kenrich & Whitcher.)			
22524	Whitcomb, Alonzo	Worcester, Mass.	Press, copying	Jan. 4, 1859.
25988	White, E. B.	Springfield, Ohio.	Plough, mole.	Nov. 1, 1859.
24685	White, James W. and G. W. Richardson. (See Richardson & White.)	Nashua, N. H.	Alarm-attachment for tills	July 5, 1859.
25296	White, John M.	New York, N. Y.	Boilers, steam, feed-water heater for.	Aug. 30, 1859.
26146	White, L., assignor to self and E. P. Miller.	Hartford, Conn.	Curtain-fixtures	Nov. 15, 1859.
23520	White, Le Roy S.	Waterbury, Conn.	Burnishing-machine.	April 5, 1859.
25783	White, Le Roy S.	Waterbury, Conn.	Burnishing-machine.	Oct. 11, 1859.
25475	White, Lewis, assignor to self and Daniel McLaughlin.	Hartford, Conn.	Lamps.	Sept. 13, 1859.
24421	White, Lyman	Davenport, Iowa.	Drills, rock	June 14, 1859.
23969	White, Milton, Howard, Henry T., and Joseph	Philadelphia, Pa.	Ice-pick.	May 10, 1859.
24345	White, Robert F.	New York, N. Y.	Omnibus-register	June 7, 1859.
23133	White, William H.	Garrettsville, N. Y.	Rakes, horse.	Mar. 1, 1859.
24071	Whitehall, Nicholas	Newtown, Ind.	Cultivators, seeding.	May 17, 1859.
24170	Whitehead, Jesse	Manchester, Va.	Harvesting-machines	May 25, 1859.
23418	Whitehead, T. I.	South Paris, Me.	Stoves	Mar. 29, 1859.



Patentees of invention and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
23064	Whitehill, James.	Frederick, Md.	Furnaces, hot-air	Nov. 8, 1859
	Whitehurst, Jesse H., et al. (See Smith, John W., ass'r.)	Springfield, Ohio	Harvesters	Aug. 30, 1859.
25297	Whiteley, Abner.	Boston, Mass	Boilers, steam.	April 19, 1859.
23733	Whiteley, Edward.	Springfield, Ohio	Harvesters	Jan. 18, 1859.
22684	Whiteley, William N., and Andrew.	Fuller's Corners, Ind.	Cultivators.	Nov. 22, 1859.
23216	Whiteside, J., and H. F. Crabill.	New York, N. Y.	Skates to boots, attaching	Dec. 20, 1859.
26540	Whitman, Thomas Spurr.	Springfield, Vt.	Carpenter's rule.	Sept. 13, 1859.
25460	Whitmore, Hamlin, and David M. Smith.	Genesee, Ill.	Stoves	Sept. 27, 1859.
25596	Whitney, C. L., and Samuel Reed.	Bolton, Mass	Ploughs	Mar. 1, 1859.
23134	Whitney, John M.	Bolton, Mass	Cultivators	Mar. 1, 1859.
23135	Whittaker, John M.	Bolton, Mass	Planters, corn	Sept. 13, 1859.
25461	Whittaker, Charles.	Davenport, Iowa.	Steam-apparatus, cut-off-gear for.	Sept. 20, 1859.
23208	Whittington, Henry	Philadelphia, Pa.	Churn	Mar. 8, 1859.
24686	Wicks, Loren J.	Racine, Wis.	Churn	July 5, 1859.
22923	Wicks, Loren J.	Racine, Wis.	Boot-jack	Feb. 8, 1859.
25166	Wickersham, J. B., and H. Jenkins, assignors to New York Wire Railway Company.	Brooklyn, N. Y.	Fences, iron	Aug. 16, 1859.
23970	Widman, John George	New York, N. Y.	Stoves	May 10, 1859.
23632	Wdrig, George J.	Memphis, Tenn.	Bales, cotton, hook-fastening for.	Apr. 12, 1859.
26136	Wiebe, Edward.	Brooklyn, N. Y.	Advertising, mode of.	Nov. 17, 1859.
23210	Wilber, William.	New York, N. Y.	Burning-fluids	Mar. 8, 1859.
25928	Wileox, Dutee.	Providence, R. I.	Studs, shirt	Oct 25, 1859.
23633	Wileox, John W.	West Roxbury, Mass.	Rollers, constructing electro-plated.	April 12, 1859.
23876	Wileox, S., Jr., et al. (See Stillman & Wileox.)	Westerly, R. I.	Air-engine	May 3, 1859.
24957	Wileox, Stephen, Jr.	Milan, Ohio.	Ship's hoisting apparatus	Aug. 2, 1859.
23534	Wilcoxson, D. J.	Milan, Ohio.	Ship's steering apparatus	April 5, 1859.
25859	Wilder, J. T.	Greensburgh, Ind	Water-wheel, horizontal	Oct. 18, 1859.
25358	Wilder, S. H.	Grinnell, Iowa.	Valves to extinguish fire, method of opening.	Sept. 6, 1859.
25598	Wilder, Zater F.	Painted Post, N. Y.	Water by animal power, method of raising.	Sept. 27, 1859.
	Wildman, Frederick A., and J. Hinkley. (See Hinkley, Jonas, assignor.)	Danbury, Conn	Brick-machines	April 12, 1859.
23634	Wildman, Russell	Adrian, Mich.	Borer, hub	April 5, 1859.
23535	Wiley, Cutting B., assignor to self and Alex'r Stebbins.	Frankfort, Ohio	Planters, corn	July 5, 1859.
24687	Wiley, Henry.	Bridgeport, Pa.	Carriage-thills, key-bolt for attaching	Feb. 22, 1859.
23055	Wilhelm, C. P.	Philadelphia, Pa	Lamp-shades	May 3, 1859.
23875	Wilhelm, Charles, and Anna C.	West Andover, Ohio.	Cheese-wats	Nov. 22, 1859.
26222	Wilkins, C. M.	Burns, N. Y.	Washing-machine	Nov. 22, 1859.
26217	Wilkins, R. G.	Madison, Ind.	Presses, rotary	Sept. 20, 1859.
25542	Wilkinson, Asbury	Brooklyn, N. Y.	Paper, machine for receiving and piling	Aug. 9, 1859.
25069	Wilkinson, Jephtha Avery	Brooklyn, N. Y.	Paper, shears for separating.	Aug. 9, 1859.
25068	Wilkinson, Jephtha Avery	Brooklyn, N. Y.	Registering-apparatus	Aug. 30, 1859.
25928	Wilkinson, Jephtha Avery	Brooklyn, N. Y.	Registering-apparatus	Sept. 20, 1859.
25543	Wilkinson, Jephtha Avery	Brooklyn, N. Y.	Registering-apparatus	Sept. 20, 1859.



23971	Willard, H., and Robert Ross. (See Burt & Willard.)	Vergennes, Vt.	Harvesting-machines.	May 10, 1859.
23989	Willard, W. W. (See Burt & Willard.)	Harmony Grove, Ga.	Threshing-machine.	Dec. 6, 1859.
23635	Willbanks, D. A.	Port Jervis, N. Y.	Gates for canal-locks.	April 12, 1859.
26314	Williams, C. W.	Port Jervis, N. Y.	Locks, canal.	Nov. 29, 1859.
22836	Williams, C. W.	Philadelphia, Pa.	Sizing for colored papers.	Feb. 1, 1859.
23994	Williams, Charles.	Williamsburgh, N. Y.	Gauge, steam and water.	May 10, 1859.
24254	Williams, Cornelia H., admin'x of Aug's Williams, ass'r to A. Pollok, assignor to N. Clark.	Washington, D. C.	Window-sash, friction-spring for supporting.	May 31, 1859.
25155	Williams, E. D.	Beverly, Mass.	Horse-power machine.	Aug. 16, 1859.
25155	Williams, F. B.	Philadelphia, Pa.		
25155	Williams, Giles B., et al. (See Bond, Lester L., assignor.)	Freeport, Ill.		
25155	Williams, J. B., et al. (See Richardson & Glover.)			
25462	Williams, J. B., et al. (See Richardson & Glover, assignors.)			
25462	Williams, J. S.	St. Louis, Mo.	Grates.	Sept. 13, 1859.
26218	Williams, John.	Ashfield, Mass.	Washing machine.	Nov. 22, 1859.
26335	Williams, John. (See Griffin, Caleb H., assignor.)			
23211	Williams, John P., et al. (See Richardson, George W.)			
24255	Williams, Paul.	Lodi, Miss.	Presses, cotton.	Dec. 27, 1859.
22910	Williams, Solomon, jr.	Hume, N. Y.	Ploughs.	Mar. 8, 1859.
23419	Williams, T. S.	Enterprise, Miss.	Mosquito-bar.	May 31, 1859.
23734	Williams, Thomas, and W. C. Joslin.	Fishersville, Conn.	Ellipsograph.	Feb. 8, 1859.
23463	Williams, W. I.	New York, N. Y.	Seraper, foot.	Mar. 29, 1859.
23463	Williams, W. I.	New York, N. Y.	Wood, fire, machine for splitting.	April 19, 1859.
23156	Williams, William B.	Warrenton, N. C.	Ploughs.	Sept. 13, 1859.
23147	Williams, William B.	Warrenton, N. C.	Ploughs.	Sept. 13, 1859.
22760	Williams, William L.	New York, N. Y.	Wood, kindling, machine for bundling.	Aug. 16, 1859.
23219	Williams, Wm. L., assignor to self and Thos. J. O'Conner.	New York, N. Y.	Wood, kindling, machine for bundling.	Nov. 15, 1859.
22535	Willianson, George W.	New York, N. Y.	Heating-apparatus.	Jan. 25, 1859.
23070	Willis, Epeutus A.	Cold Spring, N. Y.	Floating-batteries.	Nov. 22, 1859.
26402	Willoughby, James D., assignor to C. M. Alexander.	Carlisle, Pa.	Can and bottles, sealing.	Jan. 4, 1859.
26402	Wills, Eri.	Augusta, Me.	Stump-extractor.	Aug. 9, 1859.
26315	Wilson, Rebecca H., administratrix of John M. Willson, deceased.	Washington, D. C.	Cartridge box, fastening for.	Dec. 6, 1859.
26316	Winarth, A. L., et al. (See Wilson, Archelaus, assignor.)	Charlestown, Mass.	Bolts, machine for drawing.	Nov. 29, 1859.
24966	Winarth, Seth.	Toledo, Ohio	Separators, grata.	Nov. 29, 1859.
25167	Winnington, William.			
24896	Wilson, Bowers, & Griggs. (See Bowers, Griggs, & Wilson.)	St. Thomas, Miss.	Hemp-brake.	Aug. 2, 1859.
24897	Wilson, A. C., and G. Emery. (See Emery & Wilson.)	New York, N. Y.	Electricity, mode of lighting gas by.	Aug. 16, 1859.
25860	Wilson, Allen, and George C. Fletcher.	Cincinnati, Ohio.	Steam, apparatus for warming by.	July 26, 1859.
22761	Wilson, Archelaus, assignor to D. A. Heald, A. W. Winarth, C. T. Martin, and H. A. Hurlburt.	Cincinnati, Ohio.	Steam-radiator.	July 26, 1859.
23755	Wilson, Charles A.	Cincinnati, Ohio.	Thermostat.	Oct. 13, 1859.
23736	Wilson, Charles A.	Cincinnati, Ohio.		
24772	Wilson, Charles A.	Cincinnati, Ohio.		
25609	Wilson, G. W., and C. V. Stadler. (See Stadler & Wilson.)	Walnut Grove, Ill.	Washing-machine.	Jan. 25, 1859.
24346	Wilson, George W., and A. Johnson.	Wilmington, Del.	Seaming-machine, double.	April 19, 1859.
24346	Wilson, James, C. Green, and William Wilson, jr.	Wilmington, Del.	Metal, machine for corrugating sheet.	April 19, 1859.
24346	Wilson, James, C. Green, and William Wilson, jr.	Wilmington, Del.	Powder kegs, &c., attaching the heads of metallic.	July 12, 1859.
24346	Wilson, James, C. Green, and William Wilson, jr.	Anderson C. H., S. C.	Gin, cotton.	Sept. 27, 1859.
24346	Wilson, John.	Philadelphia, Pa.	Lock-attachment.	June 7, 1859.

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
22911	{ Wilson, John P., and John F. Thomas.	Frankfort, N. Y.	Alarm, burglar's	Feb. 8, 1859.
26220	Wilson, Riley P., and R. Lapham. (See Lapham & Wilson.)	Olean, N. Y.	Boats, ship's, disengaging-hook for liberating	Nov. 22, 1859.
23636	Wilson, T. W., and L. Raymond.	New York, N. Y.	Ploughs	April 12, 1859.
24171	Wilson, William H.	Summerfield, Ohio	Cultivators	May 24, 1859.
23330	Wilson, William A.	Franklin, Ind.	Saw-teeth, construction of	Mar. 22, 1859.
23972	Wilson, William H.	Berlin Falls, N. H.	Harvesting-machines	May 10, 1859.
24269	Wilson, Alfred B., assignor to self and Charles Adams	Denton, Md.	Boots and shoes, heels for	May 31, 1859.
26541	Wilverth, H.	Dorchester, Mass.	Fuel, artificial	Dec. 21, 1859.
25601	Winshurst, Henry William	Caseyville, Ky.	Metal, sheet, manufacture of	Sept. 27, 1859.
22597	Winans, Ross	Dalston, England	Locomotive-engines	Jan. 11, 1859.
	Winchester, C., and G. C. (See Fitts, Robert, assignor.)	Baltimore, Md.		
	Winchester, C. J., et al. (See Hall, Hunt, & Winchester.)			
22608	Windall, Thomas, assignor to J. B. Ford, Jas. H. Shields, and H. L. Bridwell.	New Albany, Ind.	Moving-machines	Jan. 11, 1859
25780	Winder, Daniel	Cincinnati, Ohio	Bed-bottom	Oet. 11, 1859.
22598	Windle, George	Edenburg, Va.	Surveying-instruments	Jan. 11, 1859.
24898	Wineman, Parker	Loydsville, Ohio	Churn-dashers	July 26, 1859.
22762	Wingate, George	Philadelphia, Pa.	Pump, rotary	Jan. 25, 1859.
26317	Winger, Martin	Lancaster Co., Pa.	Bark, machine for shaving	Nov. 29, 1859.
25071	Winslow, A. P.	Cleveland, Ohio	Cars, railroad, roofs for	Aug. 9, 1859.
23637	Winter, C.	Piqua, Ohio	Adding-machine	Apr. 12, 1859.
22763	Winter, Herman	New York, N. Y.	Valve-gear of oscillating steam-engines	Jan. 25, 1859.
22995	Wintringham, David L. (See Chichester, Lewis S., assignor.)	Albany, N. Y.	Metals with tin, coating	Feb. 15, 1859.
	Wirseling, Alvis, et al. (See Miller & Wirseling, assignors.)			
26542	Wirths, Edward	New York, N. Y.	Skate-fastenings	Dec. 21, 1859.
25229	Wisel, Ira	Brookville, Wis.	Water-wheels	Aug. 23, 1859.
25072	Wisniewski, I. F.	Cincinnati, Ohio	Preparation of glycerine	Aug. 9, 1859.
24347	Wiswall, Samuel	Hyde Park, Vt.	Washing-machine	June 7, 1859.
	Withers, Richard, et al. (See Johnston, Hezekiah, ass'r.)			
	Witherow, Washington, et al. (See Roland & Forbis, assignors.)			
22764	Witsil, G. L.	Wilmington, Del.	Washing-machine	Jan. 25, 1859.
25991	Woleott, R. F.	Claremont, N. H.	Scales, platform	Nov. 1, 1859.
24256	Wolff, Samson	Vicksburg, Miss.	Presses, cotton and hay	May 31, 1859.
	Wonderlich, J., et al. (See Goshen, J. G., assignor.)			
	Wood & Rogers. (See Rogers & Wood.)			
	Wood, A. McL., and John Keane. (See Keane, John, assignor.)			
23137	Wood, Albert A.	New York, N. Y.	Valve-gear	Mar. 1, 1859.
22837	Wood, Auriu	Worcester, Mass.	Screw-blanks, machine for shaving the heads of	Feb. 1, 1859.
23420	Wood, John	Brooklyn, N. Y.	Shingles, method of operating the knife in riving	Mar. 29, 1859.
23802	Wood, John	Brooklyn, N. Y.	Wadding and paper, machines for cutting and folding	April 23, 1859.



25989	Wood, Luke H.	Marlborough, Mass	Pegging-machines	Nov. 1, 1859.
25999	Wood, Keuben	Grand Ledge, Mich	Punch, hand	Sept. 27, 1859.
25990	Wood, Simon	Worcester, Mass	Auger	Nov. 1, 1859.
24172	Wood, Solon	White Pine, Pa.	Saw-filer	May 24, 1859.
23378	Wood, Walter A.	Hoosic Falls, N. Y.	Harvesting-machine	May 3, 1859.
24836	Wood, Walter A., and J. M. Rosebrooks	Hoosic Falls, N. Y.	Harvesters	July 19, 1859.
23056	Wood, Walter A.	Hoosic Falls, N. Y.	Harvesters	Feb. 22, 1859.
23057	Wood, Walter A.	Hoosic Falls, N. Y.	Mowing-machines	Feb. 22, 1859.
23331	Wood, William	Hartford, Conn	Brick-machines	Mar. 22, 1859.
24707	Wood, Wm. W. W., and Henry Howson, assignors to John Rice.	Philadelphia, Pa.	Valve for steam-engines, cut-off device for operating the	July 5, 1859.
23521	Woodbury, D. A.	Rochester, N. Y.	Engines, steam, variable cut-off for	April 5, 1859.
23737	Woodbury, D. A.	Rochester, N. Y.	Engines, steam, variable cut-off gear for	April 19, 1859.
23212	Woodbury, James A., et al. (See Bee, Benj. F., ass'r.)	Toledo, Ohio	Fireman's protector	Mar. 8, 1859.
24257	Woodruff, Chauncey D	Philadelphia, Pa	Cars, railroad, seats and couches for	May 31, 1859.
24257	Woodruff, Theodore T	Philadelphia, Pa	Cars, railroad, seats and couches for	May 31, 1859.
25781	Woods, Dougherty, Egerton, & Co. (See Murrill, James H., assignor.)	Philadelphia, Pa.	Life-preserving buoy	Sept. 11, 1859.
24899	Woodward, Oliver Evans	Brooklyn, N. Y.	Guard, safety, for ferry-wharf	July 26, 1859.
25037	Woodward, Edward F.	Brooklyn, N. Y.	Skirts, skeleton	Aug. 9, 1859.
23782	Woodward, Edward F.	Brooklyn, N. Y.	Skirts, skeleton	Aug. 9, 1859.
23782	Woodward, Francis G.	Worcester, Mass.	Sewing-machines	Sept. 11, 1859.
22996	Woodward, Gilman, and Franklin S. Hathaway.	Keene, N. H.	Garments, &c., to books, securing	Sept. 11, 1859.
24173	Woodward, Isaac F.	Philadelphia, Pa.	Signals, gong or bell for	Feb. 15, 1859.
26137	Woodward, Joseph A.	Philadelphia, Pa.	Signals, gong or bell for	May 24, 1859.
23003	Woodworth, A, 3d	Boston, Mass.	Signal-bell	Nov. 15, 1859.
23003	D. Woodworth, and M. T. Hitchcock, assignors to A. Woodworth, 3d, and D. Woodworth.	Warren, Mass	Rocking-horse	Feb. 15, 1859.
24900	Woodworth, G. H.	Springfield, Mass	Rocking-horse	Feb. 15, 1859.
22599	Wolf, Thomas J., and P. F. Jordan. (See Ager, Wilson, assignor.)	Brooklyn, N. Y.	Blinds, venetian	July 26, 1859.
23136	Wooten, John E.	Philadelphia, Pa.	Valves, steam	Jan. 11, 1859.
26318	Wooten, John E.	Philadelphia, Pa.	Gauge-cock	Mar. 1, 1859.
24688	Worcester, Leonard	Philadelphia, Pa.	Power, hand, moving locomotive-engines by	Nov. 29, 1859.
22912	Worden, Benjamin B., and Wm. Caldwell. (See Johnson, Danforth, assignor.)	Lebanon, N. H.	Boring or mortising blind-stiles, machine for	July 5, 1859.
23801	Work, Thomas K.	Hartford, Conn	Odometer	Feb. 8, 1859.
24072	Worl, Brothers. (See Black, James, assignor.)	Goodwinsville, N. J.	Wicks, lamp	April 26, 1859.
26455	Worl, W. S. (See Black, James, assignor.)	Colerain, Pa.	Roofing, cement for.	May 17, 1859.
23973	Wortendyke, J. B.	Canton, Mo	Planters, seed	Dec. 13, 1859.
23877	Worth, J. Carpenter	New York, N. Y.	Blinds, mode of constructing slats for	Jan. 11, 1859.
24689	Worth, Wm. H., and Leonard Finlay.	New York, N. Y.	Lath, metallic	May 3, 1856.
24688	Worthen, W. E., and J. J. Althouse.	New York, N. Y.	Curb and gutter, street, combined metallic	May 10, 1859.
23973	Worthen, W. E.	New York, N. Y.	Metal, corrugating sheet	July 5, 1859.
24689	Worthen, W. E., and H. B. Renwick.	New York, N. Y.	Pumping-engine	July 19, 1859.
24688	Worthington, Henry R.	Brooklyn, N. Y.	Evaporating, apparatus for	Jan. 11, 1859.
22601	Worthington, Wm. S.	Newtown, N. Y.	Evaporating, apparatus for	Jan. 11, 1859.
25074	Wright, Albert H.	Camden, N. J.	Composition of matter for ornamental purposes	Aug. 9, 1859.
25074	Wright, Benjamin, et al. (See Bean & Wright.)	Camden, N. J.	Composition of matter for ornamental purposes	Aug. 9, 1859.

Patentees of inventions and designs, 1859.

No.	Name of patentee.	Residence.	Invention or discovery.	Date.
24690	Wright, Benj. S., <i>et al.</i> (See Campbell, Robert M., ass'r.)	Worcester, Mass.	Spinning-mules, self-acting	July 5, 1859.
25075	Wright, John K.	Philadelphia, Pa.	Printing in different colors, machine for.	Aug. 9, 1859.
22765	Wright, R. A., and L. J. Fouché	Paris, France	Process for decomposing fats	Jan. 25, 1859.
26543	Wright, Robert W.	New Haven, Conn.	Newspapers, &c., machines for feeding up, cutting, and pasting directions on.	Dec. 31, 1859.
22609	Wright, Wm., assignor to self and Frederick Wright.	New York, N. Y.	Gas-burners	Jan. 11, 1859.
26138	Wright, Wm.	Hartford, Conn.	Pumping-engine, steam	Nov. 15, 1859.
26139	Wright, Wm.	Hartford, Conn.	Pumps	Nov. 15, 1859.
23879	Wulze, August.	St. Louis, Mo.	Barley, pearl, machine for making.	May 3, 1859.
26065	Wuterich, F., and J. Koerber.	New York, N. Y.	Gins, cotton	Nov. 8, 1859.
24773	Wyckoff, Arealous.	Elmira, N. Y.	Augers, hollow	July 12, 1859.
24901	Wyckoff, J. N., and T. M. Fell.	Brooklyn, N. Y.	Amalgamators, ore-washer and.	July 26, 1859.
24902	Wyckoff, J. N., and T. M. Fell.	Orange Mines, Va.	Amalgamators, gold	July 26, 1859.
23283	T. M. Fell.	Brooklyn, N. Y.	Table, bread-making	Mar. 15, 1859.
23283	Wyckoff, W. K.	Orange Mines, Va.	Amalgamators, gold	July 26, 1859.
23738	Yeardley, T. W., <i>et al.</i> (See Burnish, Talbot, & Yeardley.)	Ripon, Wis.	Table, bread-making	Mar. 15, 1859.
24422	Yates, Gilbert	West Dresden, N. Y.	Gates by hand, method of opening and closing farm.	April 19, 1859.
23522	Yates, Gilbert	West Dresden, N. Y.	Car-couplings	June 14, 1859.
26396	Yates, Wm. H. and George.	Chittanooga, N. Y.	Sawing shingles from the bolt, method of	April 5, 1859.
22913	Yeager, Wm. F.	Starkville, Miss.	Ploughs	Dec. 6, 1859.
25861	Yeasley, P., <i>et al.</i> (See Cullom, John B., assignor.)	Lexington, Ky.	Altitudes of the sun, instrument for taking	Feb. 8, 1859.
23803	Yeiser, Frederick	New York, N. Y.	Bustles	Oct. 18, 1859.
24259	Yerby, George W.	New York, N. Y.	Refrigerator	April 26, 1859.
23685	Yost, Abraham	Providence, R. I.	Springs, upholstery, machines for making	May 31, 1859.
23804	Young, C. A. and S. W.	West Galway, N. Y.	Railroad-chairs	Jan. 18, 1859.
24348	Young, John	West Galway, N. Y.	Railroads, construction of	April 26, 1859.
24597	Young, John	Joliet, Ill.	Cultivators	June 7, 1859.
24073	Young, John H.	Joliet, Ill.	Cultivators, rotary	June 28, 1859.
24598	Young, MeClintock, jr.	Springfield, Ohio	Pump	May 17, 1859.
22766	Young, MeClintock, jr. (See Fitzhugh & Young.)	Frederick, Md.	Harvesting-machines	June 28, 1859.
24074	Young, Wm. D.	Baltimore, Md.	Boot-jaek	Jan. 25, 1859.
23739	Youngman, Jacob	Sunbury, Pa.	Railroad-switches	May 17, 1859.
23638	Zeigler, George W., and W. H. Reed. (See Guernsey, S. B., assignor.)	Tiffin, Ohio	Fan, automatic	April 19, 1859.
25523	Zeigler, George W.	Mill Creek, Pa.	Horse-power machines, mode of applying and constructing.	April 12, 1859.
24423	Zeller, William	Lancaster, Ohio	Trace-fastenings	April 5, 1859.
26140	Zink, Anthony	Quincy, Ill.	Grain-hilling machines.	June 14, 1859.
25697	Zimmerman, William	New York, N. Y.	Telegraphing, mode of	Nov. 15, 1859.
25697	Zook, Samuel K.	New York, N. Y.	Telegraphing, mode of	Nov. 15, 1859.
25697	Zug, David	Shaferstown, Pa.	Harvesters	Oct. 4, 1859.



*Alphabetical list of persons to whom patents have been reissued during the year 1859.*

No.	Names of patentees.	Residence.	Invention or discovery.	Date of reissue.	Date of original patent.
709	Adams, Augustus, and Philo Sylla. (See Sylla & Adams.)	Troy, N. Y.	Knitting-machines	May 3, 1859	July 13, 1858.
677	Aiken, Nelson P.	Newburgh, N. Y.	Furnace, smelting	Mar. 29, 1859	July 30, 1857.
663	Alger, Charles C.	Freeport, Pa.	Distillation of oils from coal	Feb. 8, 1859	April 27, 1858.
	Alter, David, and S. A. Hill, assignors to themselves and W. F. Johnson, G. S. Selden, J. L. Russell, J. I. Johnson.				
741	Amies, Israel, assignor to John A. Jackson.	Philadelphia, Pa.	Veneers	June 21, 1859	Dec. 11, 1855.
784	Ames, John. (See Mitchell, Thomas, assignor.)	Derby, Conn.	Skirts, skeleton	July 26, 1859	} Division, Oct. 19, 1858.
785	Atwood, E. G., assignor to The Shelton and Osborn Skirt Manufacturing Co.	Derby, Conn.	Skirts, skeleton	July 26, 1859	
679	Atwood, E. G., assignor to The Shelton and Osborn Skirt Manufacturing Co.	Albany, N. Y.	Gas, making illuminating	April 5, 1859	} Division, Jan. 8, 1856.
680	Aubin, N.	Albany, N. Y.	Gas-generators	April 5, 1859	
681	Aubin, N.	Albany, N. Y.	Gas-retorts, tight joints for	April 5, 1859	
771	Aultman & Co. (See Sylla & Adams, assignors.)	Canton, Ohio	Mowing-machines	July 19, 1859	} Division, June 17, 1855.
772	Aultman, C., and Lewis Miller, assignors to C. Aultman & Co.	Canton, Ohio	Mowing-machines	July 19, 1859	
773	Aultman, C., and Lewis Miller, assignors to C. Aultman & Co.	Canton, Ohio	Mowing-machines	July 19, 1859	
774	Aultman, C., and Lewis Miller, assignors to C. Aultman & Co.	Canton, Ohio	Mowing-machines	July 19, 1859	
775	Aultman, C., and Lewis Miller, assignors to C. Aultman & Co.	Canton, Ohio	Mowing-machines	July 19, 1859	
776	Aultman, C., and Lewis Miller, assignors to C. Aultman & Co.	Canton, Ohio	Mowing-machines	July 19, 1859	
708	Aultman & Co. (See Miller, Lewis, assignor.)	Philadelphia, Pa.	Gas-burners	May 3, 1859	Oct. 12, 1858.
831	Bacon, S. T. (See Smith, E. N., assignor.)	Nashua, N. H.	Shuttles for weaving	May 3, 1859	Jan. 31, 1840; extended.
832	Bacon, S. T. (See North, John, assignor.)	Canton, Ohio	Mowing-machines	Sept. 27, 1859	} Division, Dec. 1, 1857.
728	Bailey, Yarnall, assignor to John K. O'Neil	Canton, Ohio	Mowing-machines	Sept. 27, 1859	
	Baldwin, James	Buffalo, N. Y.	Water, apparatus for raising	May 24, 1859	Mar. 20, 1849.
	Ball, E.				
	Ball, E.				
	Barnes, William T.				
	Bartlett, Joseph W. (See Reynolds, O. L., assignor.)	New York, N. Y.	Lamps	Feb. 8, 1859	Dec. 28, 1858.
659	Batchelder, William W.	Brooklyn, N. Y.	Printing-presses, machine for wetting and cutting paper for	Nov. 15, 1859	Aug. 25, 1857.
852	Beach, Moses S.	Brooklyn, N. Y.	Ox-druance, breech-leading	Aug. 16, 1859	Sept. 9, 1856.
	Bechtel, George H. (See Sichel, H. G., assignor.)				
791	Bishop, G. W.	Brooklyn, N. Y.	Wood, bending	Nov. 15, 1859	Dec. 18, 1849.
853	Blake, David, et al. (See Dodge, James, assignor.)	Boston, Mass.	Lockets, rim for	Nov. 15, 1859	} Division, April 28, 1857.
850	Blanchard, Thomas.	Wickford, R. I.	Lockets, mode of constructing	Nov. 15, 1859	
851	Bloomer, Charles G.	Wickford, R. I.			

*Alphabetical list of persons to whom patents have been reissued during the year 1859.*

No.	Names of patentees.	Residence.	Invention or discovery.	Date of reissue.	Date of original patent.
664	Brown, James, <i>et al.</i> (See Draper, James, assignor.)	London, England.	Cables, chain, arrangement of means for working and stopping.	Feb. 15, 1859	July 25, 1854; antedated April 20, 1847.
754	Brown, Thomas	Cincinnati, Ohio	Billiard-table cushions	July 12, 1859	Dec. 8, 1857.
690	Burrall, Thomas D.	Geneva, N. Y.	Harvesters	April 12, 1859	Mar. 18, 1856.
695	Burrall, Thomas D.	Geneva, N. Y.	Harvesters, grain	April 26, 1859	} Division, April 5, 1853.
696	Burrall, Thomas D.	Geneva, N. Y.	Harvesters, grain	April 26, 1859	
644	Burt, Henry, and J. T. Hedden.	Newark, N. J.	Hames, machine for making	Jan. 11, 1859	Feb. 17, 1857.
832	Butcher, William, and William A.	Philadelphia, Pa.	Coating metallic surfaces	Dec. 6, 1859	June 29, 1858.
755	Button, Lysander, and Robert Blake.	Waterford, N. Y.	Fire-engines	July 12, 1859	Nov. 30, 1858.
732	Cholar, J. B., assignor to David Stuart and R. Peterson.	Albany, N. Y.	Stoves, plates for boiler-holes and tops of	May 31, 1859	Feb. 6, 1849.
833	Clark, James M.	Philadelphia, Pa.	Bolts, flour	Oct. 4, 1859	July 26, 1859.
643	Coates, Abraham	New York, N. Y.	Lamps, carcel, regulating the flow of oil to the wick in.	Jan. 4, 1859	Mar. 25, 1856.
799	Collender, Hugh W.	New York, N. Y.	Billiard-table cushions	Aug. 23, 1859	Dec. 8, 1857.
869	Cook, D. M.	Mansfield, Ohio	Evaporating cane juices, pans for	Dec. 20, 1859	June 22, 1858.
758	Cooper, J. M., and W. S. Laveley. (See Ells, Josiah, assignor.)	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	} Division, March 10, 1849; reissued May 13, 1851.
759	Cooper, James. (See Marston, Stanhope W., assignor.)	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	
760	Corliss, George H.	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	} Division, March 10, 1849; reissued May 13, 1851.
761	Corliss, George H.	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	
762	Corliss, George H.	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	} Division, March 10, 1849; reissued May 13, 1851.
763	Corliss, George H.	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	
780	Corliss, George H.	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	} Division, March 10, 1849; reissued May 13, 1851.
697	Corliss, George H.	Providence, R. I.	Engine, steam, cut-off, and working-valves of.	July 12, 1859	
828	Crooker, Matthew A.	New York, N. Y.	Cut-off gear	July 26, 1859	July 29, 1851.
847	Culver, John, assignor to J. Regester, William G. Webb, John L. Roche, and John L. McCart.	Baltimore, Md.	Paddle-wheels, arrangement of buckets	April 26, 1859	Oct. 28, 1856.
792	Cummings, De Witt C.	Fulton, N. Y.	Hydrants, waste-device for	Sept. 27, 1859	April 22, 1856.
756	Day, Austin G.	New York, N. Y.	Straw-cutters	Nov. 8, 1859	Aug. 7, 1855.
757	Day, Austin G.	Seymour, Conn.	Ash-sifters	Aug. 16, 1859	Mar. 8, 1859.
802	Day, Horace H. (See Tyler, George, and John Helm, assignors.)	Seymour, Conn.	Caoutchouc, cleansing	June 7, 1859	} Division, June 10, 1856.
870	Devoe, Isaac L. (See Perry, Samuel M., assignor.)	Seymour, Conn.	Caoutchouc, treatment of crude	June 7, 1859	
733	Doughty, S. H., <i>et al.</i> (See Draper, James, assignor.)	Brooklyn, N. Y.	Lamps	Aug. 30, 1859	May 3, 1859.
870	Dietz, Michael A.	Waterford, N. Y.	Knives, grinding and polishing	May 31, 1859	Oct. 12, 1858.
669	Dodge, James, assignor to self and David Blake	New York, N. Y.	Skirts, skeleton	Dec. 27, 1859	Oct. 4, 1859.
803	Draper, James, assignor to self, S. H. Doughty, James Brown, and William King.	Niagara City, N. Y.	Shutler operator	Mar. 1, 1859	July 8, 1856.
650	Edwards, Charles R.	New York, N. Y.	Motion, device for converting reciprocating into intermittent.	Aug. 30, 1859	June 21, 1859.
650	Ehrenfeld, Henry	Boston, Mass.	Chair, reclining	Jan. 25, 1859	May 11, 1858.



713	Elliot, William H.	Plattsburg, N. Y.	Coffee-pots	May 10, 1859	June 25, 1859.
652	Ellis, Josiah	Pittsburg, Pa.	Fire-arms, revolving.	Feb. 1, 1859	April 25, 1854.
806	Ellis, Josiah, assignor to William S. Lavelley and James M. Cooper.	Pittsburg, Pa.	Fire-arm, revolving.	Sept. 6, 1859	Aug. 1, 1854.
786	Fairclough, John	Louisville, Ky.	Mill-stones, balancing.	Aug. 2, 1859	Dec. 21, 1858.
793	Falconer, Ralf J.	Washington, D. C.	Sash-fastener	Aug. 16, 1859	Aug. 31, 1858.
835	Fales, Squire M.	Baltimore, Md.	Furnace for smelting iron	Oct. 18, 1859	Feb. 8, 1859.
855	Fawkes, Joseph W.	Christiana, Pa.	Ploughing, machines for	Nov. 22, 1859	June 26, 1858.
873	Filley, Giles F.	St. Louis, Mo.	Stoves, cooking.	Dec. 27, 1859	June 14, 1853.
692	Forbush, Eleakim B.	Buffalo, N. Y.	Harvesters, grain and grass.	Apr. 19, 1859	July 20, 1852; reissued July 8, 1856.
693	Forbush, Eleakim B.	Buffalo, N. Y.	Harvesters, grain and grass.	Apr. 19, 1859	Mar. 18, 1856.
707	Forbush, Eleakim B.	Buffalo, N. Y.	Harvesters, grain and grass.	June 28, 1859	April 17, 1855.
668	Freud, Samuel, and George Seiler.	New York, N. Y.	Ring, finger, extension.	Feb. 22, 1859	Dec. 21, 1858.
752	Fuller, Albert.	Cincinnati, Ohio.	Faucet	July 5, 1859	Oct. 16, 1855.
810	Fulton, William	Cranberry, N. J.	Lamps	Sept. 13, 1859	Aug. 3, 1858.
671	Gardner, Joseph W.	Shelburne Falls, Mass.	Cutlery, handles for.	Mar. 8, 1859	Feb. 1, 1859.
672	Gardner, William	New York, N. Y.	Picture-frames, machine for preparing oval.	Mar. 15, 1859	Aug. 17, 1858.
720	Gardner, William	New York, N. Y.	Picture-frames, machine for preparing oval.	May 17, 1859	Aug. 17, 1858; reissued March 15, 1859.
871	Gleason, jr., R., assignor to R. Gleason & Sons.	Dorchester, Mass.	Caster, table.	Oct. 25, 1859	Mar. 8, 1859.
812	Goodell, A. W., et al. (See Lyon, William, assignor.)	New York, N. Y.	India-rubber fabrics, manufacture of.	Sept. 14, 1859	May 13, 1845, extended.
688	Goodyear, Henry B., administrator of Nelson Goodyear.	New York, N. Y.	Printing-presses.	Apr. 12, 1859	} Division, July 13, 1858.
689	Gordon, George P.	New York, N. Y.	Printing-presses, automatic grippers for carrying sheets of paper in.	Apr. 12, 1859	
698	Gratz, R. H., and William Hooper. (See Lloyd, Charles E., assignor.)	New York, N. Y.	Boots and shoes, machines for pegging.	Apr. 26, 1859	} Division, Jan. 17, 1854; reissued July 4, 1854.
699	Greenough, John James	New York, N. Y.	Boots and shoes, machines for pegging.	Apr. 26, 1859	
700	Greenough, John James	New York, N. Y.	Boots and shoes, machines for pegging.	Apr. 26, 1859	
701	Greenough, John James	New York, N. Y.	Boots and shoes, machines for pegging.	Apr. 26, 1859	
702	Greenough, John James	New York, N. Y.	Boots and shoes, machines for pegging.	Apr. 26, 1859	
703	Greenough, John James	New York, N. Y.	Boots and shoes, machines for pegging.	Apr. 26, 1859	
854	Haigh, Hartupee, & Morrow. (See Kenyon, William, assignor.)	New York, N. Y.	Liquids, cooking apparatus for	Nov. 22, 1859	Sept. 20, 1859.
645	Hall, V., by B. M. King, executrix.	New York, N. Y.	Screw-heads, machinery for dressing	Jan. 4, 1859	Aug. 18, 1846.
691	Hardy, Anson, assignor to S. T. Bacon. (See North, John, assignor.)	Mitchellsville, Tenn.	Roasters, coffee.	Apr. 12, 1859	Jan. 18, 1859.
704	Harvey, Thomas W., assignor to H. A. Harvey.	Newark, N. J.	Shears, tailor's	Apr. 26, 1859	July 13, 1858.
848	Heermans, Theodore.	Baltimore, Md.	Punips	Nov. 8, 1859	Oct. 4, 1859.
804	Helm & Tyler, assignors to H. H. Day. (See Tyler & Helm, assignors.)	Cleveland, Ohio.	Harrow	Aug. 30, 1859	Mar. 17, 1857.
	Henderson, William M.				
	Hill, S. A. (See Alter & Hill, assignors.)				
	Hofman, S. W., and A. J. Frederiek. (See McWilliams, Robert, assignor.)				
	Hogle, Sidney S.				
	Hopper, William, and Robert H. Gratz. (See Lloyd, Charles C., assignor.)				

*Alphabetical list of persons to whom patents have been reissued during the year 1859.*

No.	Names of patentees.	Residence.	Invention or discovery.	Date of reissue.	Date of original patent.
813	House, Royal E.	Binghamton, N. Y.	Telegraphs, magnetic printing	Sept. 20, 1859	April 18, 1846.
742	Hussey, Obed	Baltimore, Md.	Reaping-machines	June 21, 1859	Division, Aug. 7, 1847;
743	Hussey, Obed	Baltimore, Md.	Reaping-machines	June 21, 1859	Reissued Apr. 14, 1857.
653	Hyatt, Thaddeus	New York, N. Y.	Vault-lights	Feb. 1, 1859	Sept. 19, 1854.
738	Ingram, James	New York, N. Y.	Ranges, water-backs for	June 21, 1859	Feb. 16, 1858.
746	Jackson, John A. (See Armies, Israel, assignor.)	Sandusky, Ohio	Brick-machines	June 28, 1859	May 5, 1857.
747	Jayne, Joseph W.	Brooklyn, N. Y.	Wire-grating, &c., process of manufacturing	June 28, 1859	Mar. 6, 1847.
807	Jenkins, Henry	Brooklyn, N. Y.	Fence, iron, ornamental connection of the parts of an.	Sept. 6, 1859	Jan. 13, 1852.
665	Jensen, N.	Washington, D. C.	Bandages	Feb. 15, 1859	Dec. 14, 1858.
	Johnston, W. F. and J. T., et al. (See Alter & Hill, assignors.)				
648	Jones, Edward F.	Boston, Mass.	Lamps	Jan. 11, 1859	Oct. 14, 1851; reissued
666	Kenyon, William, assignor to James Wood.	Pittsburg, Pa.	Nuts, washers, &c., machines for making	Feb. 15, 1859	Mar. 18, 1856.
787	King, Mrs. B. M., executrix. (See Hall, V., deceased.)	Raynham, Mass.	Nail-machine	Aug. 2, 1859	Oct. 20, 1857.
	King, William, et al. (See Draper, James, assignor.)				
744	Kingsland, Joseph, jr.	Franklin, N. J.	Paper-pulp, process for grinding	June 28, 1859	Dec. 23, 1848.
745	Kingsland, Joseph, jr.	Franklin, N. J.	Paper-pulp, machinery for grinding	June 28, 1859	Dec. 16, 1856.
673	Kirby, William A.	Buffalo, N. Y.	Harvesting-machines	Mar. 15, 1859	Sept. 2, 1856.
647	Knowles, Lucius J.	Warren, Mass.	Boilers, steam, safety indicators for	Jan. 11, 1859	Feb. 10, 1857; reissued Feb. 23, 1858.
750	Laveley, William S., and J. M. Cooper. (See Ells, Josiah, assignor.)	Philadelphia, Pa.	Gas-metres, dry, valves for	June 28, 1859	June 22, 1858.
865	Lloyd, Charles C., assignor to William Hopper and Robert H. Gratz.	Griffin, Ga.	Pumps	Dec. 13, 1859	Mar. 1, 1859.
646	Lunquest, John M.	Newark, N. J.	Sewing-machines	Jan. 4, 1859	Dec. 12, 1854.
	Lyon, William, assignor to A. W. Goodell and N. R. Seovel.				
849	Lyons, J. II.	New York, N. Y.	Lock and detector	Nov. 8, 1859	Sept. 13, 1859.
674	Marcher, Robert.	New York, N. N.	Mouldings, &c., machinery for enameling	Mar. 15, 1859	Oct. 21, 1851.
809	Martino, John W. (See Delany, E. J., et al.)	Oxford, Mass.	Sewing-machines	Sept. 7, 1859	Oct. 27, 1857.
783	Marsh, John W.	New York, N. Y.	Fire-arms, fly-tumbler lock for	July 26, 1859	Jan. 7, 1851.
751	Masser, H. B.	Sunbury, Pa.	Ice-cream freezers	June 28, 1859	Jan. 1, 1850.
739	McCallum, D. C.	Owego, N. Y.	Bridges	June 21, 1859	Jan. 20, 1857.
730	McCart, John, et al. (See Culver, John, assignor.)	New York, N. Y.	Cracker-machines	May 31, 1859	Mar. 23, 1852.
816	McCollum, John	Chicago, Ill.	Reaping-machines	Sept. 20, 1859	
817	McCormick, Cyrus H.	Chicago, Ill.	Reaping-machines	Sept. 20, 1859	
818	McCormick, Cyrus H.	Chicago, Ill.	Reaping-machines	Sept. 20, 1859	
819	McCormick, Cyrus H.	Chicago, Ill.	Reaping-machines	Sept. 20, 1859	
820	McCormick, Cyrus H.	Chicago, Ill.	Reaping-machines	Sept. 20, 1859	Oct. 23, 1847; reissued
821	McCormick, Cyrus H.	Chicago, Ill.	Reaping-machines	Sept. 20, 1859	May 24, 1853, and di- vision Dec. 21, 1858.



822	McCormick, Cyrus H.....	Chicago, Ill.....	Reaping-machines.....	Sept. 20, 1859
823	McCormick, Cyrus H.....	Chicago, Ill.....	Reaping-machines.....	Sept. 20, 1859
824	McCormick, Cyrus H.....	Chicago, Ill.....	Reaping-machines.....	Sept. 20, 1859
825	McCormick, Cyrus H.....	Chicago, Ill.....	Reaping-machines.....	Sept. 20, 1859
872	McCracken, James.....	Bloomfield, N. J.....	Evaporating apparatus.....	Dec. 27, 1859
736	McCurdy, R. A. L., assignor to David G. Olmsted.....	Sabine Parish, La.....	Cotton-gins.....	June 14, 1859
				Mar. 13, 1855. June 26, 1855; reissued July 15, 1856.
800	McEvoy, C. A.....	Richmond, Va.....	Railroad-station indicator.....	Aug. 23, 1859
841	McWilliams, Robert, assignor to S. W. Hoffman and A. J. Frederick.....	Philadelphia, Pa.....	Cars, railroad, journal-boxes for.....	Oct. 25, 1859
797	Meriman, C. B. <i>et al.</i> (See Lyon, William, assignor.) Meyer, L. Otto P., assignor to Conrad Poppenhusen.....	Newtown, Conn.....	Caoutchouc and other vulcaulzable gums, treating.....	Apr. 4, 1854.
764	Miller, Lewis, <i>et al.</i> (See Aultman & Miller, assignors to C. Aultman & Co.)	Canton, Ohio.....	Harvesters.....	July 19, 1859
765	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
766	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
767	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
768	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
769	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
770	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
771	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
772	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
778	Miller, Lewis, assignor to C. Aultman & Co.....	Canton, Ohio.....	Harvesters.....	July 19, 1859
858	Menard, O. W.....	Waterbury, Conn.....	Brass kettles, making.....	Nov. 29, 1859
749	Mitchell, Thomas, assignor to John Ames.....	Lausenburg, N. Y.....	Brush-handles, machine for finishing.....	June 28, 1859
715	Moffitt, John R.....	Piqua, Ohio.....	Separators, grain.....	May 17, 1859
716	Moffitt, John R.....	Piqua, Ohio.....	Separators, grain.....	May 17, 1859
717	Moffitt, John R.....	Piqua, Ohio.....	Separators, grain.....	May 17, 1859
718	Moffitt, John R.....	Piqua, Ohio.....	Separators, grain.....	May 17, 1859
719	Moffitt, John R.....	Piqua, Ohio.....	Separators, grain.....	May 17, 1859
	Moore, S., and William M. Griffith. (See Orr, William H., assignor.)	Andover, N. H.....	Clothes-dryers.....	Nov. 14, 1856.
830	Morrill, Samuel.....	Amsterdam, N. Y.....	Mowing and reaping-machines.....	May 10, 1859
	Morrow, Haigh, & Hartupee. (See Keuyon, William, assignor.)	Amsterdam, N. Y.....	Reaping and mowing-machines.....	Nov. 29, 1859
714	Mulley, Jeremiah W.....	Amsterdam, N. Y.....	Reaping and mowing-machines.....	Nov. 29, 1859
859	Mulley, Jeremiah W.....	Amsterdam, N. Y.....	Reaping and mowing-machines.....	Nov. 29, 1859
860	Mulley, Jeremiah W.....	Amsterdam, N. Y.....	Reaping and mowing-machines.....	Nov. 29, 1859
861	Mulley, Jeremiah W.....	Amsterdam, N. Y.....	Reaping and mowing-machines.....	Nov. 29, 1859
808	Mumma, Jacob II.....	Harrisburg, Pa.....	Straw-cutter.....	Sept. 7, 1859
711	Myer, Henry B.....	Buifalo, N. Y.....	Car-seats into beds or lounges, mode of con- verting the backs of.....	May 3, 1859
	Myers, John L., <i>et al.</i> (See Smith, Hamilton E., as- signor.)	Boston, Mass.....	Cars, railroad, ventilating-windows for.....	Jan. 18, 1859
649	Neilson, George.....	Allegheny, Pa.....	Retorts for distilling oils from coal.....	May 3, 1859
	New England Screw Co. (See Whipple, Cullen, as- signor.)	Philadelphia, Pa.....	Locomotive-engines, running gear for.....	Nov. 22, 1859
712	Nictolson, John.....			
856	Norris, Septimus.....			
	North American Paper Bag and Envelope Manufacturing Co. (See Smith & Pettee, assignors.)			

Division, May 4, 1858.

April 15, 1856.  
June 23, 1857.

Division, Nov. 30, 1852;  
reissued Mar. 23, 1858.

Division, Dec. 1, 1857.

Division, Feb. 10, 1857.

Jan. 26, 1858.  
Sept. 19, 1854.

Feb. 15, 1859.  
Sept. 26, 1854; reissued  
Mar. 2, 1858.

*Alphabetical list of persons to whom patents have been reissued during the year 1859.*

No.	Names of patentees.	Residence.	Invention or discovery.	Date of reissuance.	Date of original patent.
661	North, John, assignor to S. T. Bacon .....	Middletown, Conn.....	Paper, machine for folding .....	Feb. 8, 1859	April 15, 1856; reissued July 27, 1858.
857	O'Conner, Thos. J., <i>et al.</i> (See Williams, Wm. L., ass'or.) Oldman, William..... Olmsted, David G. (See McCurdy, R. A. L., assignor.) O'Neil, John K. (See Bailey, Yarnall, assignor.) Orr, William H., assignor to William M. Griffith and S. Moore.	Buffalo, N. Y.....	Boilers, steam .....	Nov. 22, 1859	June 7, 1859.
845	Paine, Henry M., assignor to the Railroad Car Spring Co. Palmer, P. A. .... Parker, C., <i>et al.</i> (See Savage, Elliott, assignor.) Peale, Franklin..... Perkins, James, and William H. Burnet .....	Martin's Ferry, Ohio.....	Grain, machines for cleaning .....	Nov. 1, 1859	July 13, 1858.
667	Peter, Henry M., assignor to the Railroad Car Spring Co.	Worcester, Mass.....	Car-springs, railroad .....	Feb. 15, 1859	Oct. 27, 1857.
811	Pierce, Henry E. ....	Troy, N. Y.....	Heating elevated ovens .....	Sept. 13, 1859	Sept. 24, 1850.
682	Prindle, Daniel B. ....	Philadelphia, Pa.....	Valve, tubular, elastic.....	April 5, 1859	June 24, 1856.
814	Reynolds, O. L., assignor to James M. Bartlett.....	Newark, N. J.....	Metal pipe, machine for bending.....	Sept. 20, 1859	Oct. 14, 1856.
678	Perry, Samuel M., assignor to Isaac L. Devoe.....	New York, N. Y. ....	Chairs for railroad-cars and other uses, re- elining.	Mar. 29, 1859	July 27, 1852.
788	Poppenhuisen, Conrad. (See Myer, L. Otto P., assignor.) Porter, Charles T..... Powell James .....	Charlemont, Mass .....	Matches, machine for matting the ends of match-blocks.	Aug. 2, 1859	Jan. 10, 1854.
740	Prindle, Daniel B. ....	New York, N. Y. ....	Governors for steam-engines.....	June 21, 1859	July 13, 1858.
753	Register, I., <i>et al.</i> (See Culver, John, assignor.) Reynolds, O. L., assignor to James M. Bartlett.....	Cincinnati, Ohio.....	Faurets .....	July 5, 1859	Mar. 22, 1859.
864	Rieseek, George .....	Bethany, N. Y. ....	Boilers and steamers.....	Dec. 13, 1859	Sept. 13, 1859.
829	Roache, John L., <i>et al.</i> (See Culver, John, assignor.) Robinson, J. R., and H. S. Robinson .....	Dover, N. H.....	Sewing-machines.....	Sept. 27, 1859	May 14, 1850.
655	Robjohn, Thomas .....	Pittsburg, Pa .....	Steam-valve.....	Feb. 8, 1859	Aug. 10, 1858.
795	Rogers, David B .....	Clinton, Mass .....	Valve-cocks.....	Aug. 16, 1859	Aug. 31, 1858.
729	Rogers, David B .....	New York, N. Y. ....	Inkstands .....	May 24, 1859	Aug. 25, 1857.
782	Root, E. K .....	Pittsburg, Pa .....	Railroad ear-springs.....	July 26, 1859	Feb. 23, 1858.
815	Rulofson, Isaac, assignor to self and L. Harvey.....	Pittsburg, Pa .....	Cultivator-teeth .....	Sept. 20, 1859	Nov. 1, 1845.
846	Russell, John L., <i>et al.</i> (See Alter & Hill, assignors.) Sanford, Gelston.....	Hartford, Conn .....	Fire-arms, revolving .....	Nov. 1, 1859	Dec. 25, 1855.
863	Savage, Elliott, assignor to self and C. Parker.....	Penn Yan, N. Y. ....	Ploughs .....	Dec. 13, 1859	Mar. 1, 1859.
670	Savage, Elliott, assignor to self and C. Parker.....	Poughkeepsie, N. Y. ....	Mills, grinding.....	Mar. 1, 1859	Mar. 9, 1858.
826	Seller, George, <i>et al.</i> (See Friend & Seiler.) Sellers, William.....	Berlin, Conn.....	Screw-blanks, machines for threading .....	Sept. 27, 1859	Nov. 21, 1854.
827	Sener, J. W., and C. B. Waite. (See Waite & Sener.) Shaver, Archibald G .....	Berlin, Conn.....	Screw-blanks, machines for threading .....	Sept. 27, 1859	Nov. 21, 1854.
656	Shunk, Christian .....	Philadelphia, Pa.....	Bolts, machine for threading.....	Feb. 8, 1859	Dec. 1, 1857.
805	Sickels, H. G., assignor to George H. Bechtel.....	Hartford, Conn .....	Eraser and pencil sharpener .....	Aug. 30, 1859	Mar. 8, 1859.
798	Simpson, F. G., <i>et al.</i> (See Lyon, William, assignor.)	Canton, Ohio.....	Furnace, blast, refining iron in the hearth of a.	Aug. 16, 1859	May 17, 1859.
734		Philadelphia, Pa.....	Lamps, gas.....	May 31, 1859	Aug. 7, 1849.



837	Skinner, Holly	Huron, Ohio	Clock, calendar	Oct. 18, 1859	Mar. 2, 1858.
660	Smith, Edward N., assignor to S. T. Bacon	Springfield, Mass	Paper, machines for folding	Feb. 8, 1859	May 19, 1857.
662	Smith, Edward N., assignor to S. T. Bacon	Springfield, Mass	Paper, machines for folding	Feb. 8, 1859	Nov. 27, 1849; reissued Jan. 7, 1851.
694	Smith, Hamilton E.	Philadelphia, Pa.	Washing-machine	April 19, 1859	Oct. 26, 1858.
705	{ Smith, John A., and S. E. Pettee, assignor to North American Paper Bag and Envelope Manufacturing Co. Smith, Robert, and C. L. Crowell. (See Massey Wil- liam, assignor.)	Clinton, Mass } Foxborough, Mass }	Paper bags and envelopes, machine for making.	April 26, 1859	May 1, 1855.
675	Solomon, Lewis	New York, N. Y.	Amalgamator	Mar. 15, 1859	Dec. 7, 1858.
868	Stebbins, Erastus	Chicopee, Mass.	Stop-cocks	Dec. 21, 1859	April 19, 1859.
706	Stedman, George W., by Emeline Stedman, executrix	Vienna, N. J.	Sewing-machines.	April 26, 1859	Dec. 12, 1854.
731	Stemple, Adolph	New York, N. Y.	Leather for harness, machine for creasing and blacking.	May 31, 1859.	Nov. 2, 1858.
842	Stetson, W. S.	Baltimore, Md.	Harvesters	Oct. 25, 1859.	} Division, April 5, 1859.
843	Stetson, W. S.	Baltimore, Md.	Harvesters	Oct. 25, 1859.	
844	Stetson, W. S.	Baltimore, Md.	Harvesters	Oct. 25, 1859.	} May 1, 1855. Jan. 23, 1855.
834	Stever, Jeremiah.	Bristol, Conn	Metals, machines for burnishing.	Oct. 11, 1859.	
737	Streeter, Abel W.	Shelburne Falls, Mass.	Bits, fastening centre	June 14, 1859.	} July 18, 1854.
676	Stuart & Peterson. (See Chollar, J. B., assignor.)	Columbus, Ga	Gauges, steam.	Mar. 15, 1859.	
721	Sylla, Philo, and Augustus Adams, assignor to C. Ault- man & Co.	Elgin, Ill	Harvesters, grain and grass.	May 17, 1859.	} Division, Sept. 20, 1853.
722	Sylla, Philo, and Augustus Adams, assignor to C. Ault- man & Co.	Elgin, Ill	Harvesters, grain and grass.	May 17, 1859.	
723	Sylla, Philo, and Augustus Adams, assignor to C. Ault- man & Co.	Elgin, Ill	Harvesters, grain and grass.	May 17, 1859.	
724	Sylla, Philo, and Augustus Adams, assignor to C. Ault- man & Co.	Elgin, Ill	Harvesters, grain and grass.	May 17, 1859.	
725	Sylla, Philo, and Augustus Adams, assignor to C. Ault- man & Co.	Elgin, Ill	Harvesters, grain and grass.	May 17, 1859.	
726	Sylla, Philo, and Augustus Adams, assignor to C. Ault- man & Co.	Elgin, Ill	Harvesters, grain and grass.	May 17, 1859.	
654	Thompson, George	East Tarentum, Pa.	Alkalies, caustic, devices for putting up.	Feb. 1, 1859.	Oct. 21, 1856.
657	Thompson, George	East Tarentum, Pa.	Alkalies, boxes for preserving.	Feb. 8, 1859.	Sept. 15, 1857.
789	Tift, S. H.	Morrisville, Vt.	Clothes-dryer.	Aug. 2, 1859.	July 30, 1858.
683	Tueker, Hiran.	Cambridgeport, Mass.	Bed-bottoms, spring.	April 5, 1859.	July 3, 1855, additional improvement June 9, 1857.
727	Tyler, Henry G., and John Helm, assignors to H. H. Day.	New Brunswick, N. J.	India-rubber goods, manufacture of, by means of zinc compounds.	May 24, 1859.	Jan. 30, 1849, reissued Aug. 7, 1849.
748	Van Auken, Miner.	Saratoga Springs N. Y.	Washing-machine	June 28, 1859.	May 11, 1858.
836	Waite, C. B., and J. W. Sener	Fredericksburg, Va.	Coffee-pots	Oct. 18, 1859.	April 22, 1856, reissued Aug. 10, 1858.
790	Watt, George	Richmond, Va.	Ploughs	Aug. 2, 1859.	Feb. 9, 1858.
735	Webb, William E., et al. (See Culver, John, assignor.) Webber, Elbridge.	Gardiner, Me	Shingle-machine.	June 7, 1859.	Jan. 28, 1857, additional improvement June 15, 1858.
838	Wells, Wallace, assignor to self and Samuel B. Wells	New York, N. Y.	Pumps and steam-engines, construction of cy- linders and pistons for.	Oct. 18, 1859.	Oct. 12, 1858.
839	Weston, C., T. F. Weston, and John W. Weston.	Salem, Mass.	Leather finishing-machines.	Oct. 18, 1859.	Sept. 25, 1855.

*Alphabetical list of persons to whom patents have been reissued during the year 1859.*

No.	Names of patentees.	Residence.	Invention or discovery.	Date of reissue.	Date of original patent.
684	Whipple, Cullen, assignor to New England Screw Co.....	Providence, R. I.....	Screws, &c., wood, machinery for making.....	April 12, 1859.	} Division, Dec. 7, 1852, antedated June 7, 1852.
685	Whipple, Cullen, assignor to New England Screw Co.....	Providence, R. I.....	Screws, &c., wood, machinery for making.....	April 12, 1859.	
686	Whipple, Cullen, assignor to New England Screw Co.....	Providence, R. I.....	Screws, &c., wood, machinery for making.....	April 12, 1859.	
687	Whipple, Cullen, assignor to New England Screw Co.....	Providence, R. I.....	Screws, &c., wood, machinery for making.....	April 12, 1859.	
840	Wilder, Aretus A.....	Detroit, Mich.....	Clap-board machine.....	Oct. 18, 1859.	
869	Williams, William L.....	New York, N. Y.....	Wood, fire, machine for splitting.....	Dec. 21, 1859.	
651	Winaus, Ross, and Thomas Winans.....	Baltimore, Md.....	Vessels, hulls of steam.....	Jan. 25, 1859.	
796	Wolle, Francis.....	Bethlehem, Pa.....	Paper-bags, machines for making.....	Aug. 16, 1859.	
658	Wüst, John.....	Philadelphia, Pa.....	Bucket, coal, self-dumping.....	Feb. 8, 1859.	
779	Young, McClintock, jr.....	Frederick, Md.....	Harvesters.....	July 19, 1859.	
866	Young, McClintock, jr.....	Frederick, Md.....	Harvesters.....	Dec. 13, 1859.	

ALPHABETICAL LIST OF PERSONS TO WHOM PATENTS FOR DESIGNS HAVE BEEN ISSUED FOR THE YEAR, 1859.

No.	Name of patentee.	Residence.	Design.	Date.
1104	Abbott & Lawrence. (See Gibbs, S. W., assignor.)	Boston, Mass.....	Monuments, sepulchral.....	May 24, 1859.
1089	Abbott & Lawrence. (See Smith & Brown, assignors.)	Providence, R. I.....	Stoves, cook's.....	Mar. 22, 1859.
1086	Abbott, James G. (See Smith & Brown, assignors.)	New York, N. Y.....	Stereoscope cases.....	Mar. 1, 1859.
	Baekus, Evans. (See Gibbs, S. W., assignor.)			
	Barry, Richard.....			
	Barstow, A. C.....			
	Bartlett, Hayward, & Co. (See Smith & Brown, assignors)			
	Beckers, Alexander.....			
	Beesly, J., and Anthony J. Gallagher. (See Gallagher & Beesly.)			
1081	Bissell, Hiram.....	Hartford, Conn.....	Furnaces, hot-air.....	Feb. 15, 1859.
1100	Blanchard, George.....	New York, N. Y.....	Watch-guards.....	May 10, 1859.
1116	Bogle, James, assignor to self and Daniel Bogle.....	West Newton, Mass.....	Cloth, floor, oil.....	July 5, 1859.
1117	Bogle, James, assignor to self and Daniel Bogle.....	West Newton, Mass.....	Cloth, floor, oil.....	July 5, 1859.
1134	Bogle, James, assignor to self and Daniel Bogle.....	West Newton, Mass.....	Cloth, floor, oil.....	Aug. 23, 1859.
1135	Bogle, James, assignor to self and Daniel Bogle.....	West Newton, Mass.....	Cloth, floor, oil.....	Aug. 23, 1859.
1172	Bragg, Oliver T., and Michael Burrows.....	St. Louis, Mo.....	Trade-mark.....	Dec. 20, 1859.
	Brown, Henry, and G. Smith. (See Smith & Brown.)			
	Brown, Thomas, W. (See Reynolds, Edward, assignor.)			
1156	Brown, William Newton.....	New York, N. Y.....	Sewing-machines, ornamenting.....	Oct. 25, 1859.
	Burrows, Michael and O. T. Bragg. (See Bragg & Burrows.)			



1111	Chase, North, and North. (See Smith & Brown, ass'rs.) Chase, M., and H. M. (See Pittock, John, and G. W., assignors.)	West Meriden, Conn.	Match-boxes.	June 28, 1859.
1151	Clark, P. J., assignor to S. S. Clark.	Troy, N. Y.	Stove-box	Oct. 4, 1859.
1078	Cox, Whitman, & Cox. (See Smith & Brown, assignors.)	New York, N. Y.	Ink-bottles	Jan. 11, 1859.
1131	Cridge, E. J.	St. Louis, Mo.	Stoves, parlor, coal.	Aug. 9, 1859.
1105	Dezouche, Isaac.	New York, N. Y.	Sewing-machines	June 7, 1859.
1149	Ellithorp, Solomon B.	New York, N. Y.	Sewing-machine, frame of a.	Sept. 27, 1859.
1162	Ellithorp, Solomon B.	New York, N. Y.	Clock-cases	Nov. 1, 1859.
1087	Foot, Charles T.	Bristol, Conn.	Bells, table	Mar. 8, 1859.
1106	Fuller, Warren, & Co. (See Hathaway, David, assignor.) Gallagher, Anthony J., and J. Beesely, assignors to Anthony J. Gallagher.	Wallingford, Conn. Philadelphia, Pa.	Stoves, cook's	June 7, 1859.
1157	Gallagher, Anthony J.	Philadelphia, Pa.	Stoves, cook's.	Oct. 25, 1859.
1107	Gibbs, S. W., assignor to Abbott & Lawrence.	Albany, N. Y.	Stove-plates	June 14, 1859.
1108	Gibbs, S. W., assignor to Abbott & Lawrence.	Albany, N. Y.	Stove-plates	June 14, 1859.
1109	Gibbs, S. W., assignor to Rathbone & Co.	Albany, N. Y.	Stoves, sheet-iron, tops and bases of	June 14, 1859.
1077	Gibbs, S. W., assignor to Evans Backus	Albany, N. Y.	Stoves, parlor	Jan. 11, 1859.
1143	Gilbert, Philo B.	New York, N. Y.	Spoons and forks, handles of	Sept. 6, 1859.
1112	Greer, James, and Rufus J. King.	Dayton, Ohio	Stove, cooking	July 5, 1859.
1113	Greer, James, and Rufus J. King.	Dayton, Ohio	Stoves, sides and doors of cooking	July 5, 1859.
1168	Grosh, Harrison	Lititz, Pa.	Carriage-bodies	Nov. 15, 1859.
1128	Ham, Robert, assignor to Smith, Sheldon, & Co.	Lowell, Mass.	Stoves, parlor	Aug. 9, 1859.
1163	Hardgrove, Thomas, and Samuel.	Richmond, Va.	Trade-mark	Nov. 1, 1859.
1158	Harris, C., and Paul W. Zoiner.	Cincinnati, Ohio	Stoves, parlor	Oct. 25, 1859.
1075	Harris, C., and Paul W. Zoiner, assignors to Harris, Zoiner, & Co.	Cincinnati, Ohio	Stoves, dining-room	Jan. 4, 1859.
1076	Harris, C., and Paul W. Zoiner, assignors to Harris, Zoiner, & Co.	Cincinnati, Ohio	Stoves, cook's	Jan. 4, 1859.
1102	Hartford Carpet Manufacturing Company. (See Thompson, Henry G., assignor.)	Troy, N. Y.	Stove-plates	May 17, 1859.
1125	Hathaway, David, assignor to Fuller, Warren, & Co.	Troy, N. Y.	Stove, cook's	July 26, 1859.
1088	Hathaway, David, assignor to Fuller, Warren, & Co.	Troy, N. Y.	Stove, parlor, cook's.	Mar. 22, 1859.
1114	Hayward, Bartlett, & Co. (See Smith & Brown, assignors.)	New York, N. Y.	Spoon and fork-handles	July 5, 1859.
1136	Hebbard, Henry	New York, N. Y.	Spoon or fork-handles.	Aug. 28, 1859.
1145	Hebbard, Henry	New York, N. Y.	Spoons, forks, &c., handles.	Sept. 13, 1859.
1079	Horton, J., and J. Martino. (See Martino & Hortou.)	Troy, N. Y.	Stove, cooking	Jan. 18, 1859.
1095	Hoyt, John W. (See Virolet, J. B., assignor.)	Buffalo, N. Y.	Stove, cook's	April 26, 1859.
1099	Hubbell, Henry S., et al. (See Wood, Roberts, & Hubbell.)	Buffalo, N. Y.	Stoves	May 3, 1859.
1150	Hyde, James R.	New York, N. Y.	Gas-cocks, &c.	Sept. 27, 1859.
1154	Jewett, Sherman S., and Francis H. Root.	New York, N. Y.	Clock-case front.	Oct. 4, 1859.
1101	Jewett, Sherman S., and Francis H. Root.	Ausonia, Conn.	Stove-plates.	May 10, 1859.
1164	Kimberly, Roswell.	Newtown, N. J.	Casters, base for	Nov. 1, 1859.
	King, Rufus J., and James Greer. (See Greer & King.)	Hartford, Conn.		
	Lane, J. W.			
	Lawrence & Abbott. (See Gibbs, S. W., assignor.)			
	Lawrence & Abbott. (See Smith & Brown, assignors.)			
	Leonard, Allen			

*Patents for designs, 1859.*

No.	Name of patentee.	Residence.	Design.	Date.
1165	Leonard, Allen	Hartford, Conn	Caster-handles	Nov. 1, 1859.
1098	Lewis, William H	Glastenbury, Conn	Spoon and fork-handles	May 3, 1859.
1166	Lewis, William H	Glastenbury, Conn	Spoon and fork-handles	Nov. 1, 1859.
1173	Lincoln, Thomas, and Samuel Lowell Manufacturing Company. (See Ney, Elemir J., assignor.)	Providence, R. I.	Trade-mark for soap-boxes	Dec. 20, 1859.
1085	Loyd, William	Philadelphia, Pa.	Stereoscope-eases	Feb. 22, 1859.
1147	Martino, John, assignor to D. Stuart, and Richard Peterson.	Philadelphia, Pa.	Stove, cook's	Sept. 20, 1859.
1148	Martino, John, and James Horton, assignors to D. Stuart, and Richard Peterson.	Philadelphia, Pa.	Stoves, cylinder	Sept. 20, 1859.
1110	McCurdy, James S., assignor to John M. Myers	Brooklyn, N. Y.	Sewing-machines, arms of	June 14, 1859.
1152	McCurdy, James S., assignor to John M. Myers	Brooklyn, N. Y.	Sewing-machines, arms of	Oct. 4, 1859.
1155	McLean, James H	St. Louis, Mo.	Trade-mark	Oct. 11, 1859.
1097	McMurtry, John, assignor to George C. McMurtry	Fayette Co., Ky.	Burial-case	May 3, 1859.
1159	Meyer, Jeremiah, assignor to Alden Sampson	Manchester, Me.	Cloths, floor	Oct. 25, 1859.
1174	Meyer, Jeremiah, assignor to Alden Sampson	Manchester, Me.	Cloths, floor, oil, carpets, &c	Oct. 25, 1859.
1124	Munu, Joseph A.	New York, N. Y.	Clock-cases	Dec. 20, 1859.
1146	Murdoek, Eliza A.	Boston, Mass	Cap for ladies, skating or riding	July 26, 1859.
1082	Murgrave, Hiram B	Cincinnati, Ohio	Gas-burners	Sept. 20, 1859.
	Myers, John M. (See McCurdy, James S., assignor.)			Feb. 15, 1859.
1083	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpets	Feb. 15, 1859.
1084	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpets	Feb. 15, 1859.
1120	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	July 5, 1859.
1121	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	July 5, 1859.
1122	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	July 5, 1859.
1123	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	July 5, 1859.
1129	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	Aug. 9, 1859.
1130	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	Aug. 9, 1859.
1144	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	Aug. 9, 1859.
1169	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	Sept. 6, 1859.
1170	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	Nov. 22, 1859.
1175	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpet-pattern	Nov. 23, 1859.
1176	Ney, Elemir J., assignor to the Lowell Manufacturing Co.	Lowell, Mass	Carpets, &c	Dec. 20, 1859.
	North, Chase, & North. (See Smith & Brown, assignors.)		Carpets, &c	Dec. 20, 1859.
1091	Peterson, James	Elizabeth City, N. J.	Cloth, floor	April 4, 1859.
	Peterson, R., and D. Stuart. (See Martino & Horton, as- signors.)			
1126	Pittock, G. W., and John, assignor to M. & H. M. Chase.	Union Mills, N. Y.	Stove, cook's	July 26, 1859.
1092	Ransom, Samuel H	Albany, N. Y.	Stove, plates of a	April 5, 1859.
1093	Ransom, Samuel H	Albany, N. Y.	Stove, plates of a cook's	April 5, 1859.
1090	Reynolds, Edward, assignor to Thomas W. Brown.	Boston, Mass	Racks, hat	Mar. 29, 1859.
1080	Richardson, N. P., & Co. (See Stevens, W. W., assignor.)			
	Richmond, Apollo	Brooklyn, Conn	Stoves	Feb. 1, 1859.
	Roberts, John E., <i>et al.</i> (See Wood, Roberts, & Hubbell.)			
	Root, Francis H., and S. S. Jewett. (See Jewett & Root.)			





LIST OF DISCLAIMERS ENTERED DURING THE YEAR 1859.

No.	Name of patentee.	Residence.	Design.	Date.
	Blake, William.	Boston, Mass.	Gas-burners.....	Aug. 5, 1859.
	Tatum, Samuel C. (Sec Whittaker, S. H., assignor.)	East Tarentum, Pa.	Caustic, alkalies, device for putting up.....	Feb. 23, 1859.
	Thompson, George.	Cincinnati, Ohio.	Nut-machine.....	Aug. 27, 1859.
	Whittaker, S. H., assignor to Samuel C. Tatum.	Cincinnati, Ohio.	Nut-machine.....	Aug. 27, 1859.
	Whittaker, S. H., assignor to Samuel C. Tatum.	Cincinnati, Ohio.	Nut-machine.....	Aug. 27, 1859.

ALPHABETICAL LIST OF PATENTEES TO WHOM ADDITIONAL IMPROVEMENTS WERE GRANTED DURING THE YEAR 1859.

Names.	Residence.	Invention.	Date of patent.
Allison, W. A., assignor to self and John Murphy.	Philadelphia, Pa.	Railways, apparatus for watering and sweeping.....	Sept. 6, 1859.
Baker, William.	Utica, N. Y.	Lubricator for railroad car-axles, automatic.....	Aug. 11, 1857.
Bales, Moses	Big Plain, Ohio.	Plough, mole.....	Feb. 15, 1859.
Beebe, Hubb	New Haven, Conn.	Slates, mode of preparing and mounting.....	Mar. 29, 1859.
Bly, Douglas	Rochester, N. Y.	Vehicles, attaching thills to.....	April 12, 1859.
Campbell, Alexander, William, and James.	Harrison, Ohio.	Planters, corn.....	June 28, 1859.
Carlisle, Charles.	Woodstock, Vt.	Packing-wool, machine for.....	Oct. 6, 1857.
Castle, Orlander L.	Upper Alton, Ill.	Arithmometer for addition.....	Nov. 2, 1858.
Covert, H. W., assignor to M. Briggs	Rochester, N. Y.	Locks.....	Sept. 15, 1857.
Cravy, James.	Middleport, Ohio.	Shingle-machine.....	Nov. 24, 1857; reissued Sept. 28, 1858.
Croy, John J.	Caledonia, Mo.	Spokes, tools for tenoning.....	Feb. 3, 1857.
Cummings, D., jr.	Mobile, Ala.	Mangles.....	July 27, 1858.
Davis, Augustus B.	Philadelphia, Pa.	Car-springs, railroad.....	Feb. 15, 1859.
Draper, Simon W., and R. M.	South Dedham, Mass.	Mill-stones, machines for dressing.....	May 13, 1856.
Fink, John, and D. H. Fox.	Reading, Pa.	Ventilators, railroad car.....	May 8, 1855.
Hall, Joseph F.	Bangor, Me.	Curtain-fixture.....	Mar. 9, 1858.
Hall, Theodore F.	Marietta, Ohio.	Sash, window.....	Dec. 21, 1858.
Harris, L. P.	Mansfield, Ohio.	Evaporating saccharine juices, apparatus for.....	July 18, 1859.
Harris, Lyman P.	Mansfield, Ohio.	Evaporating saccharine juices, apparatus for.....	Jan. 18, 1859.
Haw, John	Old Church, Va.	Sawing-machine, picker.....	June 23, 1857.
Heth, Albert, and Gaylor Hall	Adams Center, N. Y.	Sawing-machine, cross-cut.....	Aug. 24, 1858.
Hodge, Samuel F.	Detroit, Mich.	Crushing-machine, orc.....	May 26, 1857.
Hollman, W. W.	Eddyville, Ky.	Straw-cutters.....	Mar. 30, 1858.
James, C. C.	Dayton, Ohio.	Seeding-machines.....	Dec. 15, 1857.
Jordan, Douglas B.	Cumberland, R. I.	Journals, mode of oiling.....	Mar. 15, 1859.
Keezert, John.	Chillicothe, Ohio.	Hominy-mortars.....	Mar. 2, 1858.
Monroe, Freedom.	Romeo, Mich.	Harness.....	Aug. 24, 1858.



ALPHABETICAL LIST OF PATENTEES WHOSE PATENTS WERE EXTENDED DURING THE YEAR 1859.

Names.	Residence.	Invention.	Date of patent.
Musser, William R., and J. Coleman	Lynchburg, Va.	Presses, tobacco.	Feb. 2, 1858.
Nelson, Mortimer	New York, N. Y.	Gold-washer.	Oct. 4, 1859.
Parker, Ephraim	Marlow, N. H.	Clothes-pins, machine for making	Jan. 15, 1856.
Riehards, Anos A.	Urbana, Ohio	Locks.	Feb. 15, 1859.
Riley, William	Camden, Miss.	Trap, fly.	April 27, 1858.
Robinson, Oliver	Cambridgeport, Mass.	Chairs, sofas, &c., spring-seats of.	March 9, 1858.
Robinson, Oliver	Rochester, N. Y.	Bedstead-fastening.	Dec. 28, 1858.
Simmons, Jonas	Coloes, N. Y.	Axes, machine for making	March 1, 1853.
Sims, William	Dayton, Ohio	Refrigerators.	Feb. 8, 1859.
Smith, Henry T.	Washington, D. C.	Bed-bottoms, spring	Oct. 6, 1857.
Spaulding, Samuel B.	Brandon, Vt.	Stoves, cooking	June 22, 1858.
Speat, James	Philadelphia, Pa.	Stoves, cooking	June 1, 1858.
Speat, James	Philadelphia, Pa.	Stoves, railroad-car	July 7, 1857.
Watt, George	Riehmond, Va.	Ploughs	Feb. 9, 1858.
Waugh, John	Elmira, N. Y.	Paper-hanging, machines for trimming the edges of.	Oct. 5, 1858.
Wells, Benjamin F.	Georgetown, D. C.	Naval architecture.	Oct. 18, 1859.
Wells, William	Boston, Mass.	Corn-shellers	Oct. 4, 1859.
Whipple, Carlisle	Cleveland, Ohio	Saws, reeiprocating, method of hanging and operating	Jan. 13, 1857.
Yeiser, Frederick	Lexington, Ky.	Altitudes of the sun, instruments for taking.	Feb. 8, 1859.
Andrews, Joseph E., John M. Farrar, administrator of.	Manchester, N. H.	Planing-machines.	Nov. 21, 1845.
Bigelow, Erastus B.	Boston, Mass.	Looms, for weaving plaids, &c.	April 10, 1845.
Blake, William	Boston, Mass.	Gas-burners	May 19, 1845.
Bruce, David, jr.	Brooklyn, N. Y.	Types, machines for casting.	June 7, 1845.
Burrall, Thomas D.	Geneva, N. Y.	Corn-sheller.	Dec. 6, 1845.
Edwards, Lewis	Norwich, Conn.	Ruling-machines	Oct. 9, 1845.
Faber, George, deceased, John S. Rappe, administrator.	Canton, Ohio	Boilers, magnetic water-gauge for.	Nov. 26, 1845; reissued Mar. 10, 1859.
Fessenden, George, and Luke L. Knight.	Templeton, Mass.	Match-splints, and arranging them in different frames, machinery for making.	April 26, 1845.
Francis, Joseph	New York, N. Y.	Boats and other vessels of sheet-iron or other metal, making	Mar. 26, 1845.
Goodyear, Nelson, deceased, Henry B. Goodyear, administrator of.	New York, N. Y.	India-rubber fabrics, manufacture of.	May 13, 1845.
Grant, Isaac T.	Schaghticoke, N. Y.	Fan-mills.	July 10, 1845.
Hale, Warren, and A. Goodman	Dana, Mass.	Wood, shaping irregular surfaces in.	July 22, 1845.
Hamilton, James	New York, N. Y.	Dredging-machines.	Mar. 30, 1852; French patent Dec. 16, 1845.
Hatch, J., deceased, J. B. Thaxter, administrator of.	Hingham, Mass.	Buttons	Feb. 20, 1845.
Heddenberg, Francis L.	New York, N. Y.	Stoves.	May 7, 1845.
Holmes, James G.	Charleston, S. C.	Chairs for invalids.	Sept. 24, 1845.
Hoe, Richard M.	New York, N. Y.	Printing-presses.	May 1, 1845; reissued May 1, 1847.

*Alphabetical list of patentees whose patents were extended during the year 1859.*

Names.	Residences.	Invention.	Date of patent.
Hyatt, Thaddeus.....	New York, N. Y.....	Vault-covers, illuminating.....	Nov. 12, 1845.
Montgomery, James.....	New York, N. Y.....	Boilers, steam.....	Dec. 26, 1845.
Morris, Ephraim.....	New York, N. Y.....	Raising and lowering weights, machines for.....	July 5, 1845.
Parkhurst, Stephen R.....	New York, N. Y.....	Ginning cotton and wool, machine for.....	May 1, 1845.
Pierce, Samuel.....	Troy, N. Y.....	Stoves, cooking.....	Dec. 6, 1845; reissued April 24, 1847.
Quecn, Christian V.....	Peekskill, N. Y.....	Forges.....	Nov. 18, 1845.
Robertson, William H.....	Residing in Havana.....	Mattresses.....	Dec. 17, 1846; European patent January 2, 1846.
Rogers, Calvin B.....	Saybrook, Conn.....	Combs, machine for dressing.....	Dec. 20, 1845.
Rogers, David B.....	Pittsburg, Pa.....	Cultivator-teeth.....	Nov. 1, 1845; reissued Sept. 20, 1859.
Sickles, Frederick E.....	New York, N. Y.....	Valves, cut-off, mode of tripping.....	Sept. 19, 1845.
Swift, Beriah, Jane Swift, and J. G. Lane, executors of.....	Washington, N. Y.....	Mills, grinding.....	Aug. 16, 1845.
Thayer, George W.....	Springfield, Mass.....	Bridges, wooden.....	April 22, 1845.
Trapp, William.....	Elmira, N. Y.....	Barrel, machinery.....	Oct. 1, 1845; reissued Mar. 10, 1859.
Tyler, Philos B.....	Springfield, Mass.....	Presses, cotton.....	Jan. 16, 1845; reissued May 1, 1847.
Woolson, Thomas J.....	Cleveland, Ohio.....	Stoves, cooking.....	Sept. 9, 1845.



DESCRIPTIONS AND CLAIMS OF PATENTS,

ISSUED IN THE YEAR 1859.

ILLUSTRATED WITH ENGRAVINGS.

No. 22,477.—HENRY B. ADAMS, of Brooklyn, N. Y.—*Improved Automatic Feed Boiler.*—Patent dated January 4, 1859.—The channels  $e$  and  $e^*$  communicate with tubes  $J J^1$  which are rigidly attached to the shell  $K$ , and which form sockets into which the oscillating chambers  $L L^1$  fit closely, and the channels  $d d^*$  communicate with pipes  $M M^1$ , which extend upward and through the covers of the oscillating chambers so that they communicate with the upper portion of the same, and float-valves  $P$  are hinged to the covers of the chambers  $L L^1$ , so that the openings of the pipes  $M M^1$  will be closed by the action of those valves. A rod  $N$  extends from the middle of the lower half  $I^1$  of the shell, and a weight  $O$  slides on this rod.

The inventor says: I *claim* the arrangement and combination, substantially as shown and described, of the chambers  $L L^1$ , shell  $K$ , and adjustable weight  $O$ , for the purposes set forth.

I also claim the combination of the valves  $P$  with the chambers  $L$ , as and for the purposes shown and described.

No. 22,478.—JONATHAN BALL, of Elmira, N. Y.—*Improved manufacture of Umbrella Rings.*—Patent dated January 4, 1859.—This invention consists in casting the ring  $A$  in a metal mould, in which mould are placed the bases of the ribs  $B$  and the wire to secure them, the wire being secured in place by the metal which is poured into the mould surrounding and inclosing it, thereby retaining the said bases more firmly in position and preventing it from being broken.

The inventor says: I *claim* as a new article of manufacture, an umbrella ring having the ends of the ribs or the stretchers and the wire to confine them, cast within, as set forth.

No. 22,479.—THOMAS BENNETT, of New York, N. Y.—*Improvement in Grinding Mills.*—Patent dated January 4, 1859.—This invention relates to an improvement in that class of grinding mills in which a rotary grinding cone  $H$  is placed within a similar-shaped shell  $D$ , and consists in having the conical shell adjustable instead of the grinding cone and shaft.

The inventor says: I *claim* the adjustable conical shell  $D$ , in combination with the grinding cone  $H$ , placed or secured upon a shaft  $C$ , having no end play or longitudinal or adjusting movement, the parts being arranged substantially as and for the purpose set forth.

I further claim, in combination with the adjustable shell  $D$  and cone  $H$ , the cob-cutter  $D^1$  permanently attached to the shaft  $C$ , and having its shell  $I$  fitted over the end of shell  $D$ , for the purpose set forth.

No. 22,480.—LEWIS BISHOP, of Talladega, Ala.—*Improvement in Elastic Saddles.*—Patent dated January 4, 1859.—This invention consists in having the seat  $C$  of the saddle suspended on springs  $B$  by means of loops  $a$  and eyes  $b$ , whereby the saddle is made to conform to the movements of the animal.

The inventor says: I *claim*, as an improved article of manufacture, a saddle having a seat  $C$ , suspended on springs  $B$ , by means of loops  $a$  and eyes  $b$ , and otherwise made as shown and described.

No. 22,481.—MICHAEL BOMBERGER, of Hummelstown, Pa.—*Improvement in Corn-Shellers.*—Patent dated January 4, 1859.—The nature of this invention consists in providing the shellers with flanged rollers  $E E$  revolving on stationary shafts or axles placed at right angles to the shelling cylinder  $B$ , which works in combination with loose rings  $h h$ , also placed on other shafts at right angles to the shelling cylinder  $B$ . It also consists in arranging a loose bar  $D D$  against which the springs  $f$  press, so that the springs will assist each other.

The inventor says: I *claim* so arranging the rollers  $E E$  (provided with helical springs, as described,) in combination with the loose rings  $h h$  as to operate in the manner and for the purposes as set forth.

I also claim the employment of the loose bar  $G$  when arranged with rollers  $E E$ , helical

springs *f*, adjusting bars *D D* and shelling cylinder *B*, substantially as and for the purposes described.

No. 22,482.—WILLIAM H. BROWN, of Middletown, Pa.—*Improvement in Horse-Rakes*.—Patent dated January 4, 1859.—To the rake *F* a segment rack *e* is secured, and to a longitudinal bar *f* in the frame *E* a toothed sector *g* is attached, said sector gearing into the rack *e*. The sector *g* is provided with an arm *h*, the upper end of which is connected by a link *i* with a lever *j*, the lower end of which is attached by a fulcrum pin *k* to the bar *f*, the lever *j* extending up in front of the driver's seat *D*.

The inventor says: I *claim* the arrangement and combination of the segment rack *e*, toothed sector and arm *g h*, rod *i*, lever *j*, and frame *E*, as and for the purpose shown and described.

No. 22,483.—A. C. BROWNLICH, of Buffalo, N. Y.—*Improvement in Harvesters*.—Patent dated January 4, 1859.—The nature of this invention consists in so constructing the axle *F* of a harvesting machine as to form, in connection with its adjuncts, the frame to which to attach the gearing.

The inventor says: I *claim* the axle *F* in combination with the pinions *o t v D*, shaft *H*, and pillow block *N*, constructed, arranged and operating substantially in the manner described, for the purpose specified.

No. 22,484.—JOEL BRYANT, of Brooklyn, N. Y.—*Improvement in Seed-Planters*.—Patent dated January 4, 1859.—The nature of this invention consists in providing cultivating ploughs with a seed-planting apparatus *P*, so that the said ploughs may be used either as cultivator or as seed-planter

The inventor says: I *claim* in connection with the cultivating plough *A* the seed-planting apparatus *P*, consisting of the drill-plough *c*, seed-box *d*, seed-slide *e*, driving-rod *r*, covering-wheel *o*, and sod-clearer *k*, the same being constructed and operating substantially as described and for the purposes set forth.

No. 22,485.—JOHN BURT, of Hartford, Conn., and WILLIAM W. WILLARD, of Syracuse, N. Y.—*Improved construction of Spectacles*.—Patent dated January 4, 1859.—The nature of this invention consists in employing a link-joint *A* in the nose-piece *x*, and arranging short bows *F* with tension springs *H*, and holding cups *E* or pads on the ends of said bows.

The inventors say: We *claim* the employment of the link-joint *A* to the nose-piece *x*, for the purpose described.

We also claim the construction and arrangement of the short bows *F*, springs *H*, cups *E* or pads, substantially in the manner and for the purpose as set forth and described.

No. 22,486.—DAVID BUZZELL, of Charlestown, Mass.—*Improved Rocking Chair*.—Patent dated January 4, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I *claim* in combination with the chair-stand or frame the movable leg-rest *D* and the sliding foot applied to such leg-rest, essentially as described, a mechanism by which, when the leg-rest is moved or swung upon its fulcrum *ff* or bearings, the sliding foot-rest *F* shall be moved on its supports either toward or away from the seat, substantially as specified.

I also claim the combination of the foot-levers *G G* and the rockers applied to the chair or seat-frame *A*, so as to operate together, substantially as described.

I also claim the combination of the toggles *L M*, the lifting-levers and their connections with the foot-levers and rockers *I*, the same being for the purpose of so operating the said rockers and levers as to cause the chair to be supported on the ground or floor either by the two rockers or the four foot-levers, as set forth.

I also claim so combining a foot-rest with a movable or turning leg-rest that the former shall be movable relatively to the latter, as specified.

No. 22,487.—CALVIN CANNADAY, of Indianapolis, Ind.—*Improvement in Cotton Cultivators*.—Patent dated January 4, 1859.—The nature of this invention consists in arranging the shears or blades *E E*<sup>1</sup> of the implement, whereby the same are prevented from being choked or clogged, and also rendered capable of being adjusted to suit the form of the ridges of the rows of cotton plants. It also consists in a thinning hoe *L* arranged and operated automatically so as to thin out the cotton plants in the drills the required distance apart as the implement is drawn along.

The inventor says: I *claim*, first, the two shears or blades *E E*, when placed obliquely with each other, pivoted to their respective standards *c c* and adjusted by the rod *G*, nut *g*, and fork *F*, substantially as and for the purpose set forth.

Second. The employment or use of the reciprocating hoe *L* attached to the bar *K*, which is connected with the rod *I*, the hoe being operated substantially as shown, to wit, through the medium of the cam *J* and spring *j* in connection with the pin *l* and springs *n n*, so that the transverse movement of the hoe relatively with the row of the plants will be obtained, and also



a vertical movement to allow the hoe to clear the plants when passing over them previous to each thinning out stroke, substantially as shown and described.

Third. The lever N when applied to the rod I and used in connection with the thinning hoe L, substantially as and for the purpose set forth.

No. 22,488.—AUGUSTUS C. CAREY, of Lynn, Mass.—*Improved Car Fan-Sweeper*.—Patent dated January 4, 1859.—The invention consists in the employment of a revolving fan F, which is so adjusted as not to come in contact with the carpet, but to revolve in close proximity thereto, by which the dust and dirt are blown into the pan or receptacle.

The inventor says: I *claim* the use of a fan F for the purpose of sweeping the carpet or other surface, in place of the revolving brush heretofore employed for the purpose.

No. 22,489.—GARDNER CHILSON, of Boston, Mass.—*Improvement in Cooking-Range*.—Patent dated January 4, 1859.—The nature of this invention consists in the mode of making the upright flue D leading from the fire-place to the flue space or spaces about the oven, and in the arrangement of a curved valve or damper N and recess M with reference to the diving and top flues of the ovens F F<sup>1</sup>. Also in the application of a protector plate H with reference to the fire-place, the two ovens, and the flues between and in rear of the ovens so as to support the ovens.

The inventor says: I *claim* as my improved arrangement of flues against the bottoms, the outer sides, the tops, the inner sides, and in rear of the two ovens, whereby the smoke, after passing over the tops of the two ovens or either is made to descend between them and pass out into the back flue in manner as described. And with the said arrangement of flues or the parts thereof to which the same specially belong, or, in other words, the top and diving flues of the two ovens, I claim the arrangement and application of a curved valve N and its arched recess M, the whole being made to operate substantially in manner described.

I also claim the protector plate H as combined and arranged with reference to the fire-place, the two ovens, and the flue between the two ovens, so as to support the ovens, as set forth.

I also claim the described mode of making the upright flue D leading from the fire-place or boiling chamber to the flue space about the oven, such being made with a reflecting back and tapering sides, and in other respects substantially as specified.

I also claim the expansion safety plate *t* as arranged with respect to the fire-place and applied on the top plate of the boiling chamber, in the manner and for the purpose substantially as specified.

No. 22,490.—EVERARD M. CLARK, of Lancaster, Penn.—*Improvement in Smut-Machines*.—Patent dated January 4, 1859.—As the grain is fed into the machine by the spout D at I it is arrested and scattered by the upper wings or beaters Q, and much of the lighter materials driven off in the spout D through the valve H before it enters the machine, in combination with the lower diagonal wings or beaters S a powerful suction is induced, keeping the grain suspended while it is beaten to and fro between the grooved wings and sides of the cylinder, and thereby effectually scouring off the fuzzy end of the grain; hulling it from all appending chaff.

The inventor says: I *claim* the diagonal grooved wings or beaters S, the upper and lower grooved wings or beaters Q, the two sliding valves O O on the bottom of the machine for regulating the draft, when combined substantially as set forth.

No. 22,491.—H. W. COLLENDER, of New York, N. Y.—*Improved Billiard-Cue Tips*.—Patent dated January 4, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the new article of manufacture named, to wit, a cue-leather or cue-tip, coated on its flat surface with a soluble gum or cement, as described for the purpose set forth.

No. 22,492.—W. B. CALVER, of Scranton, Penn.—*Improvement in apparatus for hoisting and dumping coal*.—Patent dated January 4, 1859.—The loaded cars D are shoved along one at a time on the portable rails *a a*, which when depressed rest on the sleepers I I. When a loaded car is on the rails *a a* the bar E is raised by means of power applied to rope A<sup>1</sup> attached to bail H, and the bars *i i* rise with the shaft E, the hooks *j j* catching underneath the axle *k k* of the car D; the car D is raised vertically and in a horizontal position until the rollers *d* reach the inclined portions *e* of the guides, when the bar E follows the inclination and the car D is tilted.

The inventor says: I *claim* the arrangement and combination of the rod G, bars *f*, E, *c c*, *i*, *j j*, bail H, and inclined guides *e*, as and for the purpose shown and described.

No. 22,493.—GEORGE H. DICKERMAN, of Boston, Mass.—*Improvement in Band-boxes*.—Patent dated January 4, 1859.—This invention consists in making the standard within the band-box on which the bonnet rests.



The inventor says: I *claim* the combination of a removable standard with the paper band-box, arranged substantially in the manner described and for the purposes set forth.

No. 22,494.—JOHN B. DUANE, of Schenectady, N. Y.—*Improvement in Cultivators*.—Patent dated January 4, 1859.—The frame D is formed of two parallel bars *c c*, connected at their outer ends by a traverse bar *d*. The front ends of the bars *c c* are connected by bolts or pins *e* to opposite sides of the frame A. To the end of each projection *f* a wheel *g* is attached. To the right side of the frame A a bar F is attached by a bolt or pin *h*, the bar F being allowed to work freely on said bolt; near the centre of the bar F a castor-wheel G is secured, and to the frame A in line with the front part of the bar F a bearing *i* for the bar F is attached.

The inventor says: I *claim* the arrangement and combination of the frame D, having wheels *g*, bar F, wheel G, bar E, and frame A, as and for the purpose shown and described.

No. 22,495.—JOHN W. EINHANS, of New York, N. Y.—*Improved Escapement for time-keepers*.—Patent dated January 4, 1859.—The nature of this invention consists in the mode of constructing an escapement-wheel C by arranging on the surface of the wheel in two lines of curvature alternating series of escapement-pins or teeth D E, and combining therewith a triangular block lever pallet F, so that as the escapement-wheel rotates, the outer and inner series of pins are alternately brought into contact with the opposite inclined planes of the pallet.

The inventor says: I *claim* the use of a triangular-shaped pallet-lever for an escapement-pallet for clocks, watches, &c., with an escapement-wheel constructed in the manner set forth; but irrespective of such use of my block-pallet I make no claim to the construction of the escapement-wheel of itself, as my invention relates exclusively to the use and application of the block-pallet substantially as set forth.

No. 22,496.—GEORGE B. FIELD, of St. Louis, Mo.—*Improvement in Spading Machines*.—Patent dated January 4, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* propelling the shovels H by means of single cranks G attached to handles X, and guided by adjustable arms or levers L, so that the lower end of the shovels when in motion shall run in separate lines or furrows, the whole being constructed, arranged, and operating substantially as described.

No. 22,497.—MICAH GILLAM, of Alba, Penn.—*Improvement in Washing-Machines*.—Patent dated January 4, 1859.—The beaters or lifters *ff* are made up of two plates, forming a structure like the letter A, the brace connecting the two plates having the place of the cross mark of that letter. The shaft to which the beaters or lifters *ff* are attached is a horizontal rocker-shaft, and is actuated by the hand-lever *h*, there being interposed between the hand-lever and the rocker-shaft connecting rods *i i*, arms *k k*, vertical rocker-shaft *l*, connecting-rods *m m*, and crank-arms *n n*.

The inventor says: I *claim* the beaters or lifters arranged upon the rocker-shaft within the half cylindrical tub, lined with anti-friction rollers, the rocker-shaft being operated by the lever, vertical shaft, and connecting rods, and the whole being constructed and operated as set forth.

No. 22,498.—WILLIAM GOURLEY and ISAAC KREBS, of Winchester, Va.—*Improvement in the means of operating Carriage-Brakes*.—Patent dated January 4, 1859.—The nature of this improvement consists in constructing and applying brakes to vehicles in such a manner as that the power applied to the brake can be so regulated as to accommodate itself to the amount of weight on the *vehicle*, and compensate for the varying depression of the springs L, while at the same time the brake or rubber-rod *g h i* in its action supports in a measure the weight of the shafts.

The inventors say: We *claim* the construction and application of the compound or double lever *d d e e*, as described, and the crank-shaped rubber-rod or brake-bar *g h i* and T-shaped spring L, when combined and operated substantially as set forth and described.

No. 22,499.—E. H. HANCOCK, of Augusta, Ga.—*Improved Machine for Sawing Laths*.—Patent dated January 4, 1859.—This invention consists in the employment of a front set of feed rollers G G<sup>1</sup> having their teeth arranged around their circumference in spiral lines, the spirals of the upper roller running just the reverse of those of the lower roller, in combination with an ordinary back set of straight fluted feed-rollers H H<sup>1</sup> and with a stationary guide or gauge-strip *o*, which is set oblique to instead of parallel with the face of the saw. It also consists in the combination of a table B with hinged-top arbor *a* with saws, which can be set nearer together or further apart by means of collars *d d d*, feed-rollers with spiral and straight teeth, swinging or yielding frames A, and obliquely-set guide or gauge-set.

The inventor says: I *claim*, first, the combination of the peculiar spirally-toothed feed rollers G G<sup>1</sup>, ordinary toothed or fluted feed rollers H H<sup>1</sup>, and obliquely-set guide or gauge



O, when the whole is arranged as described and relatively to the saws for the purposes set forth.

Second. The combination of the rollers  $G^1 H$ , swinging frames  $L^1 L^1$ , shaft  $J$ , pinions  $K K$ , spur-wheel  $L$ , and cog-wheel  $D$ , substantially as and for the purposes set forth.

Third. The arrangement of the swing-table  $B$ , bearing a portion of the machinery, with respect to the frame  $A$ , and the rest of the machinery thereon, as set forth.

No. 22,500.—JOHN S. HARBISON, of Sacramento, Cal.—*Improvement in Bee Hives*.—Patent dated January 4, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the graduating chamber  $B$  in combination with the curtain  $C$  and ventilating passages  $E$  and  $F$ , whereby air is admitted without light into the hive, arranged substantially as and for the purpose described.

Second. Providing the adjustable sectional comb-frames  $K$  with the flexible metal clamps  $b b$ , when the frames are constructed and arranged in the manner described for the purposes specified.

While not claiming, broadly, the removal of a tier of boxes at one operation, nor the boxes of a tier separately, by means of a clamp, irrespective of the mode of construction, I do claim—

Third. The device composed of the parts  $L f d c$  in combination with a horizontal tier of boxes, arranged and operated as and for the purposes described.

No. 22,501.—JOHN W. HEDENBERG, of St. Louis, Mo.—*Improvement in Coffee Pots*.—Patent dated January 4, 1859.—This improvement is applied to a coffee-pot having a reservoir and condenser attached for the purpose of condensing the steam as fast as generated, and it consists in making an air-chamber  $D$  between the reservoir  $C$  and coffee-pot, so as to prevent the water in the reservoir from becoming heated by immediate contact with the coffee-pot.

The inventor says: I *claim* the application of the chimney or pipe to the open space between the coffee-pot and the condenser, for the purpose of causing a current of cold air to pass between the coffee-pot and condenser, as set forth.

No. 22,502.—CHARLES HOWELL, of Cleveland, O.—*Improvement in Rotary Harrows*.—Patent dated January 4, 1859.—In the engraving the harrow  $A$  is of a triangular form, through the angles of which oblique mortises are formed, through which the axis  $a$  of the harrow  $B$  passes. The axis of the front harrow is inclined, but as the inclination of the latter would necessarily increase the drag on that side in which the teeth of the harrow are most depressed, the drag is neutralized by arranging the drag-hook  $c$  of the harrow on the other side of its axis.

The inventor says: I *claim*, first, the arrangement and combination of three rotary harrows, when the axis of each is inclined in the manner and for the purposes substantially as described.

Second. The arrangement of the hook  $c$  in relation to the front harrow, when combined with two harrows in the rear, arranged to operate in the manner set forth.

No. 22,503.—LUCIUS J. KNOWLES, of Warren, Mass.—*Improved Method of Operating the Valves of Pumping Engines*.—Patent dated January 4, 1859.—In the engraving  $A$  is the steam cylinder,  $B$  the piston,  $C$  the exhaust, and  $D E$  the steam passages,  $F$  the slide valve, which controls the main piston  $B$ , and to which is attached a hollow plunger  $G$ , that slides longitudinally in a cylinder in the steam chest  $H$ . Attached to the main steam chest  $H$  is an auxiliary steam chest  $I$ , in which slides the valve  $K$ . This valve is actuated by means of an arm  $L$ , attached to the piston rod  $M$ , through which passes the rod  $N$  attached to the valve. As the piston  $B$  reaches either end of its stroke, the arm  $L$  strikes one or the other of the adjustable nuts  $f g$  upon the rod  $N$ , and the valve  $K$  is moved.

The inventor says: I *claim* controlling the motions and positions of the plunger  $G$ , exclusively by steam admitted from the steam chest, and by suitable exhausts as set forth, for the purpose specified.

Second. I claim the described arrangement of the induction ports  $a$  and  $p$ , with respect to the exhaust ports  $z$  and  $h$ , and with respect to the throw of the plunger  $G$ , for the purpose specified.

Third. I claim admitting a quantity of steam before the advancing plunger through the passages  $s h$  and  $i r$ , for the purpose of arresting its motion, as set forth.

Fourth. I claim the secondary exhaust ports  $v v$ , operating as described, for the purpose set forth.

Fifth. The peculiar construction of the main valve  $F$ , whereby the pressure upon the same is relieved, as it passes the centre of its throw, and the piston is caused to start more gradually, as set forth.

No. 22,504.—ISAAC KREBS, of Winchester, Va.—*Improvement in the Means of Operating Carriage Brakes*.—Patent dated January 4, 1859.—The nature of this invention consists in constructing brakes for vehicles, in such a manner as to enable the application to the circumference of the but-end  $b b b$ , of the nave or hub part of wheels, two rubber blocks  $r s$  simultaneously, and in such a way as that the said rubber blocks  $r s$ , when they become worn



away to a great extent, can be brought up closer to the circumference of the hub, and be regulated by a sliding fulcrum *g*, and slotted clips *d e f*.

The inventor says: I *claim* the levers *h I J*, with movable fulcrum *g g*, the sliding adjusting connection rod and tap *n n P*, the slotted clip or fulcrum support *d e f*, and the spring rubber *r s*, when constructed and arranged in combination, as before set forth and described.

No. 22,505.—JOHN M. LEACH, of Oakville, Md.—*Improvement in Machines for Sowing Guano and other Fertilizers*.—Patent dated January 4, 1859.—This drill is designed to prepare the ground for setting out tobacco plants, and is made up of four sections, the outer one *a* for making the furrow, a second section *b* for distributing guano or any other fertilizer into the furrow, a third section *c* for covering the turned up earth upon the guano in the furrow, and a fourth section *d* for levelling and pressing down the earth constituting the bed for the tobacco plants.

The inventor says: I *claim*, first, the arrangement of the covering section of the drill within the frame of the roller section, as and for the purposes set forth; and, in connection therewith, I claim the arrangement of the box between the hopper and distributing-spout, the box being attached to the hopper by pliable or elastic material, and being vibrated with the spout by the toothed wheel upon the axle, as described.

No. 22,506.—THEODORE LUCE and JOHN H. MORRISON, of Detroit, Mich.—*Improvement in Railroad Sleeping-Car*.—Patent dated January 4, 1859.—This invention consists in attaching a series of folding berth bottoms *C* to each side of longitudinal central partition *B*, placed within the car *A*, and using, in connection with said partition and berth bottoms *C*, a double row of single seats *E E* at each side of the car *A*.

The inventors say: We *claim* the folding berth bottoms *C*, attached to each side of a central partition *B*, within the body of the car, in connection with the double row of single seats *E E* at each side of the car, with a passage-way *n* between them, the innermost row of seats at each side of the car being provided with falling backs, and the whole arranged substantially as and for the purpose set forth.

No. 22,507.—HENRY MAULE, of Philadelphia, Pa.—*Improvement in Railway Alarms*.—Patent dated January 4, 1859.—This invention has for its object the sounding of the steam-whistle at all places where the road is crossed by common roads, or on curves or other dangerous places, and consists in an arrangement of a middle rail *I I<sup>1</sup>* along the line of the track, which coöperates with a device attached to the locomotive, whereby the valve of the steam-whistle is always opened at that part of the road where the extra rail is placed.

The inventor says: I *claim* the employment of the lever *C D*, or its equivalent, in combination with an extra rail *I I<sup>1</sup>*, and with the steam-whistle; the whole arranged and operating, substantially as described, for sounding the steam-whistle at any desired part of the road.

No. 22,508.—R. C. MAUCK, of Conrad's Store, Va.—*Improvement in Corn-Harvesters*.—Patent dated January 4, 1859.—This invention consists in a bearing-wheel *G* rotated by the stalk, by which the cut product is thrown across the machine, and which serves by bending the stalk over a rest-block *a* at the time of cutting. It further consists in the manner of attaching the cutter *E*, and in providing longitudinal pieces below the frame and behind the knife, whereby a channel or groove *I* is formed, which, by passing over the stumps, keep the machine in line.

The inventor says: I *claim*, first, the bearing-wheel *G*, arranged substantially as and for the purpose set forth.

Second. The combination of the bearing-wheel *G* and the rest-block *a*, for submitting the stalk to the knife in the best manner to effect the cut.

Third. Guiding the machine by the passage of the groove *I* over the stumps of the cut products.

No. 22,509.—NATHAN OLNEY and CHARLES H. KELLOGG, of Amherst, Mass.—*Improved Spoke-Machine*.—Patent dated January 4, 1859.—The claim and engraving will explain the nature of this invention.

The inventors say: We *claim* the expanding cutter-heads *D*, in connection with the guides or patterns *G G I* attached to the reciprocating-carriage *F*, in which the stick *A<sup>1</sup>* to be operated upon is placed; the guides or patterns *G G I* actuating the cutter-heads respectively by means of the mechanism, substantially as shown and described for the purpose set forth.

We further claim, in combination with the expanding cutter-heads *D* and the guides or patterns *G G I*, on the carriage *F*, the circular-saws *Y Y*, fitted in the frame *V*, operated automatically by the carriage *F*, substantially as set forth.

No. 22,510.—A. J. PEAVEY, of South Montville, Maine.—*Improved Machine for Cutting and Punching Iron*.—Patent dated January 4, 1859.—In this invention it will be seen that, by turning the die-box *B* with the cutter *C*, saw-teeth of various pattern may be cut with one



triangular and one die, and that the axis of any circular-saw may be so adjusted as to bring the lower edge of the saw to the cutter; and by bringing the sliding-catch V into the variously-graduated circles in the plate O, the same variety in the number of teeth will also be produced.

The inventor says: I *claim* the cylindrical die-box B, in combination with the circular punch-socket D, both punch and die being by their means capable of revolution upon their axis and adjustment to the required angles of the teeth of the saw to be gummed, as specified.

I do not claim the dividing-plate and the parts necessary for its convenient operation, nor operating the punches by lever and cam, separately considered.

But I do *claim* the combination of the dividing-plate O and its appendages, substantially as described, with the punching-apparatus, in the manner and for the purpose specified.

No. 22,511.—C. S. PETTENGILL, of New Haven, Conn.—*Improvement in Revolving Fire-Arms.*—Patent dated January 4, 1859.—This invention relates to that kind of revolver which is in most common use, having its chambered cylinder C arranged to rotate on an axis D parallel with the bore of the barrel. It consists in the combination and arrangement of parts of the lock for the purpose of effecting the cocking of the hammer *f*, the rotation of the cylinder and the locking of the cylinder with its chambers in position for firing, all by the movement of the trigger T.

The inventor says: I *claim*, first, combining the hammer and the rotating-dog with the trigger by means of a forked tumbler H and a cam L working on the same pin, the said cam being formed with a notched tail *m* to engage and operate in combination with a horn on the trigger, substantially as and for the purpose set forth.

Second. The bent-dog I applied as described on a fixed conical steed on the centre of the rear of the breech, supported and combined with a cam L on the tumbler-pin *c*, to operate substantially as described.

Third. The arrangement of the helical main-spring upon a bolt, which is jointed to the hammer, and which slides through a fixed guide in the rear thereof, substantially as described.

No. 22,512.—WILLIAM PROVINES, of Columbus, Mo.—*Improved Machine for Ditching, Grading, &c.*—Patent dated January 4, 1859.—The back end of the scoop L projects over the scoops I so that the latter will be filled as they rotate, and each scoop I as it passes underneath the back end of scoop L assumes a horizontal position to receive its load owing to the eccentric position of the rod or shaft *f* relatively with the disk H, the scoops being actuated by the rods K; and for the same reason the buckets I assume a radical or a proximate position as they pass over the upper part of their path of rotation.

*Claim.*—The arrangement and combination of the elevators I, rods K, shaft *f*, disk H, and shaft G, substantially as and for the purpose shown and described.

No. 22,513.—C. B. ROGERS, of Deep River, Conn.—*Improvement in Machinery for Pointing the Teeth of Hair-Combs.*—Patent dated January 4, 1859.—By this manner of arranging the cutting portion of the device, the feed movement is not interrupted in any way, and the teeth of the comb are not liable to be broken while operated upon.

The inventor says: I *claim* forming the recesses *c*, at the centre and from the edges of the periphery of the wheel B, toward its centre, so that each recess shall extend only partially across the periphery of the wheel, and still cutting surfaces be formed entirely across it, without breaking or dividing the screw thread *b*, entirely across the wheel at any one point, substantially as and for the purpose set forth.

No. 22,514.—PAUL A. SABBATON, of Albany, N. Y.—*Improvement in Sifting-Shovels.*—Patent dated January 4, 1859.—The object of this invention is to make the shovel light, strong, and durable, by forming it of a material that shall combine these characteristics when the bars and its other parts are cast thin.

The inventor says: I *claim* as an improved article of manufacture, a screening-shovel, composed of malleable cast-iron, and otherwise made as shown and described.

No. 22,515.—GELSTON SANFORD, of Poughkeepsie, N. Y.—*Improvement in Grinding and Crushing Mills.*—Patent dated January 4, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* first, the arrangement and combination of a conical grinding-surface with a concentric shell composed of stationary and adjustable wedges or staves, which are provided with a means of adjustment, substantially as described, and for the purposes set forth.

Second. The arrangement of the projecting surfaces C<sup>1</sup>, of the cone, substantially as described and shown, so that by reversing the direction of the rotation of the cone, small or large bodies may be crushed and ground in the mill.



No. 22,516.—WILLIAM F. SHAW, of Boston, Mass.—*Improvement in Lamps*.—Patent dated January 4, 1859.—The bottom of the chimney holder A is made of perforated metal for the purpose of admitting the air for the supply of the combustion uniformly and steadily to the air-chamber beneath the deflector, the wick *f*, within the tube D, is raised or lowered in the ordinary manner. The deflector F is made of fine wire gauze.

The inventor says: I *claim* the foraminous deflector described, operating in the manner substantially as set forth.

Second. I claim the foraminous deflector, in combination with the perforated bottom air-chamber, as set forth.

No. 22,517.—ISAAC M. SINGER, of New York, N. Y.—*Improvement in Sewing-Machines*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* placing the spool within the shuttle *c*, without any attachment, so that the heads thereof shall run in contact with the case of the shuttle, to give the required drag substantially as described.

I also claim, in combination with the shuttle-case *c*, and the spool placed therein without any connection, substantially as described, the employment of the spring-plates, substantially as described, to form spring bearings for the pivots of the spool as set forth.

And I also claim the shuttle-case and spool placed therein, without any attachment, as described, in combination with the inclosing plate and the face of the shuttle-race, substantially as described, by means of which combination the spool is held in place by simply placing the shuttle in its race substantially as described.

No. 22,518.—DAVID STUART, of Philadelphia, Pa.—*Improvement in Franklin Stoves*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim forming an air-space or chamber in which air circulates behind, or in contact with the fire-backs of stoves, and passes thence in a heated condition into the apartment, as that has been long known and used.

But what I do *claim* as my improvement in Franklin stoves is forming the fire-back of such stoves by the front wall of a cell or chamber D, around or on both sides of which the draft passes, and through which the air circulates as set forth, said cell or chamber being constructed and connected with the stove in the manner set forth.

No. 22,519.—WILLIAM HERRMANN STUBBE, of Boston, Mass.—*Lithographic Printing Press*.—Patent dated January 4, 1859.—The operation is as follows: The stone X<sup>3</sup> first passes under the "wiper" L, and is then inked; while this is going on, the toothless portion 10, of the gears C<sup>2</sup>, being opposite to the racks D<sup>2</sup>, the tympan *i* and nippers *g* remain stationary, the nippers being retained open by the pin *d*<sup>2</sup> resting upon the portion of the cam G<sup>2</sup>, and the stops rest upon the tympan, when the paper is placed on the nippers, when the bar L<sup>2</sup> passes out of the switch M<sup>2</sup> upon the carriage, the nippers are closed by the sudden motion of the cams G<sup>2</sup>, and the stops 7 are raised to permit the revolution of the tympan. The cams *f*<sup>2</sup>, upon the shaft F, move the lever E<sup>2</sup>, and engage the gears C<sup>2</sup> with the racks D<sup>2</sup>, and as the carriage now commences to return the gears are revolved, and the nippers *g* and tympan *i* are carried around, so that the paper is brought in contact with the stone.

The inventor says: I *claim* the cylinder of rollers *m*, in combination with a revolving tympan and scraper, operating as set forth for the purpose described.

Second. I claim the method of interrupting the motion of the gears *c*<sup>2</sup>, and of again engaging them with the rack by means of the cams *f*<sup>2</sup>, lever F<sup>2</sup>, and pin *a*<sup>2</sup>, operating in the manner set forth.

Third. I claim hanging the parts which operate the scraper on springs 17, in the manner substantially as specified.

No. 22,520.—GEORGE W. TOLLHURST, of Liverpool, Ohio.—*Improvement in Cultivators*.—Patent dated January 4, 1859.—The inventor says: I support the lower part of the tooth by the braces C C<sup>1</sup>, said braces are secured to the frame at the front end, the back end to the tooth about two thirds the way down. After placing the tooth at the desired point it is secured by means of the hooks E and quadrant F.

*Claim*.—The arrangement of the flanged quadrants F, pivots D, clamp-hook E, braces C and C<sup>1</sup>, teeth A B, and rigid frame G, in the manner and for the purposes set forth and described.

No. 22,521.—ALONZO WARNER and CYRUS A. WARNER, of Bristol, Conn.—*Improved Catch for Hanging Drapery*.—Patent dated January 4, 1859.—The nature of this improvement consists in securing wood or metallic springs or holders B upon a bedstead-rail or other places for the purpose of holding drapery, &c.

The inventors say: We *claim* for hanging drapery the spring-catch B, as a new and improved article of manufacture, constructed as and for the purpose specified.



No. 22,522.—DANIEL WATSON, of Newport, Ohio.—*Improved mode of Operating Drain Ploughs*.—Patent dated January 4, 1859.—In the engravings H is a crab or anchor, which is carried ahead in the line of the drain to be formed, and is secured to the ground in said line. From this crab extends a rope, or chain *f*, back through a ring in the point of the tongue *g*, to guide it, and thence to the drum I, of the travelling capstan J; the rope or chain is fastened to the drum at *i*, and thence continues to pass backward through a ring in the point of the tongue *k* to guide it.

The inventor says: I *claim* combining with the crab or anchor H, and the plough *a*, travelling capstans J, which are connected together by a rope or chain, as herein represented, for the purpose of working said plough as described.

No. 22,523.—WILLIAM WELLS, of Boston, Mass.—*Improvement in Corn-Shellers*.—Patent dated January 4, 1859.—The inventor says: The nature of this invention consists in the form which I give to the acting face of the shelling-wheel A and in its position, in combination with the direction or position of the guide B, and also in the use of the yielding presser C, in combination with the beater D.

*Claim*.—The arrangement and combination of the shelling-wheel A, guide B, clearer D, and weighted or spring-presser C, constructed and operating in the manner described and for the purpose specified.

No. 22,524.—ALONZO WHITCOMB, of Worcester, Mass.—*Copying Press*.—Patent dated January 4, 1849.—The claim and engravings will explain the nature of this invention.

The inventor says: When the screw is arranged to pass through and traverse a nut in the cross-bar, I *claim* connecting the screw D and platen F with each other in presses, by means of a cap on the upper side of the platen, with a spiral thread in its interior, to correspond with the thread on the lower end of the screw, substantially as described and for the purpose set forth.

No. 22,525.—BENJAMIN F. BEE, of Harwich, Mass.—*Improved Screw Propeller*.—Patent dated January 4, 1859.—The nature of this invention consists in inclosing the common screw propeller with a metallic cylinder *a*, for the prevention of the centrifugal tendency of the water when the propeller is in operation; the same being combined with metallic plates *e* extending lengthwise through the cylinder with perforations for the passage of the blades of the propeller.

*Claim*.—The combination of the cylinder *a* with the longitudinal plates *e*, substantially as described.

No. 22,526.—B. BRIDENDOLPH, of Clear Spring, Md., assignor to Himself and O. K. BOVEY, of said Clear Spring.—*Improvement in Horse Rakes*.—Patent dated January 4, 1859.—This rake is so constructed that it may readily be unloaded or emptied of its contents, the teeth of the rake being capable of adjustment to the desired height from the ground.

*Claim*.—The arrangement, substantially as shown, of the handles *c c*, rake-head A, shafts D D, runners F F, and links or rods E, for the purpose set forth.

No. 22,527.—MATTHEW CHAPMAN, of Greenfield, Mass., assignor to the J. RUSSELL MANUFACTURING COMPANY, of said Greenfield.—*Improvement in Attaching Handles to Cutlery*.—Patent dated January 4, 1859.—This invention consists in forming the handles by pressure by means of dies and from the rough, when secured on the tang *a* of the implement, whereby the handles are riveted to the tangs, and firmly closed around or on them.

The inventor says: I *claim* placing the handles in the rough on the tangs *a* of the implements, with or without the rivets, and compressing the same, while on the tangs, into proper form by means of dies, substantially as and for the purpose set forth.

No. 22,528.—JAMES C. COOKE, of Middletown, Conn., assignor to the RUSSELL MANUFACTURING COMPANY, of said Middletown.—*Improvement in Manufacturing Webbing*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—As a new manufacture, a fabric or belting made not only of two or more sets of body warps, 1, 2, 3, 4, 5, and a single filling thread passed through the decussations of the said warps, alternately or otherwise, but with confining warps arranged and crossed on the filling, and between the body warps and at various or numerous intervals between the two edges of the fabric, so as to bind together the cloths made by the body warps, and form them with no straight or continuous parallel ridges.

No. 22,529.—ROBERT FITTS, of New Ipswich, N. H., assignor to C. & G. C. WINCHESTER, of Ashburnham, Mass.—*Improved Method of Bending Wood*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* bending a piece of wood around a fixed form by means of the series of blocks, levers, and connecting bars, arranged and operating in the manner set forth.



Second. And, in combination with the above, I claim the spring face plate *u*, attached to the blocks *E*, substantially in the manner and for the purpose specified.

No. 22,530.—WILLIAM G. HAMILTON, of New York, N. Y., assignor to JOHN C. HAMILTON, of said New York.—*Improvement in Bridge Walls of Boiler Furnaces*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The hanging of the bridge wall *M* upon an axis, in the manner described, or equivalent, by which it is made capable of being folded down out of the way, as set forth, and also the making of the axis hollow, terminating with an opening forward, as described and shown, for the purpose stated.

No. 22,531.—DAVID E. HUGHES, of New York, N. Y., assignor to the AMERICAN TELEGRAPH COMPANY, of said New York.—*Improvement in Electro-Magnetic Telegraphing*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* introducing into that portion of the electric current which passes to the opposite pole of the machine at the station where the operator is working, a retarder *g*, such substantially as herein described, whereby said portion shall not reach the near ground plate until after the other portion of the same current shall have passed over the line wire and reached the distant ground plate *d*, whereby said current is enabled to flow through the machine situated at the place of the operator, as aforesaid, without setting said machine in motion, substantially as described.

No. 22,532.—DAMASE LAMOREUX, of New York, N. Y., assignor to ALEXANDER DOUGLAS & SAMUEL S. SHERWOOD, of said New York.—*Improvement in Manufacturing Corsets and Bustles*.—Patent dated January 4, 1859.—This invention consists in combining in one garment a corset and bustle, which may also serve as a skirt supporter, the necessary rotundity and fulness for the bustle being attained by hoops *e e*, inserted in the lower part of the corset, which extends down, and is enlarged at the bottom to form the bustle.

The inventor says: I *claim*, the new article of manufacture constituting a corset and bustle, when constructed in the manner described and for the purpose set forth.

No. 22,533.—STEPHEN G. MENDENHALL, of Richmond, Ind., assignor to ISAAC LAMB, of said Richmond.—*Improvement in Looms*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the treadle roller *G*, carrier *E F*, and spring *H*, in combination with the scroll cam *I*, arranged in the box *D*, for the purpose of operating the treadles substantially in the manner described.

Second. The hook *J* having an adjustable and hinged attachment to the breast-beam, when combined with a set screw to determine its position, and operating in the scroll cam in the manner set forth.

Third. The combination with the treadle of the graduated series of mortises *Z*, and pin *Y*, for the purpose of regulating the width of the shed.

Fourth. The combination of the picker spring *P*, sliding catches *O*, triggers *U*, and straps *Q T*, for the purpose of throwing the shuttle as set forth.

Fifth. The combination of the double eccentric pulley *R S* and straps *Q T*, with the set-screws *6*, arranged substantially in the manner described for the purpose of expanding the picker-spring *P*, in such a manner as to equalize the power at each forward motion of the lay or batten.

No. 22,534.—GOODLOE H. TAYLOR, of Shelburne, Mass., assignor to Himself and WILLIAM SHERWIN, of Shelburne Falls, Mass.—*Improvement in Lasts*.—Patent dated January 4, 1859.—This invention consists in so arranging the spring and bent lever or hook *c*, as that while the spring may act to throw the hook *c* on or under the plate on the last.

The inventor says: I *claim* so pivoting the hook or lever *c*, as that the strain shall come upon said pivot and not upon the spring, by which means I effect a better and more certain fastening, as set forth and explained.

No. 22,535.—JAMES D. WILLOUGHBY, of Carlisle, Penn., assignor to C. M. ALEXANDER, of Washington, D. C.—*Improvement in Sealing Cans and Bottles*.—Patent dated January 4, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the disks *B* and *E*, screw *F* and top *C*, with the rubber *D*, in such a manner that when the rubber is compressed its periphery will press tightly against the insides of the can or bottle mouth, while its centre presses against the rod or screw *F* for the purpose of effectually excluding the air, as fully described.

Second. I also claim the subject of the first claim in combination with the neck of the bottle or can, as constructed for the purposes set forth.



No. 22,536.—EPHRAIM D. ROSENCRANTZ and WILLARD H. SMITH, of New York, N. Y., assignors to said ROSENCRANTZ and BARTON E. CLARK, of said N. Y.—*Improvement in Burners for Vapor Lamps*.—Patent dated January 4, 1859.—The tube A holding the wick being closed with a plate *a* near its upper end, which arrests the rising of the fluid and gummy matter and prevents its flowing upon the under surface of the cap D and down its sides, thus preventing the closing of the apertures *d d* in the cap D by said gum.

The inventors say: We *claim* the employment of a tube A for holding the wick when provided with a plate *a* and perforations *ff*, for the purpose set forth.

We claim the employment of a cap D, or heater having perforations *b b* tangential to its periphery, substantially as set forth, when used with a wick tube A, in the manner and for the purpose set forth.

No. 22,537.—CHARLES E. H. RICHARDSON, of Philadelphia, Penn.—*Improvement in Coffins*.—Patent dated January 4, 1859.—The casket A A<sup>1</sup> is lined throughout with heavy silk or duck, the lining is then covered with a coat of metallic paint. Sheets of sound smooth and prepared cork is soaked in collodion long enough to fill up the pores and to coat the surfaces of the sheets. When the collodion is dry a coat of oil varnish is to be laid on the cork over it, and when the coat of paint on the lining is dry this cork is laid in a proper position on the bottom and around the sides of the coffin.

The inventor says: I *claim* the construction of a coffin or casket made air and moisture-tight by a double lining of cloth and cork, prepared and combined in the manner and for the purpose substantially as described.

No. 22,538.—WILLIAM PAGGET ALLEN, of Dubuque, Iowa.—*Improvement in Composition for Friction Matches*.—Patent dated January 11, 1859.—The inventor says: The method I pursue in mixing this composition is as follows: I take one part of sandarach and two parts of shellac by weight, dissolve them in alcohol with or without heat, using such a quantity of alcohol as will produce a paste of about the consistency of honey. To this paste I add phosphorus in the proportion of one part of phosphorus to two parts of the paste by weight. I then raise the temperature of the whole sufficiently to melt or dissolve the phosphorus, after which I stir the whole until it is cold.

The inventor says: I *claim*, first, the combination of phosphorus with the substances marked B and C, in the proportions and manners substantially and for the purpose set forth in the specification.

Second. The combination of phosphorus with the substance marked D and E, in the said proportions and manner and for said purpose.

Third. The combination of phosphorus with the substance marked A, in said proportion and manner and for said purpose.

No. 22,539.—JOHN ALLENDER, of New London, Conn.—*Improved Roller for Expressing Water from Clothes*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* a roller I consisting of a spirally coiled spring J, arranged on a shaft or roller made smallest in the middle, (to allow the spring to yield,) covered with India rubber, or some flexible material, that will yield or bend readily as the spring J yields to the cloth, clothes, or other article being squeezed by the rollers.

No. 22,540.—JAMES BARKLEY, of Weston, Mo.—*Improved Door-Spring*.—Patent dated January 11, 1859.—In the engravings B is a spring, one end of which is secured to the casing by means of two half staples, one being driven into the casing above and the other below the spring, the upper one projecting downward and the lower one upward, and the spring being caught between the two is held securely. The other end of this spring is provided with a hook *a*, said hook catching upon the rod B.

*Claim*.—The employment of the spring B, which shall be provided with a hook *a* at one end, and which shall be secured to the casing at the other by means of two half staples, thus making a spring, which is adjustable at both ends, capable of being detached from either the door or casing in a moment of time, as is specified.

No. 22,541.—BENJAMIN BEERS, of New Fairfield, Conn.—*Improvement in Canteens*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The combination with said canteen of an additional vessel, made by hollowing out a piece of wood and inserting its edge in a groove D D in the end or head C C.

No. 22,542.—A. J. BOWERS, of Richmond, Va.—*Improved method of securing together the sides of Cast Metal Columns*.—Patent dated January 11, 1859.—The two sides A B are secured together by fitting the projections *a* of the plate A in the notches *d* of the plate B, the edge of the plate A bearing against the ledge *c*. Wedges or keys *f*, which may be of wrought-iron, are then driven down between the projections *e e* and *a a*, and the two sides are firmly secured together.



The inventor says: I *claim* securing the plates or sides of metal columns together by means of the projections *a a e e*, ledge *c*, provided with notches *d*, and the wedges *ff*, substantially as shown and described.

No. 22,543.—THOMAS BIRCH and LEWIS BRADLEY, of Hartford, Conn.—*Improved Water Closet*.—Patent dated January 11, 1859.—The nature of this invention consists in constructing an air vessel, or in the employment of an air vessel to produce a gradual stoppage of the flow of water, as applied to water closets.

*Claim*.—The arrangement of the metallic rim *B*, arm *C*, disk *F*, cap *G*, lever *Q*, in the manner as and for the purpose described.

No. 22,544.—DUNCAN BRUCE, of Paspebiac, Canada.—*Improvement in Artificial Manure*.—Patent dated January 11, 1859.—This invention has reference to the preparation of nitrogenous manures from animal matters, and has for its object so to fix the ammonical and other gases, that they may be ready to act at once upon the crop, without the necessity of waiting for the decomposition of the ammonical compounds.

The inventor says: I *claim*, as a new article of manufacture, the manure manufactured by the within described process, the animal matters being first decomposed in the manner set forth, and subsequently disinfected by charred shale, or its equivalent, as described.

No. 22,545.—GEORGE BUCHANAN, of Hickory, Pa.—*Improved School-Desk and Chair combined*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* a seat *C* pivoted near its front edge to a stationary frame *A*, and hinged near its rear edge to a movable back *c*, and having its arms pivoted by their rear ends to the movable back and hinged to the stationary frame, substantially as and for the purposes set forth.

No. 22,546.—J. D. C. CARPENTER, of Cincinnati, Ohio.—*Improved Device for Setting Laterally Circular Saws*.—Patent dated January 11, 1859.—The saw *B* is supported by the shaft *C*, carrying two band pulleys *D* and *d*. From the pulley *D* is a band which passes to the wheel *E* to set in motion the feed-rollers *K*. The saw shaft *C* is capable of moving endwise so as to adjust the saw to the right or left. This adjustment is effected by means of the rock shaft *F*, to which the arms *e* are attached by a pin placed some distance from the centre of the end of the rock-shaft so as to form an eccentric. The arms *e* are attached to the bar *G*, which slide backward and forward upon the frame *A*, carrying the saw-shaft *C* and also the spreader *H*.

*Claim*.—The rock-shaft *F*, connected with arms *e*, and acting as an eccentric, or as two cranks, for adjusting the saw-shaft laterally, substantially as set forth.

No. 22,547.—JOHN B. CORNELL, of New York, N. Y.—*Improved Burglar-Proof Safe*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* combining a cast-iron door frame *a b* with the wrought-iron portions of the frame of a safe, in such a manner that the molten iron, which is afterward, whilst in a melted state, combined with the said safe frame, will form a burglar-proof protecting casing around the said door frame, substantially as set forth.

No. 22,548.—ELIJAH H. DANFORTH, of Jamestown, N. Y.—*Improved Lathe Attachment for Finishing Dental Plates*.—Patent dated January 11, 1859.—To the bed pieces *a a* are attached two boxes *b b*, which receive and carry the piston *c c*. Under the boxes *b b*, and between the bed pieces *a a*, is a slide *e e*; this slide is held in its place by a thumb-screw *h*. The adjustable crank consists of a block of brass or other metal *i*, either round or octangular; in one end of this is a hole to receive the mandrel of a lathe. In the other end is a dove-tailed groove to receive a slide *j*.

The inventor says: I *claim* the combination of the mechanical devices specified, consisting of the piston *c c*, bed pieces *a a*, boxes *b b*, slides *e e*, and *j*, and the crank constructed and operated for dental and other purposes, as described.

And I also claim the adjustable crank, as it is arranged and attached to the specified parts of this machine, as set forth.

No. 22,549.—THOMAS DANIELS, of Toledo, Ohio.—*Improved Soda-Water Apparatus*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the whole apparatus, the sirup cans being elevated above the refrigerator, which is provided with the group stop-cock *e*, substantially as set forth for the purposes described.

Second. The arrangement of the tubes *d* and *G*, for conducting the sirups and the water to the top of the ice chamber without cooling them, and concentrating the cooler portion of these liquids below the ice, near the place of discharge, substantially as described.



No. 22,550.—A. L. DENNISON, of Waltham, Mass.—*Improved Method of Securing the Cylindrical Balance-Springs of Watches.*—Patent dated January 11, 1859.—The top plate A is cut away at *a* immediately beneath the balance, of which the shaft *f* is supported by the cock *c*, and the lower part *b*. At the bottom of the shaft *f* is the collet *g*, which is vibrated by the fork *x*. Above the roller is placed the cylindrical spring *h*, one end of which is attached to the balance and the other to a stud which is attached to the *potence* or to the pillar or lower plate.

The inventor says: I *claim* placing the cylindrical spring *h*, beneath the balance and between it and the fork, and cutting away the upper plate to furnish room for its accommodation, as set forth.

No. 22,551.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improved Lewis for Attaching Tackles to Blocks of Stone.*—Patent dated January 11, 1859.—A semi-spherical metallic shell A has a detachable air-pump D attached to its side capable of exhausting the air from the chamber when it is pressed on huge blocks of stone, to which it will adhere by the pressure of the atmosphere, to enable the stone to be elevated by tackle.

The inventor says: I *claim*, as an improved article of manufacture, a lewis, composed of a shell A, air-pump D, nozzle or tube B, packing E, staple G, and otherwise made as shown and described.

No. 22,552.—SAMUEL FALWELL, of Memphis, Tenn.—*Improvement in Endless Conveyors for removing Earth.*—Patent dated January 11, 1859.—The endless conveyor C consists of a series of cars *e e*, which are each composed of sections *ff*, hinged together upon the axis of the small wheels *g g*. These sections are sufficiently narrow to turn readily upon the end rollers or wheels *c c*. The wheels *g g* are of less diameter than the truck wheels *h h*, each section is furnished with checks or shoulder-stops *k k*, against which the side panels *m m* of the cars abut, which prevent the swagging of the sections of the cars.

The inventor says: I *claim*, first, the series of sectional cars *e e*, in an endless connection, each car being provided with terminal or truck wheels *h*, and intermediate wheels *g g*, of varying and lesser diameter than the truck wheels, and shoulder stops *k k*, or equivalents thereof, substantially as set forth.

Second. I claim the combination of such cars, with an upper and lower track and wheels *c c*, as set forth.

No. 22,553.—MOSES G. FARMER, of Salem, Mass.—*Improved Electro-Magnetic Fire-Alarm Apparatus.*—Patent dated January 11, 1859.—This invention consists, first, of a circuit wheel *a*, and the means of actuating it and regulating its motion. Secondly, of the means by which the signal indicated upon the circuit wheel is transmitted to the central station.

The inventor says: I *claim* the circuit wheel *a*, and the crank or handle by which it is actuated, in combination with the key H, and the electro-magnetic circuit, operating in the manner substantially as set forth, to send a definite signal from a sub-district to the central station.

Second. I claim the method of completing the circuit, when the door of the signal box is closed, through the springs M and N, as set forth for the purpose described.

No. 22,554.—JOHN S. GRAY, of New York, N. Y.—*Improved Door-Spring.*—Patent dated January 11, 1859.—The socket *a* has an extension *b* cast with it. In this socket there is a turning bolt *c*, which has a square hole *e* in its upper end at its centre, into which the end of the spring *d* fits. *f* is a hold-fast, and consists of a collar that fits over the upper end of the bolt *c*.

*Claim.*—The combination of the socket *a b*, bolt *c*, and hold-fast *f*, with the torsion-spring, constructed and arranged substantially in the manner and for the purposes set forth.

No. 22,555.—I. R. HALDEMAN and J. S. HALDEMAN, of Bloomington, Ill.—*Improved Washing Machine.*—Patent dated January 11, 1859.—This invention consists in the manner of mounting the rolls J, on which the endless apron is placed by means of which any number of fluted rolls H may be used. It also consists in the arrangement and combination of devices, by means of which the operation is materially facilitated.

The inventors say: We *claim*, first, the arrangement of the springs F, and supporting beams E, in connection with the sliding-frame G, that carries the lower series of fluted rolls H, for the purposes set forth.

Second. The clasp *o*, as constructed and operated for the purposes set forth.

Third. The sliding-standard R, or its equivalent, in combination with the rack-bar Y, and pawl X, the whole being arranged and operated in the manner and for the purposes substantially as set forth.

No. 22,556.—EDEN S. HOWELL, of Hope, N. J.—*Improved Washing-Machine.*—Patent dated January 11, 1859.—In using this machine the live-rubber *k* is kept continually oscillating on its axis, and periodically pressed against and removed from the dead-rubber. During this operation upon the piece of the clothes, the water in the piece is at each pressure



of the live-rubber partially forced through the apertures *aa*, causing the water in that portion C<sup>1</sup> of the shell included between the head I and partition E to rise higher than in the other part of the said shell, and at each receding of the live-rubber, or while it continues to press and rub the surplus water in the portion C<sup>1</sup> of the shell flows back through the apertures *aa*, keeping the piece flooded.

The inventor says: I *claim*, first, the combination of the live-rubber *k*, with the horizontal sliding and rotating shaft G, vibrating pressing lever H, and ratchet *g*, or its equivalent, the whole arranged and operating substantially as described for the purposes set forth.

Second. In combination with the rocking and pressing rubber K, the perforated rubber partition E, substantially as described.

Third. The detachable lever *m*, and bar O, substantially described for the purpose set forth.

No. 22,557.—THOMAS J. HUBBARD, of Hamilton, N. Y.—*Improvement in Flail-Caps*.—Patent dated January 11, 1859.—The inventor says: I construct the flail-caps of cast iron or brass, in two equal parts or longitudinal sections A A, with a crescent tongue or lip B formed in the interior of each section, so that when adjusted to the staff C, with the groove D to match the tongue or lip B, and fastened with a wire E, it makes a perfect and durable cap.

*Claim*.—The construction of flail-caps, of casting metals in separate parts or sections, with the lip or crescent tongue formed upon the interior thereof as described.

No. 22,558.—EDWARD HUNT and HENRY DAVIS POCHIN, of Talford, England.—*Improvement in Preparation of Resins*.—Patented in England, April 27, 1858.—Patent dated January 11, 1859.—The claim will explain the nature of this invention.

The inventors say; We are aware that stills and steam worms, capable of distributing small jets of steam, have been before used in a somewhat similar way for the treatment of oils and fatty matters, and for improving the quality of resin oil, obtained from substances similar to those used by us in the processes described. But such a process has never, so far as far as we can ascertain, been applied to any such substances, as are proposed to be operated upon by our processes for the purpose of obtaining the resinous and solid products specified as the result of our said processes.

We therefore *claim* the new articles of commerce specified, as produced by the processes mentioned, or by any similar mode or process, said articles or products not having been hitherto known in commerce or used in the arts.

No. 22,559.—R. V. JONES, of Johnstown, Pa.—*Improved Sausage Stuffer*.—Patent dated January 11, 1859.—In the engravings A is a hollow cylinder, into which the minced meat is placed through the hopper or funnel H; the cylinder is open at one end for the admission of the piston M, and at the other having a nozzle or tube P.

*Claim*.—The piston rod and supporting recess, constructed as described, in combination with the prolonged nut and screw for the purpose specified.

No. 22,560.—HENRY W. JOSLIN, of Trenton, N. J.—*Improvement in Treatment of India Rubber*.—Patent dated January 11, 1859.—The nature of this invention consists in combining sulphuret of zinc with India rubber or caoutchouc, and submitting the compound thus formed to the action of heat, by which in its nature and qualities it becomes so altered as not to be affected by heat unless of a higher temperature than that used in its preparation.

*Claim*.—The use and employment of sulphuret of zinc, either artificial or native, substantially prepared by the aforesaid process described, in combination with India rubber, for the purpose of curing or vulcanizing it in form and manner as set forth, without the use of free sulphur in any way in combination with the rubber.

No. 22,561.—JOHN L. KNOWLTON, of Glassborough, N. J.—*Improvement in Stump-Extractors*.—Patent dated January 11, 1859.—This invention consists in forming a simple device for extracting stumps by combining a vibrating lever C, catches G G<sup>1</sup>, and springs M M<sup>1</sup> with a hauling chain H, the chain being so guided as to be incapable of twisting or of moving vertically or laterally at the point where it is acted upon by the catches G G<sup>1</sup>.

*Claim*.—The lever C, with the catches G and G<sup>1</sup>, in combination with its hauling chain H, and the springs M and M<sup>1</sup>, or their equivalents, when the said chain is guided, so as to prevent it from twisting or from moving laterally or vertically, as set forth.

No. 22,562.—OLIVIER LAFREMIERE, of New York, N. Y.—*Improvement in Horse-Collars*.—Patented January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, as an improved article of manufacture, a horse collar, having its lower part provided with a metallic tube C, to give form to and hold the packing, and otherwise made as set forth.

No. 22,563.—HENRY LESTER, of Cincinnati, Ohio.—*Improvement in Roofing Compositions*.—Patent dated January 11, 1859.—The nature of this invention consists in mixing the following ingredients: pitch, rosin, coal, tar, rubber, or gutta percha, calcined plaster of Paris, soap-



stone, rosin oil, linseed oil, turpentine, gum copal, fire-proof paint, charcoal, japan, and white-lead, in such proportions that the roofing when finished will not run, crack, or scale off.

The inventor says: I *claim* a composition for roofing and similar purposes, produced from the mixture of the ingredients described, in the proportion and for the purposes set forth.

No. 23,564.—JOHN MARVIN, of Bellport, N. Y.—*Improved Taper-Gauge for Carpenters*.—Patent dated January 11, 1859.—The object of this invention is to obtain a gauge that will scribe a line having an oblique position relatively with the edge of the *stuff*, plank, or board, against which the force of the gauge bears as it is shoved along, and from which the work is to be cut or formed, and one that is capable of being so adjusted that the line may be made more or less taper as required.

The inventor says: I *claim* the employment and use of a conical roller C, applied to a block or a stock B of the gauge, and connected with a rack *a*, or the pencil bar A, in the manner shown, or in any equivalent way, so that the roller will be rotated as the gauge is shoved along, and the bar A moved longitudinally by the rotation of the roller, so as to produce the desired result.

I further claim, in combination with the conical roller C, the adjustable band *c*, and fence *e*, applied to the block or stock B, for the purpose of regulating the degree of taper of the line *h*, substantially as described.

No. 22,565.—EDWARD MAYNARD, of Washington, D. C.—*Improvement in Metallic Cartridge Cases*.—Patent dated January 11, 1859.—This metallic-cartridge is produced by soldering a steel disk *b*, to the exterior surface of the bottom of a brass cap *c*, which is of less diameter than the disk *b*, and then drilling a small central aperture through the combined brass and steel bottom of said cartridge.

The inventor says: I *claim* as a new manufacture, an improved metallic-cartridge, composed of a brass cup, combined with an exterior steel disk, substantially as set forth.

No. 22,566.—CHARLES MCBURNEY, of Roxbury, Mass.—*Improvement in India Rubber Hose-Pipes*.—Patent dated January 11, 1859.—The material of which the pipe is made is compounded as follows: 12 pounds of rags, cuttings or trimmings of cloth that have been coated with unvulcanized India rubber, 12 pounds rubber, 25 pounds flour of sulphur, and 6 pounds oxyd of zinc. These materials are ground or mixed together into one mass, and the compound is rolled into sheets, which are then cut into strips and formed into a tube upon a tube. The pipe is then submitted to the vulcanizing or heating process.

*Claim*.—As a new article of manufacture, a semi-elastic composition pipe, compounded of the ingredients, and in the proportions substantially specified, when vulcanized, as set forth.

No. 22,567.—ALEXANDER B. McCANS, of Ashley, Mo.—*Improved Machine for Sawing Shingles from the Bolt*.—Patent dated January 11, 1859.—This invention consists in the combination of devices for swinging the saw past the bolt, so as to saw off the shingles, and for returning it again for the next succeeding similar operation. Also in setting the bolt, to give the proper taper to the shingles which are cut *butt* and *point* therefrom.

The inventor says: I *claim*, in combination with a saw hung in a swinging arm, the spur *h*, rack *i*, and sliding-bar E, for drawing said saw through the bolt to sever the shingle therefrom, and to trip and allow the saw to fall back for the next similar operation, substantially as described.

I also claim, in combination with a pivoted table for holding the bolt, the shifting bars R R, arranged and operating substantially as herein described, for bringing the bolt up to the saw in such a manner as to alternately reverse the ends of said bolt from which the butts and points of the shingles are cut, as set forth.

No. 22,568.—THOMAS E. McNEILL, of Philadelphia, Pa.—*Improvement in Railroad Car Seats*.—Patent dated January 11, 1859.—These seats are constructed so that they can swing round on pivots at one of their ends, and the backs can be detached so as to form berths for sleeping.

The inventor says: I *claim*, first, jointing the ends of the arm-rests I to the ends of the upright standards L, at the corners of the seats, and providing their opposite ends with sliding bolts or bars M, and right-angled plates P, and half pivots or pins I<sup>1</sup>, for enabling their attachment, when in a horizontal position, by the bars H, and their upright elevation to form a support for the hinged portions G<sup>1</sup> of the backs G, when the seats are swung round upon the crank bars B, substantially in the manner and for the purpose described.

Second. I claim the combination of the hinged board T, with the projecting ledges T<sup>1</sup> on its surface, with the box-like frame A<sup>2</sup>, forming the rest of the bottom A<sup>1</sup>, of the seat next the end of the ear, in which it can be inclosed as described.

Third. In combination with the swinging seats, I claim the box-like frames N, and the platforms U V, attached to the same by the cranks U<sup>1</sup> and jointed bars W, arranged and operating in the manner and for the purpose set forth.



No. 22,569.—GEORGE MORGAN, of Brooklyn, N. Y.—*Improvement in Stone Cutting Machines*.—Patent dated January 11, 1859.—A series of cutters I, of gradually increasing length, are arranged in frames J J, under hammers G, in such a manner that, by the action of the hammers on the cutters, a rip is made through the whole length of a block of stone which is fed against the cutters, and of the depth of the longest cutter.

*Claim*.—The arrangement of cutters I, of gradually increasing length, in such relation to hammers G, and to a sliding carriage T, that by the action of the hammers on the cutters an incision is made through the whole length of a block of stone which is placed on the carriage, substantially as and for the purpose specified.

No. 22,570.—ANTOINE NIEL, of Brooklyn, N. Y.—*Improvement in Apparatus for Increasing the draft of Chimneys*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The arrangement of the exterior tube *a* having the expanded conical and cylindrical portions *d* constituting the chamber of compression, and the contracted annular space between the two tubes above the conical part of the tube *c*, with the inner tube, the two tubes bearing the relation to each other as herein set forth, and forming an apparatus for improving the draft of chimneys, as described.

No. 22,571.—ANTOINE NIEL, of Brooklyn, N. Y.—*Improvement in Bridle Bits*.—Patent dated January 11, 1859.—This invention consists in attaching the griper bars *f* to the ordinary bit, and operated so as to grip the nose of the horse when the rider or driver wishes to check him. The griper bars *f* are fitted upon the end of the frame bars *g* and *a* of the bit and have a sliding motion upon them.

The inventor says: I *claim*, first, the combination of the griper bars, constructed substantially as described with the bars of the bit of the horse.

Second. Attaching the griper bars *f* by their double-eyed ends and by the screw nuts to the bars *g* and *a*, as set forth.

No. 22,572.—THEODORE S. NOEL, of Memphis, Tenn.—*Improved Spectacle Frames*.—Patent dated January 11, 1859.—This invention consists in the employment of springs *b b*, applied in such a manner to the frames that the springs, by their elasticity, will hold the eye-pieces closed upon the glasses, and cause the glasses to be confined in their place until it is desired to remove them, when the springs permit the eye-pieces to be sprung open far enough to permit the removal.

*Claim*.—The employment of springs *b b* applied to the frame, substantially as and for the purposes specified.

No. 22,573.—JAMES O'HARA, of Pittsburg, Pa.—*Improvement in Retorts for Distilling Oils from Coal*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The employment in an upright retort A for distilling coal, of a revolving screw B, of a circumference smaller than the interior of the retort, so applied, that while by its revolution, it produces a continuous elevation of the central portion of the charge, it permits and causes a continuous descent of the surrounding portion by gravitation, and thus produces a positive continuous and uninterrupted upward and downward circulation, substantially as and for the purpose set forth.

No. 22,574.—ALBERT OSTRANDER, of New York, N. Y.—*Improvement in Gas-Burners*.—Patent dated January 11, 1859.—The object of this invention is to make an indestructible gas burner free from the corrosive effects of the impurities of gases.

*Claim*.—The manufacture of gas-burners, made of the composition of felspar, quartz, and abestos, having the peculiar formation of the vents set forth.

No. 22,575.—B. FRANK PALMER, of Philadelphia, Pa.—*Improvement in Artificial Fore-Arms*.—Patent dated January 11, 1859.—The flexor tendons F and the extensor tendons L operate as they do in the arm, but the closing of the hand is effected by means of a strap or muscle G, to which the flexor tendons F are attached. The muscle G is clamped by means of the clamp H, which prevents its receding after being pulled.

The inventor says: I *claim*, first, closing the hand by means of a strap G, operated by an attachment to the shoulder of the opposite arm, substantially in the manner described.

Second. The clamp H, constructed and operating as described, and applied to the purpose specified.

No. 22,576.—B. FRANK PALMER, of Philadelphia, Pa.—*Improvement in Artificial Arm and Hand*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, giving a sinuous course to the flexor tendons F of the fingers, by means of the sheaves, for the purpose described.



Second. Opening the fingers by means of extensor tendons E, antagonizing the flexors by means of springs M, substantially as described.

Third. The wrist-joint G, constructed as described, of a ball and socket held in contact by cords Z Z, arranged and operating substantially as specified.

Fourth. Giving a soft and elastic covering to the shaft V and the wrist C for the purpose of imitating the changes of form which take place in the natural arm during the movements of the radius and the play of the pronator and supinator muscles, substantially as described.

Fifth. The mode described of attaching the arm to the body.

No. 22,577.—EDWIN R. PEASE and RICHARD H. HAYMAN, of Poughkeepsie, N. Y.—*Improvement in Peg-Cutters*.—Patent dated January 11, 1859.—The nature of this invention consists in the construction and arrangement of mechanical devices to enable the operator to give a rapid rotary motion to the rasp or cutter  $g g^1$ , which removes the nails or pegs at pleasure.

*Claim*.—As a new article of manufacture the described machine for cutting off or removing pegs and nails from the insides of boots and shoes, substantially as described.

No. 22,578.—EDMOND PESIER, of Valenciennes, France.—*Improvement in the Manufacture of Sugar*.—Patented in France March 29, 1858; patent dated January 11, 1859.—This invention consists in the application to the manufacture of sugar of alcohol and agents capable of effecting, when mixed with this liquid, the elimination of mineral or organic matter incorporated with the sugar, in the juice of sacchariferous plants.

*Claim*.—The treatment of the saccharine juices of plants in the manner described by the use of alcohol, in combination with other special agents.

No. 22,579.—WARREN B. POTTER, of Boston, Mass.—*Improvement in Nursery-Bottles*.—Patent dated January 11, 1858.—The inventor says: I make a glass bowl or bottle A, with a neck *a* surrounding its opening *b*, and around this neck I secure a metallic boss *c*. A screw-thread is cut on this boss *c*, into which a corresponding screw-cut in the metallic cap *d* fits. The cap *d* has a metallic lacteal tube *e* fastened to it, which tube, extending downward into the bottle, curves around until its end nearly meets the swell of the bottle. A flange *f* is raised on top of the cap *d*, which flange is slightly cut under or rounded out so as to securely hold the elastic nipple B to it when placed thereon.

*Claim*.—A nursing bottle of glass, having a metallic cap *d* screwed upon it, and a metallic lacteal tube *e*, when said cap is provided with a flange *f* for the reception of the elastic nipple B, and the whole is made and put together, substantially as set forth.

No. 22,580.—ALFRED PROSENS, of Philadelphia, Pa.—*Improvement in Grinding-Mills*.—Patent dated January 11, 1859.—This improvement consists in placing across the recesses formed by the shell or those of the burr D small obstructing strips *i i*, so as to prevent the material from passing from the mill before it is sufficiently ground.

*Claim*.—Placing across the recesses formed by the teeth of the shells, or of those of the burrs, or of both, of conical grinding-mills, any convenient number of obstructing strips, as and for the purpose set forth.

No. 22,581.—AUGUSTUS PRENATT, of Buffalo, N. Y.—*Improved Machine for Dressing Hoops*.—Patent dated January 11, 1859.—The nature of this invention relates to the position of the cutters *c*, in the cutter-head D, in reference to their axis of motion and their consequent action upon the hoops to be dressed, and in the arrangement of a cutter *g* in a vertically moving frame or gate F for the purpose of dressing the edge of the hoop, and for giving the hoop any required width.

The inventor says: I *claim* placing the cutters *c*, in the cutter-head D, in such position that the plane of their cutting edge will cross their axis of motion at an angle of  $45^\circ$ , (or nearly so,) and also stand inclined to the horizontal plane of their axis, at an angle of  $45^\circ$ , (or nearly so,) substantially as set forth.

Second. I claim the arrangement of the cutter *g* in the vertically moving gate F, including the adjustable roller H, for the purpose of dressing the edge of the hoop, and for giving the hoop any required width, as described.

No. 22,582.—GEORGE M. PRENTISS, of Worcester, Mass.—*Inkstand*.—Patent dated January 11, 1859.—When it is desired to cause the ink to flow from the cup into the inkstand, the stem or plunger E is turned so as to respectively bring the slots or depressions G H and CD on the shoulder F, an opening in which it fits, and the lower part of the stem or plunger, and well or depression B, in the bottom of the inkstand opposite each other, thus opening the communication between the outside and inside of the inkstand for the admission of air between the channel-way in the stem or plunger and the interior of the inkstand A.

*Claim*.—As an improved article of manufacture an inkstand, having a plunger E, constructed and fitted as shown and described.



No. 22,583.—ISAAC REAMER, of Conrad's Store, Va.—*Improvement in Corn-Harvesters*.—Patent dated January 11, 1859.—The nature of this invention consists in the arrangement of guides or ways *a e* to conduct the corn to the reel, and otherwise assist in directing the run and hold of the machine travelling on sliding runners against; also, in a novel arrangement of a swinging clearer *G* for discharging the cut corn from the platform.

The inventor says: I *claim*, first, the combination of the elastic lower guide *a* with the adjustable upper guide *e*, when these parts are arranged for joint operation in the manner described, for the purpose specified.

Second. The arrangement and combination of guide *h* and swinging clearer *G* for removing the corn from the platform in the manner described.

No. 22,584.—ALBERT C. RICHARD, of Newtown, Conn.—*Improvement in Detaching Paper from Vulcanized Gum*.—Patent dated January 11, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—Subjecting the surface or surfaces of vulcanized India rubber, gutta percha, or other elastic gum, sheets, valves, belts, or other objects which have been so vulcanized or cured between, or on paper, and to which the paper adheres to a mechanical process of regular bending and continual elongation, substantially as described, having the continuous effect of drawing or detaching the filaments or atoms of the elastic gum, which adhere to, or which have entered into, the pores of the paper, gradually and regularly therefrom and thereout, simultaneously across the whole width of the surface operated upon, in the manner as set forth, or in any other manner producing substantially the same result.

No. 22,585.—WILLIAM RIPLEY, of Edgartown, Mass.—*Improved Framing Square*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim the mere repetition of the bevel or mitre slots and square arms, as applied to the rule *A*, provided with a lip *B*.

But what I *claim* is the improved manufacture of framing square, as made with its bearing ledge *B*, its squaring arms *C*, mitre slots *O D*, and mortising slots *E F G*, arranged together, and with respect to a base rule *A*, substantially as set forth.

No. 22,586.—STEPHEN SCOTTON, of Richmond, Ind.—*Improvement in Machinery for Oiling the Journals of Locomotives*.—Patent dated January 11, 1859.—The nature of this invention consists of a metal box *C*, through which passes an upright shaft *B*, the lower end of which goes down through the bottom of said box, and has on it a piece of leather, made to fit tight against the bottom side of said box, to prevent the escape of oil through the aperture around said shaft when it is at rest. The upper end of said upright shaft passes up through a hole in a portion of the upper end of said oil box, and on the upper end of this shaft is a nut *J*, which can be raised or lowered to increase or diminish the amount of play up and down of the upright shaft.

The inventor says: I *claim*, first, the combination of the weighted shaft *B*, the spiral spring *F*, and the box *C*, with the journal of a locomotive carriage, substantially as set forth.

Second. I claim the metal cup *H*, in combination with the box *C* and upright shaft *B*, or their equivalents, for the purposes specified.

Third. I claim the nut *J*, when combined with the upright shaft *B* and cup *H*, or their equivalents, in the manner and for the purposes specified.

No. 22,587.—LEWIS SOLOMON, of New York, N. Y.—*Improvement in Treating Auriferous and Argentiferous Pyrites*.—Patent dated January 11, 1859.—A detailed description of this invention would require too much space to be given here. The reader will form some idea by referring to the claim and engravings.

The inventor says: I do not intend to confine myself to the specific times and proportions mentioned in the specification, these being merely incidental to and not of the essence of the invention.

But I *claim*, first, extracting gold and silver from auriferous and argentiferous pyrites, in the manner substantially as set forth.

Second. The application of wood ashes to the roasted ore during the process of grinding, and of soda ash, for the purposes specified.

No. 22,588.—OTIS W. STANFORD, of Cincinnati, Ohio.—*Improvement in Grinding-Surfaces for Mills*.—Patent dated January 11, 1859.—The grain is, by means of the peculiar shape of the teeth or circular portions, ground and carried over a large grinding surface as it tends toward the periphery or discharge of the disks *C*, and as these circular surfaces *c c* pass each other they tend to equally distribute the grain throughout the whole system of teeth. When the flouring is equally effected the flour passes out through the channels formed by the *V* shaped teeth *e e e*, and from thence it is conveyed through the passage *H*.



The inventor says: I *claim* the employment of a system of circular grinding teeth, when arranged in the manner and for the purposes set forth.

I also claim arranging around the outer surface of the disk intercepting V shaped teeth, to operate in the manner and for the purposes specified.

No. 22,589.—CASPER V. STATLER and GEORGE W. WILSON, of Walnut Grove, Ill.—*Improvement in Foot Trip-Hammers*.—Patent dated January 11, 1859.—This invention consists in arranging a hammer by means of a series of levers in such relation to an anvil, that the same can be operated either by a foot or hand, and that it can be brought to strike with force on a bar of iron placed on the anvil.

The inventors say: We *claim* arranging a hammer B in such relation to an anvil I, by means of levers E and F, and links D D, that the same can be operated by means of a hand lever L, or by foot levers J J, substantially as described.

And we also claim the arrangement of the hand lever L in such relation to the foot levers J and to the chisel O, that both the hammer B and the chisel O may be operated by the motion of the hand lever in the manner and for the purpose substantially as specified.

And, in combination with the above described hammer, we further claim connecting the handle N of the chisel with the arm M, by means of an adjustable rod g, so that the cutting edge of the chisel may be accommodated to different thicknesses of iron, substantially as set forth.

No. 22,590.—RICHARD A. STEWART, of Parish of St. Bernard, La.—*Improvement in Defecating and Clarifying Cane Juice*.—Patent dated January 11, 1859.—This invention consists in passing or disseminating, throughout the saccharine matter, sulphurous acid or gas, produced by a slow combustion, in a nearly closed retort r, of sulphur or common roll brimstone.

*Claim*.—The defecation and clarification of cane juice and other liquid or semi-liquid forms of saccharine matter, by disseminating throughout the same sulphurous gas, or sulphurous acid gas, for the purposes set forth.

No. 22,591.—H. K. SYMMES, of Newton, Mass.—*Improvement in Gas Retorts*.—Patent dated January 11, 1859.—To the forward end of the passage C is secured the joint, or elbow D, with the upper end of which f, the stand pipe, is connected. E is a door which closes the opening through which the retort is charged, and the door g closes an opening through which either the passage C, or the stand pipe, may be inspected or cleaned.

*Claim*.—Dispensing with the mouth-piece of the ordinary horizontal gas-generating retort, and dividing the mouth of the retort into two portions, one of which is brought into permanent connection with the stand pipe, the other being employed for the purpose of charging the retort as set forth.

No. 22,592.—JOEL H. TATUM, of New York, N. Y.—*Improvement in the Manufacture of Candles*.—Patent dated January 11, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—As an improved article of manufacture, a candle, having its stock composed of tallow, stearic acid, and gum camphor, with or without beeswax, in about the proportions specified, and the exterior of the candle covered with a compound composed of stearic acid, gum camphor, and gum damar, or equivalent flux, in about the proportions set forth.

No. 22,593.—BENJAMIN C. TILGHMAN, of Philadelphia, Pa.—*Improvement in Hardening Fatty Substances*.—Patented in England May 2, 1857; patent dated January 11, 1859.—The claim will explain the nature of this invention.

The inventor says: I *claim* the hardening of acid and neutral fatty substances, by subjecting them to the action of sulphurous acid at elevated temperatures, either with or without pressure, as described.

I also claim the use of oxide of copper, or its chemical substitutes, to remove from fat acids the sulphuretted impurity, produced therein by treatment with sulphurous acid, as described.

I also claim the methods of preserving the color of white neutral fats, when treated by sulphurous acid at elevated temperatures, by using the sulphurous acid entirely free from air or oxygen, and by using fats pure and neutral, and free from any mixture of acid, rancid, or decomposed fats.

No. 22,594.—JEREMIAH C. TILTON, of Sanbornton Bridge, N. H.—*Improvement in Temples for Looms*.—Patent dated January 11, 1859.—In the engravings the cloth bearer, which extends over the points or spurs b b b, is shown at C, as supported by a bar or carrier D, which is hinged to the arm A at h, and so as to be capable of being moved backward from the spring. A screw i passes upward through the carrier and enters a recess k.

*Claim*.—The application of the cloth bearer carrier to its support by a hinge, arranged in



manner substantially as described; that is, so as to allow the carrier and its bearer to be drawn backward under circumstances as described.

No. 22,595.—ARTEMAS B. VANT and ARLON M. COOK, of Milford, Mass.—*Improvement in Corn-Shellers*.—Patent dated January 11, 1859.—A is the case or frame, B is a convex wheel having teeth on its convex surface and turning with the shaft C, which receives motion from D. D also gives motion to the shaft F, on which is a gear to give motion to the wheel F; this wheel turns on a bearing or stud G, and is placed obliquely so as to incline the side toward the discharge considerably toward the convex wheel; H is a circular plate connected to the wheel F by four studs or arms I, which pass through and have springs on them between F and H, whose action is to press up toward the wheel B. J J<sup>1</sup> are two guiding plates, the lower one being made with slots or apertures to allow the corn to fall through.

*Claim*.—The combination and arrangement of the smooth revolving pressure-plate or wheel H with the convex toothed wheel B, and guard-plates *i* and *j*, when constructed and operating substantially in the manner and for the purposes set forth and described.

No. 22,596.—JAMES WANSBROUGH, of Southwark, County of Surrey, England.—*Improvement in Hydrofuze Fabrics*.—Patented in England December 13, 1853; patent dated January 11, 1859.—The nature of this invention consists in giving to water repellent fabrics an artificial face or finish different from that of the fabric itself, so as to resemble woollen cloth, or such other materials as are capable of being worked into flock or other fine division.

The inventor says: I *claim* securing the flocks, or other finely divided substance, after it has been sifted or spread on to the surface and calendered, by applying to the surface thereof a solution of India rubber, or allied gum, substantially as described.

And I also claim, in combination with the method of securing the flock, substantially as described, the subjecting of the same to a steaming process, substantially as and for the purpose specified.

No. 22,597.—ROSS WINANS, of Baltimore, Md.—*Improvement in Locomotive Engines*.—Patent dated January 11, 1859.—This invention consists in so proportioning the smallest diameter of the blast-pipe *c c h h* to the smallest diameter of the smoke-pipe, that the transverse area of the latter pipe will be double that of the former. It also consists of a blast-pipe smaller in diameter than the upper section of the chimney, with a bell mouth or bonnet *b b d d* on its lower end, arranged in near proximity to the bottom *a a*, on which the cinders and sparks rest.

The inventor says: I *claim* the blast equalizing-pipe proportioned to the chimney, and arranged substantially as set forth.

I likewise claim a blast-pipe of less diameter than the smoke-pipe, and having a bell mouth, in combination with an exhaust-nozzle and the bottom on which the sparks lie, substantially as set forth.

No. 22,598.—GEORGE WINDLE, of Edenburg, Va.—*Improved Surveying Instrument*.—Patent dated January 11, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, attaching the adjusting weight C of the magnet-case D directly to the universal joint E, on which said case turns and swings, substantially as and for the purposes set forth.

Second, The arrangement of the pointer *n*, which designates the number of degrees at which the movable frame and telescope stand, adjusted on an adjusting screw, which has the surface of its head graduated so as to indicate minutes, in combination with a stationary pointer and with an extension formed on the pointer which comes opposite the degrees on the magnet case, substantially as and for the purposes set forth.

No. 22,599.—JOHN E. WOOTTEN, of Philadelphia, Pa.—*Improvement in Steam-Valves*.—Patent dated January 11, 1859.—The inventor says: Steam having been admitted within the pressure chamber, the upward pressure against piston D is exerted upon stirrup G by means of nut M and stem H, and transmitted to valve B by means of an anti-friction roller L interposed between the stirrup G and the plate K. The slide-valve B is therefore subject to a force tending to lighten it upon its seat, equal to the upward pressure exerted upon piston D.

*Claim*.—The application of the anti-friction roller L, in combination with a diaphragmatic piston D, or an equivalent therefor, substantially as and for the purpose set forth.

No. 22,600.—WILLIAM E. WORTHEN and JOHN J. ALTHOUSE, of New York, N. Y.—*Improved mode of Constructing Slats for Blinds*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—A sheet-metal blind-slat or luffer-board, made up of the combination of a slit-tube B B B with two thicknesses of sheet-metal *a a a*, the whole being substantially such as before specified.



No. 22,601.—WILLIAM S. WORTHINGTON, of Newtown, N. Y.—*Improvement in Apparatus for Evaporating*.—Patent dated January 11, 1859.—The objects of this invention are the economical use of coal as fuel for heating evaporating pans, and the application of heat in such a manner as to prevent the burning of the salt or substance precipitated on the bottom of the pan and the burning out of the pan.

*Claim*.—The arrangement of a series of two or more grated fire-places *a b c* and communicating passages *f g* and flues *h h* in a casing *c* on each or either side of a pan or train of pans, substantially as and for the purpose set forth.

No. 22,602.—MOSES G. FARMER, of Salem, Mass., assignor to WILLIAM F. CHANNING, of Boston, Mass.—*Improved Electro-Magnetic Apparatus for setting Water-Engines in Motion*.—Patent dated January 11, 1859.—The nature of this invention consists in the application of an electro-magnetic escapement to the cock controlling the supply of water of a water engine, and to a pawl or detent arresting the motion of said water engine in such manner that it may be set in motion and stopped by the agency of electricity directed to it through conductors from a distance.

The inventor says: I *claim*, first, the combination of an electro-magnetic escapement with the cock or water-valve *k*, and with the detent *Q* of a water-engine, separately or conjointly, for the purpose of controlling its motion from a distance, especially in its application to a fire-alarm telegraph.

Second. I claim the employment of two or more arms, of progressively increasing weight, in combination with a water-engine and with an electro-magnet, or its equivalent, for the purpose of releasing machinery, as set forth; the first of the weighted arms being liberated by the electro-magnet, while the last one of the series releases the machinery, each of the weighted arms being returned to its normal position by the action of the water-engine.

No. 22,603.—JOSEPH R. GATES, of Indianapolis, Ind., assignor to Himself and ALEXANDER COREY, of Shelbyville, Ind.—*Improvement in Automatic Grain Scales*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the lever *h* and spring *q*, when used for the treble purpose of operating the cut-off gate *r*, discharging or loosening the bottom valve *l*, and preventing the weights *e* and *f* from raising the scale-box *C*, and drawing the slide *r* until the bottom *l* is closed, thereby regulating the cut-off and flow of grain without using the weight of the grain while the same is being weighted.

Second. The combination and arrangement of the spring and weight *m*, with the elbow-lever *k*, connecting-rod *j*, and lever *i*, when constructed and operated substantially as and for the purposes described.

No. 22,604.—GEORGE KENNY, of Milford, N. H., assignor to Himself and JOSEPHUS BALDWIN, of Nashua, N. H.—*Improved mode of Attaching Thills to Axles*.—Patent dated January 11, 1859.—When the device is to be made ready for use, a washer is placed at each end of the tube *E*, and a bolt *D* passed through the tube *E*. The nut *e* is then screwed on the end of the bolt *D* until the washers *c c* are close down on the outer ends of the eyes *a a*. The tube *E* thus compressed will closely fill the space between the bolt *D* and the inner surface of the eyes *a b a*.

*Claim*.—The combination of the pressing and locking India rubber tube *E* with the eyes *a a b* and bolt *D*, with its nut *e*, substantially in the manner and for the purposes described.

No. 22,605.—JAMES LYON, of New York, N. Y., assignor of JESSE J. DAVIS, of said New York.—*Improvement in Machine for Sawing Marble*.—Patent dated January 11, 1859.—The nature of this invention consists in a reciprocating slide *d*, communicating motion by adjustable rollers *f f* acting in inclined slots to slides *h h* that are so fitted in adjustable frames *g g*, that their position can be varied as desired, and said slides being connected to the frames carrying the marble saws, impart to the same a reciprocating movement.

*Claim*.—The arrangement of the reciprocating bar *d*, adjustable rollers *f f*, adjustable frames *g<sup>1</sup> g<sup>1</sup>*, and diagonally slatted sides *h h*, in relation to each other, and to parts that connect with and guide the saws, for the purposes substantially as specified.

No. 22,606.—THOMAS J. MAYALL, of Roxbury, Mass., assignor to Himself and GEORGE N. DAVIS, of Boston, Mass.—*Improvement in Manufacture of Emery Wheels and Sticks*.—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The employment of vulcanized rubber, tempered with olive oil, as set forth, in combination with powdered emery, or its equivalent, for the manufacture of polishing wheels and sticks, as specified.

No. 22,607.—THOMAS J. MAYALL, of Roxbury, Mass., assignor to Himself and BENJAMIN F. COOKE, of Boston, Mass.—*Improvement in Elastic Draw-Bar and Bumper*.—Patent dated January 11, 1859.—A *A<sup>2</sup>* are cross-heads, which slide freely upon the side-bars *B*. These bars are connected with the eye *C*, through which passes the coupling-pin, and they also



carry the collars D, which interrupt the motion of the head A<sup>2</sup> in one direction, the motion of the other head A upon the bars B being limited by the nuts *f* upon the ends of the bars. Through the centre of the cylinder E, and also through the holes *g* of the heads A A<sup>2</sup> passes a rod K, having at one extremity an eye L, for the reception of the other coupling-pin, also a collar *h*, and at the other end a nut *m*.

*Claim.*—The described combined draw-bar and bumper, consisting of the elastic cylinder E, the heads A A<sup>2</sup>, bars B, spring *d*, and bolt K, constructed and operating in the manner substantially as set forth.

No. 22,608.—THOMAS WINDELL, of New Albany, Ind., assignor to J. B. FORD, JAMES W. SHIELDS, and H. L. BRIDWELL, of said New Albany.—*Improvement in Mowing Machines.*—Patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in connection with a single frame-piece A<sup>1</sup>, of the box D<sup>1</sup>, which is cast in the manner specified, with axle P, journal-bearing *t* and *u*, and flanges *s s*<sup>1</sup> in one piece, for the purpose of connecting and securing all the gearing necessary for the operation of the machine, as fully set forth.

Second. The spring *c*, secured at one end to the front of the outer guard, and playing freely in the opening of the rear of said guard, in combination with the adjusting screw *o*, whereby the convexity of the spring-shoe is increased and diminished with the elevation or depression of the cutter, in the manner and for the purpose described.

No. 22,609.—WILLIAM WRIGHT, of New York, N. Y., assignor to Himself and FREDERICK WRIGHT, of said New York.—*Improvement in Gas-Burners.*—Patent dated January 11, 1859.—This invention consists in a double flanged cup C, containing an arrangement of passages applied with a gas-burner, for the purpose of checking any excessive pressure of the gas before its arrival at the tip of the burner.

*Claim.*—As an improved article of manufacture, a gas-burner provided with a double flanged cup C, having openings *d d*, *e e*, and otherwise constructed, substantially as shown and described.

No. 22,610.—ERNEST OTTO POHL, of Philadelphia, Pa.—*Improved method of enabling Moving Railroad Trains to Telegraph their own Passings at certain stations.*—Patent dated January 11, 1859.—The object of this invention is to enable the operatives and employes at the main and other stations on the road and on moving trains to know the whereabouts of trains on the road between certain points whether the same be approaching any station or train or going away from it; to apprise the engineers, &c., of trains of the situation of each tunnel, bridge, switch, or dam, by an electro-magnetic apparatus acting reliably of itself.

*Claim.*—The use of a self-acting electro-magnetic railway alarm telegraph, acting reliably of itself without the necessity of human intervention, and arranged and operating in the manner and for the purposes substantially as described.

No. 22,611.—F. O. DEGENER, of New York, N. Y.—*Improvement in Printing Presses.*—Antedated July 11, 1858; patent dated January 11, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* so arranging or hanging an oscillating bed N, with an oscillating platen M, in such manner that the motion of one will control the action of the other, so that by their forward movement they shall close and give an impression, and upon their reverse movement the form shall be inked, and the platen be brought into the proper position necessary for the reception of the sheet, and thus alternate from one of their positions to the other.

Second. I claim the arrangement of an oscillating bed and platen, as described, with the cam U, to cause the frisket to assume the desired position, so as to hold the sheet of paper while it is conveyed from one position to the other, all of which is described.

No. 22,612.—R. L. ALLEN, of New York, N. Y.—*Improvement in Potato Diggers.*—Patent dated January 18, 1859.—In the engravings A represents the beam, B the handles, C the standard, D the share and point, E the clevis, *a* is the central wing, *b* and *c* the two side wings between which the dirt is allowed to fall while the potatoes are allowed to fall or roll off, *d* is the joint where the side wings *b* and *c* are let into the rear part of the share by means of tenon and mortise and held in position by means of strong screws.

The inventor says: I *claim* the arrangement and combination of removable wings *b c*, with the double mould-board, substantially as set forth.

I also claim the arrangement and combination of the central or dividing bar *a*, with the standard C, by means of the notched fastening *c* and *d*<sup>1</sup>, substantially as set forth.

No. 22,613.—WILLIAM I. ALSTON, of Williamson County, Tenn.—*Improved Ring Lock.*—Patent dated January 18, 1859.—This invention consists in arranging between the inner ring C, and the barrel A, of the lock a "friction spring," so that the adhesion of the ring D to the barrel is made greater than the friction between the adjacent ends of the rings by which means on turning a ring, those on either side are not liable to be moved by it.



*Claim.*—The friction springs arranged substantially as described, in combination with the inner rings of the locks, for the purpose set forth.

No. 22,614.—STEPHEN R. ANDRES, of Troy, N. Y., SAMUEL ANDRES, and McDONOUGH BUCKLIN, of New York, N. Y.—*Improvement in Apparatus for Drying Grain, Malt, &c.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We do not confine ourselves to the precise form of our machine, described in this specification, as the same may be changed without changing the character of our invention.

We *claim* the use or employment of a blast or current of hot air introduced into the cylinder A, through a hollow journal C, or its equivalent, when said current of hot air is brought into direct contact with the substance to be dried thereby, in combination with a cylinder made adjustable to any angle, as described.

No. 22,615.—ERNST BAGNICKI, of New York, N. Y.—*Improvement in Syringing Apparatus.*—Patent dated January 18, 1859.—In making this apparatus there is constructed in the lower part of a chair a tank A, divided by means of a very fine sieve *a* into two parts *c* and *d*. In the part *c* the water or other suitable fluid is poured through the spout *f*, and filters through the sieve *a* into the other part *d* of the tank, in which latter part a pump B is placed, by which the fluid is forced up and injected through a flexible tube *g* into the womb. Above the tank A another vessel D is placed, over which the person operated on sits, and which receives the waste, which is then allowed to run off at the back through an opening or cock *h*.

*Claim.*—The construction of a chair, substantially as described, and containing a pump, with an arrangement of the valve chambers, in the manner and for the purpose as specified.

No. 22,616.—JOHN BARKER and EDWARD W. BARKER, of Baltimore, Md.—*Improved Amalgamator.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We do not confine ourselves to the precise arrangement or form or construction of the parts as described, as other forms and arrangements may be used in carrying out the principles of our improvements.

We *claim*, first, the combination of a set of crushing or attrition rollers B B, with an upper and lower rubber, arranged substantially as described for the purpose set forth.

Second. We also claim introducing an independent current of water into the amalgamator, substantially as described, so as to flow around the lower end of the feed pipe, and meet and mingle with the inflowing current of material, for the purpose as set forth.

Third. In combination with the rollers we claim constructing the lower rubber hollow E, with openings to admit the quicksilver into the interior for the purpose set forth.

Fourth. Constructing the lower rubber with a vertical passage through its centre, arranged substantially as described for the purpose set forth.

Fifth. The combination of the concave plate T, arranged substantially as described, with the rollers, for the purpose of directing the inflowing current to the centre and between the rollers.

Sixth. Constructing recesses on the interior of the casing over the journals, arranged substantially as described for the purpose set forth.

No. 22,617.—JAMES F. BECKWITH and ADIN G. GAGE, of South Alabama, N. Y.—*Improvement in Seed Planters.*—Patent dated January 18, 1859.—By shutting the hand with the fingers at M, the connecting rod G acts directly upon the bar D, which also acts directly upon the seed slides C C, moving them backward for discharging the seed which falls into a furrow made by the tooth O, and is covered by the double scrapers I I. These scrapers are attached at their upper end by a bolt to the tooth O and swing loosely.

*Claim.*—The arrangement of the tooth O, discharge spout Z, coverers I, hoppers B B, frame-piece A A, lever F, and bar D, substantially in the manner and for the purpose fully set forth.

No. 22,618.—WILLIAM H. BELL, of Washington, D. C.—*Improvement in Self-Primers for Fire-Arms.*—Patent dated January 18, 1859.—The nature of this invention consists in combining with the plunger *i* and spring *k* that operate it, together with the screw *h* used for securing them in the hammer, a shield *f* for the reception of the caps in such manner that the whole shall be withdrawn from the hammer simultaneously, so that the caps may be inserted in the shield, and the whole replaced and secured in the hammer *a*; also in providing the side of the hammer *a* with a slot *m*, arranged at the front or discharging end of the magazine chamber *b*.

The inventor says: I *claim* first, the combination of the shield *f*, plunger *i*, spring *k*, and screw-head *h*, in the manner described, with the magazine-chamber *b*, for the purposes set forth.

Second. The arrangement and combination of the pin *n*, on the piston *i*, and slot *m*, in the shield *f*, with the slot *o*, in the side of the hammer, for the purpose specified.



Third. The removable guard-plate *q*, as arranged and operated for the purposes set forth.

No. 22,619.—PETER BORN, of New York, N. Y.—*Improved Sofa-Frame*.—Patent dated January 18, 1859.—This invention consists in constructing a form of wood *A* in such a manner that the complete frame of a sofa may be pressed and formed over it, said form being constructed of a number of parts, which are united by clamps *F*, fitting over dove-tailed projections *a*, so that the same may be removed when the frame has been finished.

*Claim*.—As a new and improved article of manufacture, a complete frame of a sofa made of thin layers of wood in the manner substantially as specified.

No. 22,620.—JULES JOSEPH HENRI BRIANCHON, of Paris, France.—*Improvement in Composition for Ornamenting Glass*.—Patent dated January 18, 1859.—The claim will explain the nature of this invention.

*Claim*.—The yellow coloring composed of resin, nitrate of uranium, essence of lavender, and the flux of bismuth; also the orange red coloring, composed of resin, nitrate of iron, essence of lavender, and the flux of bismuth; also the imitation gold coloring, composed of the above described orange red coloring and the yellow coloring mixed together, with additional parts of the preparation of uranium and iron; also the variegated prismatic coloring, composed of ammoniuret or cyanuret of gold or gold dye, turpentine, essence of lavender, the bismuth flux and uranium; also the mother of pearl coloring, composed of bismuth flux, the flux of lead, chloride of antimony, resin, lavender, and other essence, and colophony; all of the above colorings being made and applied in the manner and in proportion substantially as set forth.

No. 22,621.—REUBEN R. BROWN, of Buffalo, N. Y.—*Improvement in Lubricating Compounds*.—Patent dated January 18, 1858.—The inventor says: To make one gallon of this compound take three quarts of weak ley, one quarter of a pound of common bar soap, and two grains of saltpetre, and mix well together in a wooden vessel, then take one ounce of sulphur and one quart of common fish oil and grind the sulphur in the oil, and then mix all the ingredients together.

*Claim*.—A lubricator made of the ingredients and in the proportions substantially as set forth.

No. 22,622.—W. G. BULGIN, of West Jersey, Ill.—*Improvement in Seeding Machines*.—Patent dated January 18, 1859.—The object of this invention is to properly prepare the soil by levelling and pulverizing the same, and in distributing the seed in a uniform manner in the prepared soil.

*Claim*.—The rotary coulter *I*, leveller *F*, with share *H* attached, and harrow teeth *K*, arranged relatively with respect to each other and to the seed box *A*, provided with a suitable seed distributing device, so as to operate substantially as and for the purpose set forth.

No. 22,623.—ABNER L. BUTTERFIELD, of West Dummerston, Vt.—*Improved Wind-Wheel*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I am aware that collapsible sails for wind-wheels have been previously used, and I am also aware that valves have been employed and arranged similar to those shown and described; I therefore do not claim, broadly, the sails *E*, nor the valves.

But I *claim* attaching the sails *E* to the frames *D* of the arms *C*, substantially as shown, so as to permit of a self-lateral adjustment of the same, and using the catches *o* and slides *g*, with the cords attached, for respectively locking the sails and freeing them from the locks or catches substantially as described.

No. 22,624.—GEORGE CHURCHILL, of Hartford, Conn.—*Improvement in Belt-Clasps*.—Patent dated January 18, 1859.—The nature of this improvement consists in making a belt-clasp of two plates *A A*<sup>1</sup>, one of which is provided with pins *B*, which are designed to pass through the holes cut in the ends of the belt, and entering the holes in the other plate corresponding to the pins, and thus compressing the ends of the belt firmly between the plates.

*Claim*.—The combination of the plates *A A*<sup>1</sup>, pins *B*, screws *F*, as and for the purpose described.

No. 22,625.—JOHN CLARK, of Williamsburgh, N. Y.—*Improved Mode of Operating Window-Blinds*.—Patent dated January 18, 1859.—By turning the knob *h* the rack-bar *D* will be actuated, and the slats *C* opened, and closed, or turned, as desired. The friction attending the movement of the working parts is sufficient to prevent any casual movement of the slats, and the slats may be secured in a closed state, so that they cannot be turned at the outer side of the blind by inserting the pin *k* in the spindle or arbor *g*.

*Claim*.—Attaching toothed flanches *d*, or pinions, to the tenons *c*<sup>1</sup> of the slats *C*, and having the flanches or pinions gear into a sliding rack-bar *D*, placed in the stile *B* of the blind, and



actuated by the pinion *f* and supplemental rack-teeth *e*, or their equivalents, substantially as and for the purpose set forth.

No. 22,626.—SAMUEL COLT, of Hartford, Conn.—*Improved Mode of Coupling Gun-Stocks with Pistols*.—Patent dated January 18, 1859.—The neck piece  $B^1$  is so shaped as to fit over or embrace a portion of the stock, or handle *A*, of the pistol, while its forward extremities  $B^2$   $B^2$  run under shoulders formed by cutting away the lower portion on either side of the semi-spherical part  $C^1$  of the lock-frame, and over the holder pins *d d* which project from the said lock-frame.

*Claim*.—The neck-piece  $B^1$ , with its projecting end  $B^2$   $B^2$  passing under shoulders in the lock-frame, in combination with the holder-pins *d d*; and clamping-bar *f*, arranged and operating substantially as described for the purpose set forth.

No. 22,627.—SAMUEL COLT, of Hartford, Conn.—*Canteen Gun-Stock*.—Patent dated January 18, 1859.—The gun-stock *A* is made of hollow metal, or other suitable material, in which is formed a short neck or mouth *B*, having an internal or female screw cut on it to accommodate a screw-stopper *C*; said stopper is furnished with an India rubber or other suitable packing *i*, and is attached by a small swivel *c* to a short chain *d*, which is connected by means of a loop *a* to the neck of the stock.

*Claim*.—So constructing the stock of a gun that it shall constitute a canteen, substantially as described.

No. 22,628.—J. M. CONNEL, of Newark, Ohio.—*Improved Boot-Blacking Apparatus*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I make no claim to the construction of brushes of two sections, as shown in several patented knife-polishers.

But I *claim*, as an improvement on the patented boot-blacking machine of J. M. & J. Connel, the concave-edged self-adjusting brush-wheel *B* in combination with the spring foot-piece *F*, constructed, arranged, and operating as described.

No. 22,629.—G. D. COLTON, of Galesburg, Ill.—*Improvement in Ploughs*.—Patent dated January 18, 1859.—By pressing upon the lever *E*, as long as the pole *C* rests stationary upon the neck-yoke, the beam *D* will be elevated, and by raising the back end, the beam will be depressed; thus raising or lowering the point of the plough and making it run deeper or shallower, as the operator may desire.

*Claim*.—Combining and arranging together the beam *D*, the standards *d* and *e*, upright *a*, lever *E*, axle *B*, brace *Z*, bar *H*, and pole *C*; said pole reaching forward and resting upon the neck-yoke, in the manner and for the purpose specified.

No. 22,630.—JESSE CUNNINGHAM, of Marshall, Mo.—*Improvement in Cultivators*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim the reversible bar *J*, with a marker or wheel *g* attached, for such device has been previously used.

But I *claim* attaching the furrow shares *H* to a swinging frame formed of the shaft *E*, bar *F*, and arm *b*, placed in a mounted frame *A*, in combination with the buttons *C C*, provided with step-like projections *d* for regulating or adjusting the height or inclination of said share-frame, and consequently the depth of the furrows, substantially as described.

No. 22,631.—WILLIAM M. C. CUSHMAN, of Albany, N. Y.—*Improvement in Railroad Chairs*.—Patent dated January 18, 1859.—This invention consists in combining with an outside jaw, flanch, or rib *D*, a buttress *E E* at each end thereof, which jaw, flanch, or rib, shall project upward even with the top of the track rail, or beyond the top, for the purpose of receiving a part of the tread of the car-wheels, and thereby relieve the joint of the rail where two rails meet.

*Claim*.—The buttress *E E*, at each end of the outside jaw, flanch, or rib *D*, in combination with the top or bearing surface *c*, as and for the purposes described and set forth.

No. 22,632.—LEVI S. DEMING, of Newington, Conn.—*Improvement in Horse-Rakes*.—Patent dated January 18, 1859.—The end which is secured to the shaft *A* is bent at right angles, and is then bent into a circle, to give the required elasticity to the finger *B*. After the fingers are thus formed, the end prepared is put into a hole in the shaft or flange and so fitted and secured as not to allow of a sidewise motion, by means of a strip of wood *E* to hold them in place, and having bearer *e* to give support and additional elasticity to the fingers. *F* is a cam or notch-wheel secured to the shaft *A*. *G* is a lever which holds the rake from revolving.

*Claim*.—The combination of the fingers *B*, shaft or axle *A*, cam *F*, and lever *G*; these several parts being constructed, arranged, operated, and operating in the manner described, for the purpose specified.



No. 22,633.—L. J. DICKASON and JOHN FRAZEE, of Georgetown, Ohio.—*Improved Spoke-Machine*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We *claim*, first, the described mode of operating the cutter-frame J with its cutters K, and also the emery wheel *h* and its frame L, so as to throw them all clear of the spoke S, after the operation of twining and smoothing; that is to say, we claim the employment of the two arms R<sup>1</sup> R<sup>2</sup> upon the shaft R operated by means of a hand lever R<sup>3</sup>, in the manner and for the purposes set forth.

Second. We claim the adjustable spring-rests N<sup>1</sup> N<sup>2</sup> when arranged and operating in the manner and for the purposes set forth.

Third. We claim the spring-arm *n*, spring-catch *m*<sup>1</sup>, pitman *n*<sup>1</sup>, and bent lever *n*<sup>2</sup>, in combination with the lever K<sup>2</sup>, clutch I, and rod *l*; all arranged and operating so as to throw the pulley-wheel H in and out of gear with the shaft G, substantially in the manner and for the purposes set forth.

No. 22,634.—RICHARD DOBLE and M. ANGELO STARR, of Richmond, Ind.—*Improved Machine for Making Printer's Rules*.—Patent dated January 18, 1859.—The guide-bars J J have each attached two clamps *h h*, fitted with screws *i i*, to secure the rules which are passed through the said clamps. The arcs on the plates H H<sup>1</sup> H<sup>2</sup> H<sup>3</sup> are graduated in distances from their centres, and consequently from that face of the saw D, which is contiguous, to suit the various lengths of rules commonly used; and the radial lines are graduated according to the angles which they form with the faces of the saw.

*Claim*.—The combination of the graduated plates H H having arc-formed and radial graduations, and guide-bars J J, with their clamping-screws *g g*, and screw-clamps *h i h i*, the whole applied, arranged, and operating substantially as described, in relation to the saw D, for the purpose set forth.

No. 22,635.—WILLIAM H. DRAPER, of Greenfield, Mass.—*Improvement in File-Handles*.—Patent dated January 18, 1859.—The handle A is formed with a cylindrical socket or chamber *a* for the reception of a helical spring B, whose lower end rests on the bottom of the said chamber. The upper end of the spring B is fastened to a centering socket-piece C, formed with a conical or tapering recess *b*. On the handle is screwed a metallic ferrule D, within which a short tube E is screwed, such tube having hinged to its bore two tapering jaws F F, formed and arranged in the ferrule.

*Claim*.—The centralizing socket, or socket-piece and spring, in combination with the handle and the fastening-jaws, and their operated mechanism, applied within the said handle, the whole being made to operate substantially in the manner as described.

No. 22,636.—CHARLES ESCUDIER, of Pattersonville, La.—*Improvement in Bathing Apparatus*.—Patent dated January 18, 1859.—The boilers and furnace A B are placed on a table or stand, and by means of a small metal pipe bent and fixed to the faucet of the main boiler D, connecting the same to the steam-pipe. The stand L is made lower at one of its extremities, so that the water condensed in it tends towards it, from which it is taken out by a faucet P and received into a vase Q.

*Claim*.—The new application in bathing apparatus of two boilers and steam-pipe connected thereto, affording, when united, an apparatus for the application of whatever kind of bath may be desired.

No. 22,637.—JAMES D. FOSTER, of Montgomery, Ala.—*Improvement in Ox Yokes*.—Patent dated January 18, 1859.—This invention consists in forming each bow B of the yoke of four parts *a a b b*<sup>1</sup>, the two upper parts *a a* of each bow being permanently attached to the stock A, and the lower parts *b b*<sup>1</sup> attached to the upper parts by hinges or joints *c c*, so that the lower parts may be opened or distended to be readily fitted and secured on the necks of the animals, or removed therefrom.

*Claim*.—Constructing the bows B of four parts, *a a b b*<sup>1</sup>, the parts *a a* being permanently attached to the stock A, and the parts *b b*<sup>1</sup> attached by hinge-joints *c c* to the parts *a a*, and provided with a fastening C, substantially as and for the purpose set forth.

No. 22,638.—AMBROSE FOSTER and HARVEY BROWN, of New York, N. Y.—*Improvement in Machinery for Moving Cars on Railways*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We do not claim the moving of cars on railroads by stationary power and an endless rope or chain, for that is an old device.

But our improvement consists in the mode of attaching to and removing the cars by means of the devices set forth.

We *claim*, first, the rope-supporter H, constructed and arranged substantially in the manner and for the purposes set forth.

Second. We claim the sliding-rods E, with the coiled springs F attached, or their equivalent, for the use and purpose set forth.



Third. We claim the grab or catch G, constructed, arranged, and operated substantially in the manner and for the purposes set forth.

No. 22,639.—J. FRASER, of Rochester, N. Y.—*Improved Vegetable-Cutter*.—Patent dated January 18, 1859.—The hole through the bed B is larger than the rod K, and a groove *f* is provided in its side which receives the lip *i* or eccentric portion of the rod K; a thumb-piece *l* is attached to the rod, by turning which the bed B is moved on its axis *d* for the purpose of elevating the edge of the knife G more or less above the plane of A.

*Claim*.—The combination of the eccentric rod *k*, arranged substantially as described, with the pivoted or adjustable bed B, which bears the knife G, for the purposes specified.

No. 22,640.—HUGH GERRED, of Sparta, Ill.—*Improved Cattle-Pump*.—Patent dated January 18, 1859.—When the animal passes on the platform E towards the trough F, it will be depressed, and the bucket D raised; the water being discharged when it reaches the end of its upward movement in consequence of the clasp *d* striking against a cross-piece *a*\* in the framing C, and liberating the valve *c*, which opens and allows the water to pass into the spout G, by which it is conveyed into the trough F.

*Claim*.—The arrangement and combination of the guides *f*, bucket D, the latter having a valve *c*, clasp *d*, and spring *e*, the trough F, platform E, and wheels *m l i g*, as and for the purposes shown and described.

No. 22,641.—HENRY GOULDING, of San Francisco, Cal.—*Improved Steam-Valve*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, supplying the working cylinder of the engine or machine at each successive stroke with its impelling gas or vapor from reservoirs previously charged therewith, and under the control of a valve or valves, essentially as set forth, the same serving as a substitute for a cut-off to work the gas expansively, in the manner described.

Second. Operating a valve in part or in whole by the gas or steam, at full pressure, from the supply pipe acting to propel it in one direction, when the same is used in concert with an opposing force to the valve, produced by the expansion of the gas in its passage to or performance of its work, substantially as specified.

Third. The combination of the valve B and valve cylinder or case A, with its reservoirs E F, and the several inlets or outlets for action together, in the manner described, and whereby the one valve B is made to govern the ingress and egress of the gas to or from the reservoirs, as well as to control the inlet and exhaust of the working cylinder, as set forth.

No. 22,642.—RENSSELAER D. GRANGER, of Philadelphia, Pa.—*Improvement in Heating Apparatus*.—Patent dated January 18, 1859; antedated November 24, 1858.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim, broadly, an air-chamber situated in a casing and exposed to the action of the fire within the same, as such a device has been heretofore used.

But I *claim* combining the air-chamber C with the separate perforated chamber H, having an independent communication with the air, substantially as set forth, so that the said perforated chamber may serve the double purpose of consuming the gases arising from the ignited fuel, and of preventing the rapid destruction of the bottom of the chamber G by the action of the fire.

No. 22,643.—RENSSELAER D. GRANGER, of Philadelphia, Pa.—*Patent in Coal-Stoves*.—Patent dated January 18, 1859; antedated November 24, 1858.—The claim and engravings will explain the nature of this invention.

*Claim*.—Hanging within the stove, and immediately above the fire, a perforated chamber H, when so constructed and arranged that the air shall have free access to the interior of said chamber, and when the latter shall admit of being readily raised and lowered, or its position in regard to the fire otherwise altered, for the purpose specified.

No. 22,644.—ROBERT GRAY, of Anson, Me.—*Fish-Trap*.—Patent dated January 18, 1859.—The fish, in trying to pass along the stream, will enter the mouth of the trap, go along the throat X, press between the vibrating slats T T<sup>1</sup>, and enter the chamber V V V<sup>1</sup>, and not being able to proceed further, and attempting to return, they fall back into those parts of the chambers near *m n* or *py*, and thus fail to detect the throat by which they entered the chamber.

*Claim*.—The strainer, the vibrating slats T T<sup>1</sup>, and the V shaped chambers V V<sup>1</sup>, all in the manner and for the purposes specified.

No. 22,645.—BENJAMIN F. GRINNELL, of New York, N. Y.—*Fastening for a Breastpin, &c.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The permanent hook D and spring E, in combination with the hinged-pin C of a breastpin, or other article of jewelry, when the spring is so bent as to direct the pin, when



the latter is depressed, into the hollow of the hook; and when the spring and hook are otherwise arranged in respect to each other, substantially as set forth.

No. 22,646.—JOHN H. GRISCOM, of New York, N. Y.—*Improvement in House Ventilation*.—Patent dated January 18, 1859.—The nature of this invention consists in using a part or the whole of the heated air from the heater or hot air furnace of the house as the means of warming a flue or tube V S<sup>1</sup>, and thus converting it into a ventilating shaft.

*Claim*.—The employment of an auxiliary flue or tube, connecting the hot air flue with the ventilating flue in the manner and for the purpose proposed.

No. 22,647.—JOHN M. HALL, of Warrenton, Ga.—*Improvement in Cotton-Cultivators*.—Patent dated January 18, 1859.—As the machine is drawn along, the scrapers K cut off the excess of plants in the land, leaving only a row between them, and the driving wheels A impart a rotary motion to the bevel wheel C, which, meshing into the wheel D, causes the shaft E and the hoc-wheel G to revolve the hoes H, chop out the cotton in a transverse direction, and thus leave what remains in hills.

*Claim*.—In combination with the series of adjustable revolving hoes, the scrapers K K, in advance of them, substantially in the manner and for the purpose described.

No. 22,648.—LYMAN P. HARRIS, of Mansfield, Ohio.—*Improvement in Apparatus for Evaporating Saccharine Juices*.—Patent dated January 18, 1859.—The nature of this invention consists in providing the channelled evaporator 10 and heater 8 with a portable furnace A and fire-place B, so constructed as to afford an easy and ready control over the inclination of the furnace and evaporator; also of providing the heater and evaporator with one or more valves 1 and strainers 2.

The inventor says: I *claim*, first, the stationary, yet portable, fire-place B, with the stops C C and the springs H.

Second. I claim the portable and inclined furnace A, and its combination with the stationary fire-place.

Third. I claim the handles M and their springs L, and their combination with the springs H; also the rod F, or its equivalent.

Fourth. I claim the racks O and their combination; also the movable flue or plate P and its rod R, and their combination with the movable furnace A and stationary fire-place B.

Fifth. I do not claim the heater 8, nor evaporator 10, as my invention; but I claim, as an improvement, the application of one or more strainers 2 and valves 1 to the heater and evaporator.

No. 22,649.—THEODORE HEERMAN's, of Mitchellville, Tenn.—*Improvement in Coffee-Roasters*.—Patent dated January 18, 1859.—As the cylinder revolves the coffee is picked up by the plate D or shelf and elevated, and when said plate or shelf stands over, or nearly over, the axle, the coffee descends on the inclined plane and passes to the end of the cylinder, from which position it is elevated by the plate or shelf D<sup>1</sup>.

The inventor says: I *claim*, first, the specified arrangement of the plates or shelves D D, for the purposes set forth.

Second. The combination of a window or windows F in one or both ends of a coffee-roaster, with the inclined elevating plates or shelves, substantially as and for the purposes set forth.

No. 22,650.—JOHN L. HOAG, of Genoa, Ill.—*Improvement in Corn-Planters*.—Patent dated January 18, 1859.—The driver by operating the lever *j* by hand may elevate the shares when desired, so that they will be above the surface of the ground, and by applying his foot to the lever K the distributing device will be rendered inoperative, and the machine may be drawn from place to place the same as an ordinary vehicle.

The inventor says: I *claim* the arrangement and combination of the arm *g*, lever K, and bar H, said lever serving as an oblique brace to hold the bar H, (as is shown in fig. 2,) as and for the purposes set forth.

I also claim the arrangement and combination of the lever *h*, slide *i*, lever *j*, upright Q, bar P, and swinging-frames O M, as and for the purposes shown and described.

No. 22,651.—MARK W. HOUSE, of Cleveland, Ohio.—*Improvement in Revolving-Harrows*.—Patent dated January 18, 1859.—The wheels D D<sup>1</sup> are attached to the frame A by means of the axle-boxes F and the spindle G. In the central axis of spindle G a female screw-thread is cut for the reception of screw *i*. This screw confines the cap *e* on the top of the spindle G and the box *d*.

*Claim*.—The combination with the spindle G of a revolving-harrow, of the cap *e*, and box *d*, for the purpose, and substantially in the manner described.

No. 22,652.—JAMES HUGHES and NATHAN STONECIPHER, of Cambridge, Ind.—*Improvement in Corn-Planters*.—Patent dated January 18, 1859.—D is a hollow-scorer or drill-tooth through which seed is deposited. The seed-box contains two hoppers *e e*<sup>1</sup>, separated by a partition



$e^2$ . The slide F has two apertures  $ff^1$ , beneath the centre of the partition  $e^2$  a passage  $d$  leads into the scorer D.  $G G^1$  are cut-off brushes of any approved construction. H is a gravitating trigger, operated by the thumb of the driver, so as to impart motion to the slide F by means of connecting rods I.

*Claim.*—The detached arrangements of the gravitating trigger H, connecting rods I, perforated slide F, hoppers  $e$  and  $e^1$ , and scorer D, operating as described, to deposit seed at each pressure and relaxation of the thumb of the driver.

No. 22,653.—JOHN H. IRWIN, of Carlinsville, Ill.—*Improved Cattle Pump.*—Patent dated January 18, 1859.—The cattle walk upon a platform that is capable of rising and falling, and which is connected by means of ropes or chains to a drum C, that has a pulley  $D^1$  of comparatively large diameter placed loosely upon it. The weight of the cattle depresses the platform  $BB^1$ , rotates the drum C and pulley D, which can only move in one direction, and so elevates the water.

*Claim.*—The platforms  $B B^1$ , weight F, drum C, and pulley  $D^1$ , placed loosely on the drum C, and connecting with it by the pull  $e$  and ratchet D, the whole being combined and arranged to operate as and for the purpose set forth.

No. 22,654.—WILLIAM JOHNSTON and HUGH FORBES, of Brooklyn, N. Y.—*Improvement in Composition for Lining Metal Pipes.*—Patent dated January 18, 1859.—The nature of this invention consists in the lining of lead or other metallic pipes for carrying water by a composition of gutta percha and bitumen.

*Claim.*—The composition of matter, substantially as set forth, for lining metallic or other pipes, or surfaces of a similar kind, substantially as set forth.

No. 22,655.—WILLIAM F. KETCHUM, of Buffalo, N. Y.—*Improvement in Harvesters.*—Patent dated January 18, 1859. The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim the use of a cap, or an opening in the guard-tooth, generally to prevent clogging, but I *claim* the combination of the openings in the guard-tooth below the cutters, with the caps above the cutters D, substantially as described.

No. 22,656.—HENRY A. LANDRY, of Camden, N. J., assignor to A. B. STOUGHTON, of Washington, D. C., assignor to F. G. RAMFORD, of Troy, N. Y.—*Improvement in Railroad Chairs.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The improvement of a projecting piece  $a$ , of metal either cast on the railroad chair, or made of wrought-iron or steel, and affixed and rising up alongside of the rails on railroads where two rails meet, and of sufficient height to receive all or a part of the weight of the machinery, while passing over that particular part of the rails as described, disclaiming any right to any particular form or pattern of chair to which my improvement may be applied.

No. 22,657.—WILLIAM LAYLAND, of Mixerville, Ind.—*Improvement in Car-Couplings.*—Patent dated January 18, 1859.—When it is required to uncouple the cars the lever I C will be depressed, by means of which the bolt  $c$ , working in the support M, will be turned toward the car, and the outer end of the clevis N elevated free from the latch T; when it is required to couple the cars, the clevis M rides upon the latch T until it falls over the catch.

*Claim.*—The employment of the combined adjustable latch and catch F T, when constructed and operated substantially as described for the purposes set forth.

No. 22,658.—JOSEPH LEEDS, of Philadelphia, Pa.—*Improvement in Ventilating Registers.*—Patent dated January 18, 1859.—The nature of this invention consists in arranging the swing valve A of a register in such a manner as to introduce hot air into an apartment through said register, or entirely or partially close it against such ingress.

*Claim.*—In combination with a register, the hanging of the valve A, by its centre, as shown so as to make said valve a regulator or cut-off to the ascending current of air from N to M, and at the same time a regulator of the ingress or egress of air to or from an apartment, and thus causing a register to serve the purpose of a ventilator, as described.

No. 22,659.—FERDINAND LEHR, of Hoboken, N. J.—*Improved machine for Bending Umbrella Ribs.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, a reciprocating pincer, taking the wire from a fixed, and drawing the same through the machine, dropping from said wire, and then returning below to its previous position, so as to be out of the way of the bending or coiling of the wire into eyes or loops, as set forth.

Second. I claim attaching said pincers on a travelling carriage by one side thereof, while the power for sliding said pincers lengthwise of the machine is applied to the other jaw, whereby the clamping and releasing of the wire is effected by the act of moving said pincers, as set forth.

Third. I claim attaching one end of said pincers on a stud or shaft, in combination with



the stops 6 and 7, spring 9, and slotted connecting link *f*, whereby the sliding, clamping, depressing, and elevating motions are given to the pincers by the reciprocations of said rod *f*, as set forth.

Fourth. I claim the shear *i i*, receiving the compound motion set forth from the cams *h* and 10, in the manner and for the purpose specified.

Fifth. I claim the clamping-levers *k k*<sup>1</sup>, in combination with the ledges 13 14, and shafts *p p*<sup>1</sup>, that press against and hold the wire while the loops are formed as set forth.

Sixth. I claim the mandrels, in combination with the turning shafts and stubs, when the said mandrels are projected from the blocks, or their equivalents, for the wire to be bent around the same, to form the loops or eyes in the spokes or ribs, and withdrawn from said eyes when the same have been bent, substantially as set forth.

Seventh. I claim the arrangement of the sliding-bar *l*, and the connections therefrom to the clamping-levers *k k*<sup>1</sup>, and slides *m m*<sup>1</sup>, whereby the clamps and mandrels *z* are simultaneously actuated as set forth.

Eighth. I claim the sliding-stocks *o o*, carrying the shafts *p*, and turning stubs, for allowing the withdrawal of said stubs out of the way of the travelling pincers, substantially as set forth, and in combination therewith, I claim the bar *n*<sup>1</sup>, and connections therefrom to said stocks *o o*, for communicating endwise motion to said stocks, for the purpose, and as specified.

Ninth. I claim the sliding-mandrel *z*<sup>1</sup>, and turning shaft *p*<sup>2</sup>, connected as set forth in combination with the jaws 32, or their equivalents, for turning the eye or loop in the end of the spoke, or rib, as described and shown.

Tenth. I claim the arrangement of the cranks *q* and *t*, and slotted connecting rods *q*<sup>1</sup> and *t*<sup>1</sup>, for communicating motion successively to the slides *r* and *u*<sup>1</sup>, and from the same to the turning-stubs or loop formers, as set forth.

No. 22,660.—JOSEPH MANSFIELD, of Jefferson, Wis.—*Improvement in Milk Coolers*.—Patent dated January 18, 1859.—The water enters by the pipe *W* at the lowest part of the tube, and passes upward, and the milk being poured in at the top passes down through all the tubes *T T T*, until the space below the disk *D*<sup>2</sup> is filled.

*Claim*.—The improved portable milk-cooler, when constructed in the manner and for the purpose set forth.

No. 22,661.—RICHARD MANSLEY, of Philadelphia, Pa.—*Improvement in Hemp-Brakes*.—Patent dated January 18, 1859.—This invention consists in operating the slide by means of an arm *G*, cam *H*, and spring *J*, the spring being so graduated that when the slide has been impelled to the limit of its outward movement it shall instantly recede, thereby effectually opening the fibres and shattering the ligneous pith of the hemp.

*Claim*.—Operating slide *D*, with its transverse bars by the cam *H*, arm *G*, and spring *J*, when arranged substantially as described, and when the said spring is so graduated that the slide shall instantly recede after reaching the limit of its outward movement, as and for the purpose set forth.

No. 22,662.—RICHARD MANSLEY, of Philadelphia, Pa.—*Improvement in Machinery for Tarring Oakum*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The perforated vessel *F*, or its equivalent, placed within a stationary vessel *D*, which contains the compound for tarring oakum, a jet of steam being admitted to the stationary vessel, while a reciprocating motion is imparted to the perforated vessel, as and for the purpose set forth.

No. 22,663.—BENJAMIN A. MASON, of Newport, R. I.—*Improved Horse Shoe Nail Machine*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the combination of the four hammers *B B B*<sup>1</sup> *B*<sup>1</sup>, arranged in pairs, the two constituting each pair being mounted to strike simultaneously, and in opposite directions, and the two pairs working at right angles with each other, or nearly so, substantially as described and for the purpose set forth.

I also claim the employment of an elastic bush, in the connection of the hammers with the cranks by which they are operated, substantially as and for the purpose set forth.

No. 22,664.—CHARLES MONSON, of New Haven, Conn.—*Improvement in Holders for Lamps*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the mode or means, substantially specified, of counterbalancing the system of levers or lazy-tongs *D D*, or the same and one or more articles suspended from, or supported by them, and this, whether the counterbalance weight be applied so as to push or pull on the levers of the lazy-tongs, as explained.

I also claim the method, substantially as described, of steadying the tube or rod, or its equivalent, suspended or extending from the lower termination of the system of crossed



levers or lazy-tongs, viz: by the collar or slide *p*, the levers *o o*, and the connections *f g*, applied to the part *e* and the lazy-tongs, and made to operate essentially as specified.

No. 22,665.—RICHARD MONTGOMERY, of New York, N. Y.—*Improved Mode of Constructing a Combined Street Pavement and Railroad Track*.—Patent dated January 18, 1859.—The arches A B C D consist of parallel corrugations *a a a*, which are intersected by two or more rail tracks *b b*, the rails and corrugations being cast in one piece. The bottom part of the arches is provided with projections *d d*, for the purpose of strengthening the central portion of the arches between the rails *b b*.

*Claim*.—A combined street pavement and railroad track constructed substantially as shown and described.

No. 22,666.—HENRY S. NORTH, of Middletown, and EDWARD SAVAGE, of Cromwell, Conn.—*Improvement in Revolving Fire-Arms*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We are aware that many applications of packing rings or thimbles have been made to breech-loading fire-arms, to be acted upon by the force of the explosion, to close the joint between the chamber and the breech, and the application has been made to fire-arms of the same kind, of a thimble to be acted upon by a similar agency, to close a joint between the chamber and barrel. We therefore disclaim entirely the use of rings or thimbles when not applied as herein described, in combination with a rotating chambered cylinder, having also a longitudinal movement.

But we *claim*, first, the employment of the movable, cylindrical bushing-rings or thimbles *b b*, applied substantially as herein described within cavities *i i*, formed in the front portions of the chambers of a rotating chambered breech, which has a longitudinal movement to operate and be operated upon, substantially as specified in combination with a valve-like seat *e e*, which is formed upon the rear of the barrel.

Second. The combination of the slide F, working in the bottom of the cylinder frame A, and the double jointed trigger-guard D E, part of which constitutes also a part of the lever, through whose agency the rotation of the cylinder and cocking of the hammer are effected, the whole operating substantially as and for the purpose specified.

No. 22,667.—JOHN K. O'NEIL, of Kingston, N. Y.—*Improved Washboard*.—Patent dated January 18, 1859.—To the lower rod or edge of the rubber B cords *d d* are attached, and extend thence upward into an inclosed space D, at the top of the washboard A, where they are wound around pulleys *f f*, on a shaft C, which is provided with a coiled spring *g*, for the purpose of keeping the said cords *d d* wound around the pulleys.

*Claim*.—The flexible rubber B, constructed as described, and combined with the washboard A, so that its upward movement shall be assisted by a spring, or its equivalent, arranged substantially as specified.

No. 22,668.—BENJAMIN PAYN, of Albany, N. Y.—*Improvement in Coloring and Curing Tobacco Stems*.—Patent dated January 18, 1859.—The stems, stripped from the leaves in the usual manner, are placed loosely upon a grated platform in a close room; steam is then admitted under the grated platform, and passes freely through the heap of stems, and by its action dissolves the thick gummy juices they contain.

*Claim*.—Coloring and curing tobacco stems at one operation, by subjecting them to the action of steam, as and for the purposes set forth.

No. 22,669.—THOMAS PAYNE, of Ridgefield, Conn.—*Improved Clothes-Sprinkler*.—Patent dated January 18, 1859.—To fill the clothes-sprinkler with water, the nozzle of the pitcher may be made to rest upon the stopper *d*, the stopper is pressed down by the weight of the pitcher, the orifice D is opened, and the water can be poured in. On removing the pitcher the orifice D is closed by the action of the spring E.

*Claim*.—A clothes-sprinkler, having an interior self closing stopper, and made and operating substantially in the manner and for the purpose set forth.

No. 22,670.—SAMUEL PIERCE, of Troy, N. Y.—*Improvement in Furnaces*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the series of detachable or removable heat radiating plates J J, constructed with points or stems *a a*, projecting from their surfaces, both of the surfaces being radiating surfaces, in the manner and for the purposes substantially as described.

Also, in combination with a horizontal fire-box and fire-chamber, and the outer casing K, I claim a series of plain heat radiating plates, or a series of corrugated heat radiating plates, arranged substantially in the manner and for the purposes as described.

No. 22,671.—SAMUEL F. PRATT, of Roxbury, Mass.—*Improved Carpet-Sweeper*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, in combination with the case A, and the rotary brush B, of



carpet-sweeper, a serrated or toothed clearer E, applied so as to cleanse the brush during and by its revolutions.

I also claim the arrangement of serrated or toothed clearers on opposite sides of the brush, in order that it may be cleansed while being rotated in either direction.

I also claim the arrangement of the serrated clearer in the case of the carpet-sweeper in such manner that the said clearer shall form part of, or be maintained by the dust-receptacle. I do not claim the application of a single elastic-tired driving-wheel to the driving-wheel affixed on the brush shaft; but claim the arrangement of two of the elastic-tired wheels on opposite sides of the driving-wheel of the brush shaft, as described, and so applying the said shaft in the case and to the fork of the handle, as to enable the brush-wheel to be forced in close contact with its drivers, not only when the machine is moved in either direction, but by the force exerted through the handle, and to so move the machine, the same insuring the rotary motion of the brush, whenever the machine may be in the act of being moved on and over a carpet.

No. 22,672.—R. B. PRINDLE, of Coventry, N. Y.—*Improved Mode of Attaching Thills to Vehicles.*—Patent dated January 18, 1859.—In the engravings C is the bolt or pin to hold the thills or shafts B B in their places, and is made round with a flange *c* projecting on one side and is fitted into the slot *e*, in the portion of the hinge *b b*, that is made fast to the shaft and turns with it, in one side of the cock-eye *a* there is a corresponding slot *f* to admit the flange bolt or pin being easily inserted.

*Claim.*—The flange on the bolt or pin so made and inserted that it cannot be removed when the joint is varied from the position in which the bolt is introduced.

No. 22,673.—WILLIAM W. PURDY, of Liverpool, Ohio.—*Improvement in Rolling and Pressing Wool.*—Patent dated January 18, 1859.—The roller is made in two or more sections I and I<sup>1</sup>, and the straps F are attached to the several sections of the roller by means of hooks H, the sections of the roller may be worked independent of each other, and they are provided with pins or catches so that they may be connected together and form one roller.

*Claim.*—The combination of the sectional rollers I and I<sup>1</sup>, with the strap F, and breast-piece E, for the purpose of rolling and pressing fleeces of wool, as described.

No. 22,674.—JOHN W. RIGGS, of New York, N. Y.—*Improvement in Truss Springs.*—Patent dated January 18, 1859.—This improvement consists in coating the steel or other metal of the spring with a composition which has elasticity and a sufficient degree of hardness, and which is also anti-corrosive in its character.

*Claim.*—Constructing springs for trusses in the manner and for the purposes substantially as set forth.

No. 22,675.—E. K. ROOT, of Hartford, Conn.—*Improved Method of Packing Cartridges.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: Not wishing to confine myself to any exact shape of package, peculiar mechanical construction of box, or arrangement of the cartridges and caps, what I *claim* is putting up cartridges between two blocks A A<sup>1</sup>, or their equivalents, substantially as described.

I also claim forming in the package or holder, as described, a receptacle or receptacles for containing caps or other primings, substantially as described.

No. 22,676.—JOHN F. SEAMAN, of Clyde, New York.—*Improvement in Seeding Machines.*—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim the distributing device formed of seed cells *f*, made in a cylindrical head *e*, in connection with cut-off brushes *h*, for this is an old and well known device.

Neither do I claim, broadly, rotating covering shares, irrespective of the construction and arrangement shown.

What I *claim* is operating the seed-distributing device by means of the part *b*, of the handle C<sup>1</sup>, attached by pivot *d* to the other part *c* of said handle, and connected at its lower end to the shaft E, by a cord or chain *i*, the above parts being used in connection with the spring F, attached directly to the other handle C of the implement, and to the shaft E, by a card or chain *k*, the whole being arranged substantially as and for the purpose set forth.

No. 22,677.—SOLOMON SHETTER, of Allegheny, Penn.—*Improved Horse-Shoe Machine.*—Patent dated January 18, 1859.—The nature of this invention consists in an arrangement of a sliding table, roll, shears, swage, levers, cams, springs, clamps, friction rollers, and lifter, all of which are arranged and combined for the purpose of making horse-shoes.

The inventor says: I *claim*, first, the curved arms *w* 1, of clamps *s*, moved and operated



by the friction rollers 2, and the backward and forward movements of table *c*, when clamps are used in connection with the dies *t* and *w*, as described and for the purpose set forth.

Second. The use of the flexible strip *n*, for the purpose of operating the clearer *u*, as described and for the purpose set forth.

Third. The arrangement on the upper surface of table *c*, of dies *t* and *w*, springs *x*, the under jaw *v* of the shears and the clearer *u*, when used and operated in connection with the clamps *s*, friction rollers 2, roll *t* 1, shear *d*, and swage *f*, as described and for the purposes set forth.

No. 22,678.—STEPHEN WILLIAM SMITH, of Brooklyn, N. Y.—*Improved Sweeping-Machine*.—Patent dated January 18, 1859.—Motion being given to the machine in the direction from left to right, the traction wheel E will bear upon the surface to be swept and cause the gear F to rotate the pinion G, and consequently the brush in the opposite direction, and the rapid revolutions of the brush will take up the dirt and dust and deposit it in the dirt pan J.

The inventor says: I *claim*, first, the combination of the gears F and G with the driving wheel, constructed and operating substantially as described and for the purposes specified.

Second. The method of adjusting the brush by the plate K, which admits of both vertical and lateral adjustment, as described and specified.

Third. I also claim preventing the escape and rising of the dust, by means of the flexible curtain L, arranged and operating substantially as described and specified.

No. 22,679.—BENJAMIN F. SMITH, of New York, N. Y.—*Improvement in Manufacture of White Lead*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the manner of filling the chamber with metallic lead by means of the open work tables or racks *a*, in which the lead in detached pieces rests, arranged one above the other, in successive and close series, substantially as described, and whereby a more thorough and equal circulation of the fumes or gases amongst the lead is produced.

I also claim constructing the converting chamber A with an inclined bottom, substantially as and for the purposes set forth.

I also claim the method described of extracting from the converting chamber the carbonate of lead, and other incidental products, by means of a current or currents of water passing through said chamber from top and bottom, substantially in the manner and for the objects set forth.

I also claim subjecting the carbonate of lead and other incidental products, previous to their extraction from the converting chamber, to the action of steam, substantially in the manner and for the purpose specified.

No. 22,680.—FERDINAND M. SOFGE, of Columbus, Ga.—*Improvement in Horse-Power*.—Patent dated January 18, 1859.—The nature of this invention consists in constructing the wheel A in such a manner as to support the wheel B without clamping the cogs in wheels A and B.

*Claim*.—The combination of the cogged wheel A, having the supporting flange No. 1 and the wheel B, with corresponding cogs and bearing, revolving upon the supporting ring I; the whole constructed and operating substantially as and for the purpose set forth.

No. 22,681.—P. P. STEWART, of Troy, N. Y.—*Improvement in Cooking-Stoves*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, in combination with a stove, such as described, making the front plate *c* of the oven open with doors, and an apron *l* to receive and hold a tin kitchen or roaster, substantially as specified, that the heat radiated by the front plate of the fire-chamber may be aided by the heat radiated by all the oven-plates, as specified, when combined with an end door, whereby the draft may be controlled without the aid, and independent of the front doors. And I also claim the boiler, having a removable cover and two inclined flues, which are separate at the lower end, united into one at the top to connect with the chimney, substantially as described, in arrangement with the exit-flue space, to which the boiler is fitted, and into which the gaseous products of combustion are discharged from the series of direct and return-flues, substantially as and for the purpose specified.

No. 22,682.—W. M. WAGGONER, of Middletown, Ind.—*Improvement in Devices for Gathering Grain into Gavels*.—Patent dated January 18, 1859.—This invention consists in having stationary and adjustable fingers E E G G attached to a frame-work mounted on wheels and provided with handles A A, the parts being so arranged that the operator may shove the device along and underneath a windrow of grain, and gather the same into gavels and bind each gavel into a sheaf.

*Claim*.—The stationary fingers E E G G and the fly or gathering fingers H H, attached to a suitable framing or stanchions, mounted on wheels and arranged to operate substantially as and for the purposes set forth.



No. 22,683.—LOUIS B. WAKEMAN, of Baltimore, Md.—*Improvement in Devices for Reefing Sails*.—Patent dated January 18, 1859.—The manner of working this improvement is as follows: To take the sail in, let go the standing and rolling halyards  $d^2 d^1$ , keeping taut the windlass-ropes  $d d$ , when the yard will descend by its own weight, winding the rolling halyard  $d^1$  with the sail on the yard.

The inventor says: I *claim* the employment of the smooth surfaced clamp  $E E$ , as described, when in combination with the forked screw-bolt 5, or its equivalent, carrying the blocks through which the rolling halyards  $d^1 d^1$  pass for the purposes set forth.

I also claim giving direction to windlass-ropes  $d d$ , by the bent arm  $b$ , in combination with the clamp  $E E$  and forked screw-bolt 5, when fitted with an ordinary block, operating in the manner and for the purposes set forth.

No. 22,684.—WILLIAM N. WHITELY AND ANDREW WHITELY, of Springfield, Ohio.—*Improvement in Harvesters*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We *claim* a finger so constructed that the slot or opening above the cutters  $D$  shall increase in capacity from front to rear, in combination with the clearing projection described, passing directly into the rear corner of said opening in the manner described for the purpose specified.

We also claim forming the clearing projections  $d$  of a bent extension of the cutter, substantially as described.

No. 22,685.—JOHN YOUNG, of West Galway, N. Y.—*Improvement in Railroad Chairs*.—Patent dated January 18, 1859.—The chair consists of two parts,  $a b$  and  $a^1$ . The former consisting of a double branched plate  $b$ , from whose arms rise the bearing pieces  $a$ . By drawing the ends  $e$  toward each other, the inclinations of the bearing faces of  $a a$  are altered so as to press firmly against two rails which depart from a straight line.

*Claim*.—The combination of bearing surfaces  $a$ , capable of forming any desired angle with each other, and the securing portion  $a^1$  of the chair, substantially as and for the purpose set forth.

No. 22,686.—JOSEPH BLOOM, of Philadelphia, Pa., assignor to R. E. ROGERS, of said Philadelphia.—*Improvement in Umbrella Frames*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the bow or rib  $c$ , constructed substantially as described. I am aware that the bow or rib and the brace or sustaining rod have been attached to collars upon the standard by a piece of metal having an enlarged end affixed to the end of the bow or rib, and a like piece of metal affixed to the end of the brace, the enlarged end fitting into a slit of a sheet metal collar, the flange of which must be swaged down upon the enlarged end in order to hold it in place, and I therefore do not claim this method; but I claim connecting the bow or rib and the brace  $d$  or sustaining rod to the collars  $ff$  upon the stem or standard  $g g$  by the means set forth. I am also aware that the end of the brace or sustaining rod has been connected to the bow or rib by the end of the brace being riveted to a band, which may be sprung into a groove in the inner surface of the bow or rib, and I therefore do not claim this method of connecting the two parts here named; but I claim connecting the brace or sustaining rod to the bow or rib by the spring-board  $e$  embracing the bow as set forth.

No. 22,687.—FRANZ ANTON LOHAGE, of Unna, Prussia, assignor to EDMUND LEOPOLD BENZON, of Boston, Mass.—*Improvement in the Manufacture of Steel*.—Patent dated January 18, 1859.—The claim will explain the nature of this invention.

The inventor says: I would observe that the commencement of the process—that is, the fusing and boiling of the pig iron, is similar to the operation usually carried on in the puddling furnace in the manufacture of wrought iron. I do not, therefore, intend to claim such part of the process.

But I *claim* regulating the heat and stopping the decarbonization of the fused mass of metal in the finishing process in the puddling or reverberatory furnace, as set forth, before it becomes converted into malleable or wrought iron, and whereby I obtain steel in the manner specified.

No. 22,688.—NELSON ORCUTT, of Binghamton, N. Y., assignor to Himself and G. W. GREGORY, of said Binghamton.—*Improved Paddle-Wheel*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The centrally suspended paddle  $c$ , or bucket, without any stop, means, difference of area or of weight for holding it in a working position, but left entirely to the action of the forces exerted upon it during the revolution of the wheel, as set forth.

No. 22,689.—HAMILTON E. SMITH, of Philadelphia, Pa., assignor to Himself, D. B. NELSON, of Cortland County, N. Y., and JOHN L. MYERS, of Chemung County, N. Y.—*Improved Grain, Fan, and Corn Shelter*.—Patent dated January 18, 1859.—The claim and engravings will explain the nature of this invention.



The inventor says: I do not claim, broadly, combining a grain-fan and a corn-sheller in one instrument. I claim arranging the spiked roller C and slotted shield D, of a corn-sheller, on the frame of a grain-fan, in respect to, and in combination with, the sieve-frame E, blower G, and inclined plane J, of the said grain-fan, in the manner herein described, so that the said blower, sieve-frame, and inclined plane, may serve the purpose of separating the cobs from the shelled kernels of corn, and the latter from the chaff and other refuse.

No. 22,690.—CYRUS B. THAYER, of Boston, Mass., assignor to Himself and CHARLES ROBINSON, of Cambridgeport, Mass.—*Instrument for Turning the Leaves of Music-Books, &c.*—Patent dated January 18, 1859.—If the leaves to be turned are sheet-music, the backs of the leaves are placed between the clamp-jaws C D, and secured therein by means of the eccentric I. Each leaf to be turned is then placed respectively between a pair of the cords E E, and the upper end of said cords are all placed in the notch b, at the top of the back B. When they are thus arranged, the escapement-catch H is unsprung from the rod F by pressing it downward with the hand.

The inventor says: I claim the double holding cords E E E, elastic springing cords G G G, or their equivalents, back, or catch-band B, provided with clamps C D and notch, and the curved concentric rod or way F, arranged and operating in connection with, and in relation to, each other, substantially in the manner and for the purpose specified.

I also claim the escapement-catch H, constructed, arranged, and operating in connection with the curved rod F and thimbles of the holding cords E E E, substantially as described.

No. 22,691.—J. C. APPENZELLER, of Cincinnati, Ohio.—*Improvement in Treatment of Fatty Acids*—Patent dated January 25, 1859.—The tank I is for the purpose of first treating the fatty matters with steam, and afterwards, by the application of heat to the exterior of the tank, which contains a rotary stirrer L M, keeping the fatty matters and alkalies constantly agitated during the process of saponification.

The inventor says: I claim as my invention, after subjecting the mixture for a time to the direct action of steam, shutting off the steam from it, and raising its temperature by the application of heat to the exterior of the vessel, substantially as described.

No. 22,692.—ROBERT BAILEY, of Troy, N. Y.—*Improvement in Valves for Steam-Engines.*—Patent dated January 25, 1859.—The puppet-valves of a steam-engine are, in this invention, constructed with hollow tubular stems, fitting with stuffing boxes G directly to the induction and eduction pipes of the engine, and making communication directly through their interiors and around the exteriors of their seats between the pipes and the cylinder, thus making them balanced valves.

The inventor says: I claim the arrangement and combination of the tubular valve I, seat C, induction-pipe D, eduction-valve E, levers H M, and cams J J N, substantially as and for the purpose shown and described.

No. 22,693.—W. M. BAKER, of Walpole, Ind.—*Improvement in Car-Seats and Couches.*—Patent dated January 25, 1859.—This invention consists in having an upright rod I placed at each end or side of an ordinary reversible car-seat, and having a supplemental seat and couch fitted between the rods, and allowed to slide up and down on them, these parts being used in connection with the curtains and a sliding couch.

The inventor says: I claim, first, the arrangement and combination of the boards G F, arms i, curved bar e, legs K, fenders l, slide E, seats B, and rods C, as shown and described.

Second. The arrangement and combination of the curtain H, the seat-backs D, drums Z, weights v, curtains u, and rod I, as shown and described, so that when the rod I descends the curtain u will fall and the curtain H rise; and when the rod I is released, all the curtains will be simultaneously rolled up.

No. 22,694.—GERARD BANCKER, of New York, N. Y.—*Improvement in Brick-Machines.*—Patent dated January 25, 1859.—The nature of this invention consists in the mode of constructing a dry pressing, brick-forming machine, by the arrangement and use of a horizontal rotary table C, having in it, transversely of its axis, a moulding box G.

The inventor says: I claim, first, the combination of the adjustable plunger K with the side-rods L, and rods  $j^1$  and  $j^2$  of the rotating mould-box, for operating the compressors, in the manner described, and for the purposes specified.

Second. I also claim the use of the cleft Q, in combination with the rotating moulding box G and semi-circular stationary cap-plate N, substantially as described and for the purposes set forth.

Third. I also claim the use of an elevator plunger R, operating as set forth, in combination with the rectangular rotating mould-box G, adjustable compressors  $H^1$  and  $H^2$ , and cap-plate N, as a device for moulding and compressing clay into bricks, and discharging the same therefrom.



No. 22,695.—JOSEPH BECKEL, of New York, N. Y.—*Apparatus for Displaying Stereoscopic Pictures.*—Patent dated January 25, 1859.—The prism *a a a* has journals which revolve in bearings in the side of the box, and is turned by means of the handle *B*. The pictures are arranged in an endless chain *b b*, and pass over the prism *a a a* as it is turned. The pads 1, 2, 3, &c., cause the outer edges of the pictures to form a larger arc, so that the whole series will conform to the shape of the concave *D d D*.

The inventor says: I *claim*, first, in combination with an endless chain of pictures constructed and arranged as described, the revolving prism *a a a*, arranged and operating as described.

Second. The rest or stop *C*, arranged and operating as specified.

Third. The concave *D d D*, arranged and operating in the manner described.

Fourth. The pads or cushions 1, 2, 3, 4, &c., arranged and operating as specified.

No. 22,696.—W. H. BENSON, of Wetumpka, Ala.—*Improvement in Wind-Wheels.*—Patent dated January 25, 1859.—This wheel is constructed of a series of thin strips *a* of wood, or other suitable material; placed on a common axis, which passes through their centres, and the strips *a* are so dispersed one above the other as to form something like a screw propeller.

The inventor says: I *claim* constructing a wind-wheel of a series of strips or slats *a*, placed centrally on a shaft *A*, spread and overlapped and secured together and to the shaft *A*, substantially as shown and described.

No. 22,697.—EDMUND BIGELOW, of Springfield, Mass.—*Improved Soda-Water Apparatus.*—Patent dated January 25, 1859.—This invention consists in having a set of reservoirs or vessels on a common base *B*, with a metallic hollow shaft *E* running through a thimble *I* set in an ice chamber, two arms *SS* leading from the head *X* of the shaft *E* through which the soda water flows, and from which it is discharged in the ordinary way.

The inventor says: I *claim* the arrangement of a set of sirup cans, ice chamber, and draft pipe, substantially as described.

I also claim the combination of a measuring faucet with the described and claimed arrangement of devices for drawing sirups and soda water.

No. 22,698.—SETH BOYDEN, of Newark, N. J.—*Improvement in Machinery for Forming Hat-Bodies.*—Patent dated January 25, 1859.—The cone *E* is placed on the plate *c* and the fur is placed on the apron *C*. This apron conveys the fur to the picker *B*, which by a rapid rotation throws the fur outward, so that the steam which issues from the tubes *d* will convey it to the cone *E*, the tubes being so adjusted as to give the jet of steam the proper direction.

The inventor says: I *claim* conveying the fur from the picker *B* to the perforated cone *E* by means of jets of steam issuing from the tubes *d*, arranged relatively with the picker *B* and cone *E*, substantially as described, to effect the desired purpose.

No. 22,699.—JOHN GOTTLIEB BROEMSER, of St. Louis, Mo.—*Improved Lounge.*—Patent dated January 25, 1859.—This invention consists in making the head piece *B* of the lounge adjustable by attaching the same to the seat *A* by means of hinges *D*, one of which is provided with ratchet teeth *e* into which a pawl *f* gears, which is released by the operation of a spring catch *G* at the top of the back of the lounge, which serves to steady the head piece by means of a serrated arc *F*, which is attached to the same near its top.

The inventor says: I *claim* the described arrangement of the spring catch *G* and the serrated arc *F* in combination with the pawl *f*, which gears into ratchet teeth *e* at the lower edge of the hinges *D*, and which is attached to a rocking cross-bar *E* and connected to the catch *G*, substantially as and for the purpose set forth.

And I also claim the valve *K* in the seat *A*, which is operated by an arbor *L* and by means of a cam *l* and a hook *m* in combination with the sliding frame *N*, constructed substantially as and for the purpose specified.

No. 22,700.—WILLIAM W. CAUSLER, of Baltimore, Md.—*Improved Boot-Jack.*—Patent dated January 25, 1859.—This invention consists in a metallic boot-jack with pointed prongs *H H* at one end, and a point *I* at the other, so as to serve as a brace to fasten the door of a room.

The inventor says: I *claim* the metal folding boot-jack described, with pointed prongs and pointed end, as a new article of manufacture.

No. 22,701.—JARVIS CASE, of Bloomington, Ill.—*Improvement in Mole Plough.*—Patent dated January 25, 1859.—The nature of this invention will be understood by reference to the claim and engravings.

The inventor says: I *claim*, first, so suspending the mole to the beam or coulter *G* as that it cannot go vertically beyond a given depth, whilst it may move laterally, substantially as described.

Second. I also claim extending the nose *r* of the mole into the rear of the coulter, so that



it cannot at any time run out of the line or cut of said coulter at its point, substantially as described.

No. 22,702.—SETH CHENEY, of Kiantone, N. Y.—*Improved Field Fence*.—Patent dated January 25, 1859.—A A A A are sticks or pieces of timber laid across each other in such a manner that the ends which rest on the ground will be about six feet apart. a a are strips of board or timber fastened to the legs of the posts with nails. e e e e represent lock rails or poles inserted in the crossings of the legs of the posts.

*Claim*.—The particular construction of panels and their combination with the rails, in the manner and for the purposes set forth.

No. 22,703.—SAMUEL CHENEY, of Cleveland, Ohio.—*Improvement in Lamps*.—Patent dated January 25, 1859.—The operation of the lamp is as follows: The gas tube G is placed over the wick tube C and caused to rest upon the diaphragm F, so as to cover the openings E E upon each side of the wick tube in the diaphragm F. The wick is then elevated to a point a little below the top of the gas tube G and ignited. The cap H and chimney are then placed upon the body of the lamp.

The inventor says: I *claim* the gas tube G and openings E E in combination with the wick tube C and cap H, when these several parts are constructed and arranged as described, and operating substantially in the manner and for the purpose set forth.

No. 22,704.—AUGUSTUS M. CHURCH, of Augusta, Ga.—*Improved Amalgamator*.—Patent dated January 25, 1859.—The trough N is of sheet-iron, and is furnished with *riffles* extending across it from side to side, but only every alternate riffle is in contact with and fastened to the bottom of the trough N, the other riffles have an opening between their lower edges and the bottom of the trough.

The inventor says: I *claim* the arrangement described of the vibrating riffles of the inclined trough, constructed and operated as set forth, by which it is proposed to save the finest particles of the gold by amalgamation.

No. 22,705.—JOHN C. CLIME, of Philadelphia, Pa.—*Improved Method of Hanging Reciprocating Saws*.—Patent dated January 25, 1859.—W W<sup>1</sup> are two balance-wheels, C cranks attached to fly-wheels, i i iron rod connecting one end of the pitman-bar P with the crank-wheel W, the other end of the bar being connected by means of a link L with the saws S, F the fulcrum upon which the pitman-bar P works.

*Claim*.—The employment of a spring either straight or spiral to suspend the fulcrum of pitman-bars, or other reciprocating levers, in the manner substantially set forth in the foregoing specification.

No. 22,706.—FRANCIS COTTON, of Brooklyn, N. Y.—*Improved Portable Bedstead*.—Patent dated January 25, 1859.—To the central stand A A the side-rails C C are attached at a given point G. Two end supports B B are joined to the side-rails C C at the point H. A series of straps E E E E are fastened to the end supports B B in such a manner that the line of tension shall be below the point G.

The inventor says: I *claim* the arrangement of the stand-rails, straps, and end supports, the whole forming a new and improved article of manufacture, namely, an improved portable bedstead.

No. 22,707.—ISAAC N. CREHORE, of Boston, and FRANCIS STILES, jr., of Leicester, Mass.—*Improvement in Paper Rag Engines*.—Patent dated January 25, 1859.—The plates *f* are formed with a series of angles *m*, and arranged side by side between the blocks A, with washers *i* between them, the bolts *b* pass through holes *g* in the plates and through corresponding holes in the washers *i*. By tightening the nuts *c* the whole is bound compactly together to form the bed-plate.

The inventors says: We *claim* a bed-plate composed of sheet-metal knives, corrugated, or formed with a series of angles or curved lines through their entire length, in the manner described, and for the purpose specified.

No. 22,708.—D. W. CROCKER, of Deposit, N. Y.—*Improvement in Railroad Chairs*.—Patent dated January 25, 1859.—This invention consists in a novel method of applying a key B in combination with a railroad chair, which is divided centrally into two parts, whereby the weight of the engines and cars passing over the track is made to draw the jaws *b* of the chair towards each other, and make them clamp the sides, bases, and lower portions of the heads of the rails at their joints very closely.

The inventor says: I *claim* the arrangement and combination, substantially as shown and described, of the inclined grooves *c c*, keys B, jaws *b*, and rail A, so that the weight of the cars will depress the base parts *a a* of the chair, and thereby cause the jaw parts *b* to grip the rail A more firmly.



No. 22,709.—DANIEL S. CURTISS, of Madison, Wis.—*Improved Field Fence*.—Patent dated January 25, 1859.—A A are the fence boards, B B the battens or slats, C c the key or wedge and the groove in which it is placed in the edge of the board under it, to keep it more firm in its place, a a the notched or dove-tailed ends of the boards, b b the beveled edges of the upright battens.

*Claim*.—The mode of notching the ends of the rails, and keying together the ends of the panels in the manner and for the purpose described and set forth.

No. 22,710.—ABBOTT R. DAVIS, of East Cambridge, Mass.—*Improvement in Corn-Husk-ers*.—Patent dated January 25, 1859.—In order to husk, the operator turning the crank G drops one ear of corn at a time upon the spring-board D, with the but end towards the slotted projection K, when the husks and silk are stript from the ear by the action of the rolls, the husked ear remaining between the rolls and spring-board until released by the introduction of another unhusked ear, which presses back the spring-board sufficiently for that purpose.

The inventor says: I *claim* the combination of the rolls B and C, spring-board D, slotted projection K, and conical projection J, when these several parts are constructed and arranged for operation in the manner described, and for the purpose specified.

No. 22,711.—WILLIAM T. DENNIS, of Richmond, Ind.—*Improvement in Sugar-Cane Mills*.—Patent dated January 25, 1859.—The nature of this invention consists in covering or plating the iron rollers of the sugar-cane mill with tin or other anti-corrosive metal or substance so as to prevent the corroding of the iron, and thereby discoloring the juice of the cane.

The inventor says: I *claim* the plating or covering of the iron roller of sugar-cane mills with tin, or other anti-corrosive metal or substance, for the uses and purposes described.

No. 22,712.—JOHN DROWN, of HIRON, N. Y.—*Improved Construction of Posts for Field Fences*.—Patent dated January 25, 1859.—The notches *ff* are made in the outer edges of the upper rails at their joints, and are wide enough to admit the edges of the braces C C. The braces project above the rails, and are connected together by means of a clamp *h* put over the ends of the braces, and fitting into small notches *ii* in the braces.

The inventor says: I *claim* the arrangement of the braces C C, one fixed and the other hinged or pivoted thereto, in combination with the rails A A, and chair B, substantially as specified.

No. 22,713.—RICHARD DUDGEON, of New York, N. Y.—*Improvement in Hydraulic Presses*.—Patent dated January 25, 1859.—The engravings represent these improved presses as applied to the punching of metallic plates, and especially adapted to the kind of punching now performed by what is called a screw-punch; A is the injection-piston to which the force is applied; D the ram, or piston, upon which the pressure is exerted; B and C the corresponding chambers. The packings to prevent leakage are colored yellow.

The inventor says: I *claim* the described hydraulic press, consisting of the injection-piston A, chambers B and C, and ram D, the whole constructed and operating substantially as and for the purposes set forth.

No. 22,714.—DANIEL E. EATON, of Boston, Mass.—*Improvement in Shoe-Horns*.—Patent dated January 25, 1859.—The inventor says: The purpose of the ordinary shoe-horn is to guide the heel of a person's foot into the heel of a shoe during the act of putting the shoe on the foot. To an instrument of such kind I have added a nipper-jaw, or lever B, so applied as to enable the shoe-horn to perform two functions, viz: that of guiding the foot into the shoe, and of drawing the shoe on the foot by a pull on the instrument and compression of the heel of the shoe between the jaws.

*Claim*.—The improved shoe-horn, as made with a heel-guide and nipper-jaw, applied to two cross-levers, so as to operate together substantially as specified.

No. 22,715.—LEWIS EICKENBERRY, of Eaton, Pa.—*Improvement in Iron Bridges*.—Patent dated January 25, 1859.—The nature of this invention will be understood by reference to the claim and engravings.

The inventor says: I *claim*, first, having the uprights and diagonals of the side-formings of the bridge so united together that they shall be capable of turning on their points of connection, and thus, whenever expansion or contraction in the metal occurs, they may be able to compensate therefor without ceasing to brace the bridge at the top and bottom, substantially as and for the purposes set forth.

Second. The combination of lattice side-frames of bridges, formed of diagonal braces and angular iron-uprights, which are united together, so as to turn on their points of connection, as above stated, with tubular, semi-tubular, and angular iron-arches, substantially as and for the purposes set forth.

No. 22,716.—W. H. ELLIOT, of Plattsburg, N. Y.—*Improvement in Coffee Pots*.—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.



The inventor says: I *claim*, first, the combination of boiler *a*, stillworm condenser *b*, conducting or discharge tube *g*, the external opening of the stillworm at *g*, when these devices are so arranged in relation to each other that an opening to the external air shall be provided for the non-condensable gases, while the condensable vapors are reduced to a liquid without coming in contact with the condenser water, and then turned by conductors into the boiler, as and for the purpose specified.

Second. The arrangement of the joint *c*, below the spout, so that no vapor can pass through the spout without first passing the joint as set forth.

Third. The employment of conductors in combination with the condenser for the purpose of filling the water-joint or keeping it full, as and for the purpose specified.

No 22,717.—LEWIS C. ENGLAND, of Owego, N. Y.—*Improvement in Tanning*.—Patent dated January 25, 1859.—This invention consists in the mode of causing the bark to be conveyed from the grinding mill to the leach vat, by pumping a continuous stream of the liquid from the "junk" into the trough or tube which leads from said mill to the vat, and in heating successive portions of the liquor, and discharging the same upon successive portions of the dry bark, in the conveyor trough. It also consists in passing the bark through a pair of crushing rollers before discharging it into the leach vat.

The inventor says: I *claim*, first, applying the liquor to the bark while said bark is discharged from the mill, for the two-fold purpose of making it a conveyor of the same and a preserver of the dust thereof, as set forth.

I claim, second, the method of applying the heated liquor to the bark, for the purposes and in the manner substantially as set forth.

No. 22,718.—JOHN B. FORD, ADDISON SULLIVAN, and ALBERT GREGG, of New Albany, Ind.—*Improvement in Threshing Machines*.—Patent dated January 25, 1859.—In the engravings A A represent two cylinders, which are provided with knives, and placed in such relation to each other that the knives of the one will interlap with those of the other. C is a cylinder, which is provided with teeth or beaters, and is located immediately over a concave B, which is also provided with teeth. D D are two screens, which are secured in a vibrating frame. E is a fan with arms, for the purpose of creating a current of air when operated.

The inventors say: We *claim* the combination of the cutting cylinders A A, provided with knives, the cylinder C and concave B provided with teeth, the screens D, and the fan E, substantially in the manner specified and for the purpose set forth.

No. 22,719.—WILLIAM A. FOSKET and ELLIOT SAVAGE, of Meriden, Conn.—*Improvement in Sewing Machines*.—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We *claim* the feeding device, constructed and arranged substantially as set forth, and so operating as to cause the cloth to progress by grasping the same with a positive force, in contradistinction to the employment of spring-pressure, between two surfaces moving in unison while feeding.

We also claim setting the shank of the revolving and reciprocating looping hook at an angle to the bed-plate, substantially as specified, when said looping hook is constructed in the manner herein described or referred to, for the purpose of avoiding the motion of the said hook in the direction of the axis of revolution.

We also claim operating the slide-plate O from above the sewing table by means of a feed-foot having two motions—one vibratory in the line of feed, the other reciprocatory and perpendicular to the table or thereabouts.

No. 22,720.—CARL FRANK, of Cleveland, Ohio.—*Improvement in Smut Mills*.—Patent dated January 25, 1859.—The grain falls through sieve *a* upon sieve *b*. The meshes of sieve *b* are such that the smaller particles of dirt, &c., will pass through the sieve and falling upon the inclined board *a*<sup>1</sup> will pass out of the machine through spout *b*<sup>1</sup>, while the grain rolling down the sieve *b* finds its way through slot *c* into trough *c*<sup>1</sup>. The cylinder *d* revolves within a hollow cylinder *e*<sup>1</sup>, which latter has a slot on top to correspond with slot *d*<sup>1</sup>, and has also a slot *l* at its bottom.

The inventor says: I *claim* arranging between the trough C, containing the grain to be scoured and the scouring cylinder K, a slotted hollow cylinder *d*, revolving within another hollow cylinder *e*, as described.

No. 22,721.—JOHN FREZER, of Newberry, Pa.—*Improvement in Horse Powers*.—Patent dated January 25, 1859.—The central shaft Q is supported at the bottom by the bearing box O, and has a pinion K upon it, which gears into the bevel wheel or pinion I, which is firmly attached to the horizontal shaft J. The shaft J has also a wheel H attached to it by which it is geared to the segment wheel L. A pinion M, attached to the inner end of the shaft J, gears into the pinion N, which is supported in a fixed position by the braces S, attached to the timbers D, the braces S terminating in a collar R for that purpose.



*Claim.*—The combination of the flange A, upon the end of the sweep-shaft, with the groove in the collar R, or its equivalent, for securing the shaft J, against the longitudinal motion, as set forth, in connection with the wheel H and pinion M, attached to the sweep-shaft and the stationary wheel and pinion L and M, which keeps the shaft J in a directly radial position.

No. 22,722.—F. J. GARDINER, of Washington, N. C.—*Improved Combined Chair and Lounge.*—Patent dated January 25, 1859.—This invention consists in the manner of constructing and arranging the several parts of the device so that they may be readily adjusted to form either a rocking chair or recumbent stationary chair or lounge, as may be desired.

The inventor says: I *claim* the seat A, back B, and supplemental back C, connected together by joints, and provided, respectively, with the legs *d d*, arms E E, and rockers D D, the whole being arranged substantially as and for the purpose set forth.

No. 22,723.—CONRAD GERSTEN, of Brooklyn, N. Y.—*Improvement in Lanterns*—Patent dated January 25, 1859.—The nature of this invention will be explained by reference to the claim and engravings.

The inventor says: I *claim* the mode of controlling the currents of air which feed the flame, by taking the air from the top of the lantern and causing it to pass down in a narrow annular passage to the apertures leading to the burner, in combination with the deflector which encloses the burner chamber, substantially as described.

I also claim, in combination with a lantern in which the flame is protected against disturbing causes outside, the arrangement for controlling the wick from outside the lantern, as described.

I also claim, combining with the burner and the oil reservoir, and interposed between the two, an air chamber for preventing the oil from being overheated, as described.

No. 22,724.—E. A. GOODES, of Philadelphia, Pa.—*Improved Boring Machine.*—Patent dated January 25, 1859.—The feed of this drill may be changed to modify the motion of the drill either quicker or slower, and the tool can be prevented from entering the work beyond a certain depth, and the tool can also be “gigged” back rapidly after it has bored the hole.

The inventor says: I *claim*, first, the adjustable worm H, attached to its shaft D, and arranged substantially as and for the purpose set forth.

Second. The gauge plate E, attached to the bow F, in connection with the index *q*, on the mandrel *c*, for the purpose specified.

Third. The arrangement of the tube *j*, on the shaft *k*, pinion *l* on said shaft, the pulley *l*, on the tube *j*, and also the pinion *i*, and the rack *h*, on the mandrel *c*, substantially as and for the purpose set forth.

No. 22,725.—JOHN HINDMAN, of Haynesville, Mo.—*Improvement in Hemp Brakes.*—Patent dated January 25, 1859.—This invention consists in the employment or use of a reciprocating beater D, stationary bar E, and a reel F, placed within a suitable frame, and arranged in such relation with each other that the hemp, as it is fed to the machine, is properly bruised or broken, and the woody portion separated from the fibre.

The inventor says: I *claim* the reciprocating beater D, stationary bar E, and reel F, combined and arranged to operate substantially as and for the purpose set forth.

No. 22,726.—JOHN C. HINTZ, of Cincinnati, Ohio.—*Improved Machine for Sawing Winding Forms.*—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, in the described combination with one or more shifting supports or rests, the rocking bench J, suspended at or near its midwidth, by journals *j*, and provided with suitable feeding and canting mechanism, substantially as set forth.

Second. In the described connection with a carriage E and crane D, and with a rocking bench J, having the described or equivalent feeding or canting mechanism, I claim the vibratory and arched rest F, armed with spikes *f*, the whole being arranged and operating substantially as set forth.

Third. In the described combination with a rocking rest J, and spheroidal feed roller B, I claim the pointer S *s*, adjustable in height, and having the described automatic retrograde motion, so as to indicate on the top of the slab the relative position of the bottom of the kerf, as set forth.

Fourth. In the described combination with the rocking bench J, I claim the prying lever D, constructed and operating substantially as set forth.

No. 22,727.—E. N. HORNER, of New Brighton, Pa.—*Improvement in the Method of Extracting Oil from Coal.*—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this improvement.



*Claim.*—The use of a mixture of cream of tartar, common salt, and slaked lime, for the purpose of condensing the oleaginous vapor produced by the dry distillation of coal, shale, or other bituminous minerals, extracting the oil from the gas, and depriving the gas of its inflammable quality, and throwing off the sulphurous vapor, in the manner described.

No. 22,728.—BENJAMIN ILLINGWORTH, of Freeport, Ill.—*Improved Washing-Machine.*—Patent dated January 25, 1859.—A rotating cylinder is encompassed by a series of smaller pressure cylinders which are fitted within a suitable case, the upper part of which is connected to the lower part by hinges or joints; the cylinder case being placed in a box which is fitted in a frame, and the box rendered adjustable by means of a lever or an equivalent device.

The inventor says: I *claim*, as an improved article of manufacture, a washing-machine, having a tilting-box B, cylinder D, spring-tollers *f j*, and otherwise constructed, as shown and described.

No. 22,729.—RICHARD JENKINS, of Covington, Ky.—*Improvement in Lamps.*—Patent dated January 25, 1859.—The nature of this invention consists in the employment of an inner and outer cone or semi-sphere, in such relation to each other that a space shall exist between them at all parts of their surfaces, the cones being arranged over the lamp-tube so that the inner one is some distance above the same, and furnished with flame passages and passages for the introduction of oxygen to the wick-tube and to the space existing between the cones or semi-spheres.

*Claim.*—The combination of the inner and outer cones when arranged in relation to the wick-tube and each other, substantially as specified, and supplied with air or oxygen, for the purpose of maintaining a perfect combustion of the heavier gases or matter arising, by capillary attraction, in the space or chamber existing between the cones, and thus producing, with coal-oil, a brilliant flame, with very little, if any, blue appearance at the base above the outer cone, substantially as set forth.

No. 22,730.—JOHN JONES, of Baltimore, Md.—*Improvement in Machines for making Clay Pipe.*—Patent dated January 25, 1859.—The plate A has an opening B, over which the two jaws C D move parallel to each other by means of a lever, and meet at the centre. The core-mandrel E has two sizes, the larger F corresponding to the opening B in the die-plate A, and the smaller size E corresponding with the opening G in the jaws C D. When in use the jaws are closed, and the material forced through the small opening G, and when the tube has attained a sufficient length, the jaws C D are thrown open, and the tube continued through the opening B of a larger size.

The inventor says: I *claim* a two-sized permanent core or mandrel, in combination with the fixed die A and adjustable jaws C D, constructed, arranged, and operating in the manner described and for the purpose specified.

No. 22,731.—AUGUSTUS JOUAN, of San Francisco, Cal.—*Improved Screw-Propeller.*—Patent dated January 25, 1859.—This invention consists in making elastic a part of a ship's propeller blades, cutting off for that purpose a portion of the ordinary rigid blades, and substituting for it elastic blades.

The inventor says: I *claim* combining with the rigid blades of a propeller, an elastic blade, substantially as described.

No. 22,732.—AUGUSTUS JOUAN, of San Francisco, Cal.—*Improvement in Apparatus for Evaporating Sugar Juice.*—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the floating cover *a* applied to the evaporation of saccharine liquids, or for concentrating heat for other purposes, constructed, arranged, and operated substantially as set forth.

No. 22,733.—WILLIAM W. KARSHNER, of Cincinnati, Ohio.—*Improvement in Electric Bathing Apparatus.*—Patent dated January 25, 1859.—In the engravings, C is the positive pole of the battery connected with the bathing-tub, *d* is the negative pole connected with the patient's feet, *insulated from the tub a*, *g* is a non-conducting insulating substance, *h* the conducting foot-plate from the bathing-tub, *f f f f* supporting bands attached to the sides of the bath-tub *a*.

The inventor says: I *claim* first, the suspending non-conductor bands *f f f f*, the conducting foot-plate *h* insulated from the bath-tub by the non-conducting substance *g*, all substantially as set forth.

Second. I *claim* the combined use of the above described non-conducting bands *f f f f*, the conducting foot-plate *h*, and the non-conducting substance *g*, or their equivalents, for the purpose of administering an electric bath for therapeutic purposes, as described.

No. 22,734.—HENRY KATTENHORN, of New York, N. Y.—*Improvement in Revivification of Bone-Black.*—Patent dated January 25, 1859.—This invention consists in washing the black



in a vessel, so constructed that the pressure of the atmosphere can be applied to the surface of the washing water to drive it rapidly and forcibly through the mass.

The inventor says: I *claim* the method of washing bone-black, or animal charcoal, in the purifying of sugar, substantially as described

No. 22,735.—CHAUNCEY G. KEENEY, of Manchester, Conn.—*Improvement in Knitting-Machines*.—Patent dated January 25, 1859.—The nature of this invention consists in securing one or more cards E on the periphery of the knitting-machine, so that they may be withdrawn and replaced at pleasure just below the needles outside of and bearing against the stockinet, so that the surface of the stockinet will be presented to the card surface several times as it works off from the machine

The inventor says: I *claim* the employment of a card attachment to knitting-machines, substantially in the manner and for the purposes described

No. 22,736.—WILLIAM KENNISH, jr., of New York, N. Y.—*Improvement in Marine Steam-Engines*.—Patent dated January 25, 1859.—The nature of this invention consists in placing an elbowed pipe in the race caused by a vessel's progress through the water. In a side-wheel steamer this pipe is placed immediately behind the paddle, in order that the race rushing over the middle of the pipe A will be increased by the back-water of the wheel. In a screw-propeller the pipe is placed on the stern of the vessel in front of the screw in order to increase the race past the pipe A by the draft-water of the propeller.

The inventor says: I *claim* the application of an auxiliary pipe to the present discharge-pipe of a marine steam-engine, in the manner and for the purpose described in the specification

No. 22,737.—COLUMBIA G. LOYNES, of Lenox, Mass.—*Improved Machine for Cutting and Setting Saw-Teeth*.—Patent dated January 25, 1859.—In the engraving E is a sliding screw on the bed-plate, to which is attached the die F; a is a screw with which the blades of the saw are raised or lowered so as to give a greater or less set to the saw. B B are two screws at the sides of the upright part of the bed-piece, which are used in guiding the saw-blade. F is the die which can be used either for the cutting of the saw-teeth, shearing the blade, cutting and straightening iron, or for punching any metal as the same is used with punches Nos. 6, 7, 8, 9, 10, 11.

The inventor says: I *claim* the devices for punching and shearing metals, as described, arranged in connection with the saw-gummer and saw-set, the whole constructed and operating in the manner set forth

No. 22,738.—WILLIAM C. McBRIDE, of Raritan, N. J.—*Improvement in Machinery for Scutching Flax*.—Patented, in England, May 20, 1856; patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim either set of feeders, separately, as making part of my present invention, having described a similar arrangement in letters patent granted to me by the government of Great Britain in the year 1852.

What I *claim* is the mode of operation of the combined rotating blades or beaters, with the interposed stocks, substantially as described.

I also claim combining two scutching machines, substantially such as described, or equivalents thereof, by means of the two feeding wheels, with their bands, arranged substantially as described, for transferring the fibres which have been scutched at one end, that the other end may be properly presented to the second scutcher, as set forth.

I also claim, in combination with the two sets of feeding bands and wheels, or their equivalents, the sustaining and guiding table, substantially as described, by which the upper unscutched ends of the fibre are held up, guided, and properly presented to the second scutcher, as set forth.

No. 22,739.—ANTONIO MEUCCI, of Clifton, N. Y., assignor to D. B. LORAINI, of said Clifton.—*Improvement in the Manufacture of Candles*.—Patent dated January 25, 1859.—The mould consists of two parts, the staff A, and the bead B. The lower end of the mould has a piece of India rubber c cast in it, which is perforated to admit the wick, and which, by its elasticity, pinches the latter so that it may be strained sufficiently to keep it straight in the mould, and also prevent the escape of the candle material in casting.

*Claim*.—The method of forming mould candles in saturated porous candle-moulds, substantially as set forth, in contra-distinction to the method in general use of forming them in candle moulds of the impervious metal.

No. 22,740.—U. D. MIHILLS, of Hartford, Wis.—*Improvement in Heating Apparatus*.—Patent dated January 25, 1859.—The object of this invention is to prevent the free or rapid passing onward of the products of combustion from the fire-box into the chimney or escape flue.



The inventor says: I *claim* a heat controlling cylinder, in which the regulating disks, shaped as described, are connected with a detachable frame, the same being arranged and operated as specified.

No. 22,741.—WILLIAM H. MILHOUSE, of Sugartown, Pa.—*Improved Washing-Machine*.—Patent dated January 25, 1859.—In the engravings *a* is a lever which connects with the bottom of the frame *F*, and *b* is a lever which operates lever *a*; *d* is a pitman which connects at one end with an arm on rubber *E*, and at the other with a crank on shaft *e*; *c c c* are strips of India rubber, which are placed edgewise on the rubber *E*, and concave *D*; *i i i* are slats which are secured between these strips of India rubber on the rubber *E* and concave *D*.

The inventor says: I *claim*, first, securing strips of India rubber edgewise in slots in the concave *D*, and rubber *E*, by means of the slots which are bolted in between the successive strips, as fully set forth.

Second. The arrangement of the adjustable frame *F*, levers *a* and *b*, swinging rubber *E*, pitman *D*, and shaft *e* with the concave, when the whole are combined, constructed, and operated in the manner and for the purpose set forth.

No. 22,742.—B. F. S. MONROE, of Utica, N. Y.—*Improved Bed-Bottom*.—Patent dated January 25, 1859.—The object of this invention is to allow the outermost rows of springs in a bed-bottom, chair-seat, or other article in which they may be placed, equal freedom of movement with the innermost springs without lateral play, so that each spring will be permitted to bear its proportion of weight.

*Claim*.—The two frames *A C*, with the spring *B* secured between them, the frames being connected by the cross bands *F* covered or enclosed by any suitable fabric *E*, and the upper frame supporting the seat or mattress, the whole being arranged substantially as and for the purpose set forth.

No. 22,743.—WALTER PECK, of Rockford, Ill.—*Improvement in Pumps*.—Patent dated January 25, 1859.—This pump is intended to be and is particularly applicable to deep bored, or drilled wells, of which the *diameters* are generally small, and with which the whole pump fixture must be placed down through the mouth of the well. The object of the spring-strap *B* is to hold the cylinder *D* at the bottom, or any other desired point in the well, and to support it and the pipe *A* centrally in the well.

The inventor says: I *claim* the combined arrangement of the stationary standard *c*, vibrating lever *a*, and lifting-spring *b*, with the plunger *A*, as specified, for the purposes set forth.

I also claim the combined arrangement of the hollow plunger *A*, having a cylinder *C*, and spout *f*, and attached directly to the handle, with the stationary chamber *D* and the steadying springs *B*, as specified.

No. 22,744.—FRANK P. PFLEGHAR, of Whitneyville, Conn.—*Improvement in Combined Punch and Awl*.—Patent dated January 25, 1859.—This invention is designed to facilitate the sewing together of the ends of machine belts, and consists in combining a rotating punch-stock in a manner whereby the desired end is attained.

The inventor says: I *claim* the rotating hollow head *b*, provided with a series of cutter-tubes *d* of different sizes, in combination with the awl *h* attached to or forming a part of the bent bar or rod *E*, which, as well as the head *b*, is attached to the jaw *c*, and provided with a spring-plate or stop *m*, the whole being arranged substantially as and for the purpose set forth.

No. 22,745.—GEORGE W. PITTMAN, of Bushwick, N. Y.—*Improvement in Machinery for Twisting Fibrous Substances*.—Patent dated January 25, 1859.—This invention consists in a certain mode of applying a flyer, or its equivalent, in combination with other mechanism, whereby it is made to spin a sliver or roving, and by the same operation to twist the yarn thus produced with one or more yarns or threads which have been previously spun.

The inventor says: I *claim* the application of the flyer *B*, or its equivalent, substantially as described, in combination with the rollers *D D*<sup>1</sup> and spool *F*, or other equivalent means of holding the sliver, and taking up the twist produced by the flyer, whereby the same operation is made to spin the sliver into yarn, and twist the same with one or more other yarns, simultaneously as set forth.

No. 22,746.—MICHAEL POSZ, of Shelbyville, Ind.—*Improvement in Razor-Strops*.—Patent dated January 25, 1859.—This razor-strop is composed of a short handle *A*, into which the screw *B* is firmly fastened; *x* is a metal nut to which is firmly attached leathers *u u* on opposite sides of nut *x*. Notches *x*<sup>2</sup> *x*<sup>2</sup> fit slides *K K*, so that nut *x*, with leathers *u u* attached, may slide toward either end of screw *B*.

The inventor says: I *claim*, as a new article of manufacture, the self-lubricating razor-strop, when constructed in the manner described.



No. 22,747.—HIRAM H. REYNOLDS, of Buffalo, N. Y.—*Improvement in Belt-Trusses.*—Patent dated January 25, 1859.—The perineal strap C is made of soft, pliable leather, and is fastened to the belt; it incloses the perpendicular part of the T-spring E, which is made of brass or other suitable metal. The perpendicular part of the T-spring passes through the slide I, and is fitted to it so that the plate G, conical spring H, and pad A, may be moved up or down on the T-spring.

The inventor says: I *claim* the combination of the T-spring E, with the conical spring H, pad B, belt A, and perineal strap C, the whole being arranged substantially as shown.

No. 22,748.—M. H. RISON, of Paris, Tenn.—*Improvement in Photographic Plate Vises.*—Patent dated January 25, 1859.—This invention consists in the application of a grooved or hooked eccentric lever E, to operate upon one jaw of a photographic plate vise, in combination with a spring-pawl *d*, attached to the other jaw, to operate in a toothed ratchet on the bed-piece A, for the purpose of permitting the adjustment of the vise to plates of different size, and the speedy clamping and release of the plates.

The inventor says: I *claim*, as an improved article of manufacture, a photographic vise, having its eccentric lever E provided with a groove *g*, a clamping-jaw D provided with a catch *f* to engage *g*, a jaw C provided with a spring-pawl, which engages a rack *e*, and otherwise constructed as shown and described.

No. 22,749.—DANIEL ROBINSON, of Lenox, Penn.—*Improvement in Wagon-Brakes.*—Patent dated January 25, 1859.—This invention consists in attaching shoes E to rock-shafts D D, which are fitted in the bed or truck of the vehicle, and having curved bars *d* attached to said rock-shafts, the bars passing through a sliding frame F fitted in the bed A, the frame having the draft-pole attached to it. The brake is operated by the momentum of the vehicle when the speed of the same is checked.

The inventor says: I *claim* the combination and arrangement of the sliding frame F, curved bars C attached to the rock-shafts D D and passing through the traverse bars *d* of the frame F, and the shoes E attached to the ends of the rock-shafts, the several parts being fitted in the truck or bed A, substantially as and for the purpose set forth.

No. 22,750.—PHILIP P. RUGER, of New York, N. Y.—*Improved Machine for Splitting Wood.*—Patent dated January 25, 1859.—The inventor says: I introduce a spring *f* just at the splitting point where the knives are playing, and in this way relieve the cross bars *e* from all danger of breaking. I cast an iron guide plate *x*, and through it form holes or oblong slits *i* just sufficient for the knives to play through at the ends or angles of these slits. I cast in one piece, with the plate upright, ways *y* that project up perpendicularly from the upper side of the plate, and serve as slide-ways to guide and steady the knives.

The inventor says: I *claim* the spring or yielding guide for relieving the cross bars *e* in the manner specified and for the purposes set forth.

I also claim the guide-plate *x* with the uprights *y*, constructed and arranged in combination with the wood splitters, as specified.

No. 22,751.—B. A. RUSSELL, of Deep River, Conn.—*Improved Ball-Furniture Casters.*—Patent dated January 25, 1859.—The nature of this invention consists in lessening the friction of the ball in the casing enclosing the upper portion of the same, by causing its bearing-surfaces to be confined to the surface of a horizontal plate D at its upper part, on which the weight of the table to which it is attached rests, and to the ends or points of a series of horizontally set screws G or vertical ribs G<sup>1</sup>, inserted radially in the casing on a line with the axis of the ball F at its sides.

The inventor says: I *claim* a new article of manufacture in my improved furniture-caster, when composed of the cylinder or casing A, either with or without the radially set screws G, or ribs G<sup>1</sup>, in combination with the plate D and ball F, when constructed, arranged, and operated in the manner and for the purposes set forth.

No. 22,752.—CHRISTIAN SHARPS, of Philadelphia, Penn.—*Improvement in Breech-loading Fire-Arms.*—Patent dated January 25, 1859.—This invention consists in forming on the outer end of a sliding bush G an annular inclined projection with a sharp annular edge *b*, coinciding with the smallest portion of the bore of the bush, so that when the explosion of the cartridge takes place no obstacle may be presented to the backward movement of the bush. This bush has an annular termination *e* fitting into an annular recess *d* in the barrel, which prevents the termination of any refuse matter between the end of the bush and the barrel when the discharge takes place.

The inventor says: I *claim*, first, forming on the outer end of the sliding bush G, as the sole bearing point against the breech, an annular inclined projection with a sharp annular edge *b*, coinciding with the smallest portion of the bore of the said bush, as and for the purposes set forth.

Second. The annular termination *e* of the sliding bush fitting into an annular recess *d* formed



in the barrel, and overlapped by the sharp edged annular projection, substantially as set forth and for the purpose specified.

Third. The convex base *n*, as fitted into a concave socket in the breech, so as to form a self-adjusting base for the end of the barrel.

No. 22,753.—CHRISTIAN SHARPS, of Philadelphia, Penn.—*Improvement in Breech-loading Repeating Fire-Arms*.—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not desire to confine myself to the use of a barrel-block with four bores, or to the precise devices described, for altering the position of the projection *S*, inasmuch as a barrel-block, with more or less than four bores, may be used in connection with my improvement, and as different devices for changing the position of the said projection.

But I *claim*, first, exploding, in succession, a number of cartridges of the class described, by means of a projection caused to revolve by the movements of the hammer, when the said cartridges are so arranged, in respect to the said projection, that the latter shall strike the edge only of each cartridge in succession, as set forth.

Second. The catches *t t* so arranged on the stock, in respect to the bores of the barrel-block, that on moving the latter from the breech they may be the means of withdrawing the whole of the cartridges simultaneously from their respective bores, as set forth.

No. 22,754.—PHILIP SHREINER, of Columbia, Penn.—*Improvement in Stoves*.—Patent dated January 25, 1859.—The nature of this invention consists in placing in the upper part of a stove and over the fire one or more cylinders or drums, with air-pipes or tubes extending through or outside of the stove to the floor. Cold air is conveyed from the floor through the tubes *H I* to the drums or cylinders *C E*, and while passing is heated and may be carried to another room.

The inventor says: I *claim* the air-supplying tubes and air-heating cylinders, when combined with a stove, the heat of which is unobstructed by outside casings.

No. 22,755.—STILLMAN THORP, of Portland, and WESLY THORP, of Turner, Me.—*Improvement in Boot-Heels*.—Patent dated January 25, 1859.—In the engravings, *A* represents the heel and *B* the outer part of the sole of the shank portion of a boot or shoe, the latter having a metallic spring or elastic stiffener *C* laid on the upper surface of the same, so as to extend between it and the insole, and from the upper end a screw-pin or bolt *D* extends down through the middle of the heel and carries a circular lift or plate of metal *E* which is screwed on it.

The inventors say: We *claim* the combination of the metallic plate, spring, or shank-stiffener, and the rotary heel-piece, connected together and applied to the heel and shank of a boot or shoe, substantially as specified.

No. 22,756.—WILLIAM B. TWIFORD, of Chincoteague, Va.—*Improved Washing-Machine*.—Patent dated January 25, 1859.—The nature of this invention consists in the opposing inclined planes *c c* on the underside of the ends of the sliding roller-frame *E*, in combination with fixed concave projections or ledges *c c* on the sides of the tub or box, and with grooves *B* of greater width than the diameter of the journals of the roller in the sides of the box, so that when the roller is moved back and forth it is caused to nearly touch the bottom of the box or tub when it arrives at the centre, and to rise considerably above the bottom of the same when it arrives at either end of the tub.

The inventor says: I *claim* the opposing incline planes *e e* on the underside of the ends of the sliding roller-frame *E*, in combination with fixed concave projections or ledges *c c* on the sides of the tub or box, and with grooves *B* of greater width than the diameter of the journals of the roller in the sides of the box, substantially as and for the purposes set forth.

No. 22,757.—JAMES H. WASHINGTON, of Baltimore, Md.—*Improved Method of Blowing off Steam-Boilers*.—Patent dated January 25, 1859.—The nature of this invention consists in making a joint or hinge *a* in the blow off pipe *B*, and connecting with said hinged pipe *C* a float *D*, that will keep the blow off opening always at a fixed position with regard to the surface of the water in the boiler.

The inventor says: I *claim* connecting the pipe *C* by an elastic or yielding joint to the stationary pipe *B*, and furnishing its opposite end with a float *D*, that will keep the inlet into said pipe *C* at or a little below the surface of the water in the boiler, so as to blow off sediment, &c., at the surface, however much it may rise or fall, or vary, substantially as described.

No. 22,758.—SAMUEL WETHERILL, of Bethlehem, Penn.—*Improvement in Furnaces for Distilling Zinc*.—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the employment of vertical retorts with movable caps at the top and movable cups at the bottom, substantially as described, in combination with the fire-



chamber of a furnace, and suitable chambers for the circulation of heat, substantially as described, when applied to the reduction of ores of zinc to the metallic state, as set forth.

I also claim, in combination with retorts for the reduction of the ores of zinc to the metallic state, the mode of mounting the vertical retorts, by having them sustained by the lower ends resting in suitable sockets, substantially as described, and unconfined at their upper ends, whereby they are free to yield to unequal expansion, as set forth.

I also claim, in combination with retorts for the reduction of the ores of zinc to the metallic state, the employment of two fires with separated ash-pits, substantially as described, whereby the fires can be separately cleansed and stocked, to admit of applying a continuous heat to the retorts, as set forth.

I also claim, in combination with vertical retorts for the reduction of the ores of zinc to the metallic state, the employment of perforated central tubes, substantially as described, for the discharge of the metallic vapors from the charge, and the condensation thereof to the metallic state, as described.

And I also claim the combination of the vertical retorts, the perforated central tubes, and the movable cups and appendages at the bottom, and the movable caps at the top, substantially as described, all concurring in the more ready changing of the retorts, the working of the charge, the escape and condensation of the metallic vapor to the metallic state, and the delivery thereof, and the discharge of the residuum from the retorts, and the re-charging of them, as set forth.

No. 22,759.—JESSE WHEELLOCK, of Lancaster, N. Y.—*Improvement in Boats for Transporting Railroad-Cars.*—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: First, I *claim* the arrangement of the ropes or chains Y, pulleys Z, and timbers C, when applied to each end of the boat, for the purpose of holding the boat steady at the bow and stern while the cars are transferred to or from the boat, the whole constructed and operated substantially as set forth.

Second. I claim the arrangement of the bumper-dock A<sup>1</sup>, relatively, to the dock A and slip F, for the purpose of arresting the headway of the boat, and allowing it to be drawn sidewise into the slip F, so that the track which runs lengthwise of the boat may be brought into line with the suspended track, as described.

Third. I claim the combination of the suspended track, with or without the short portion N, with the track of the boat, for the purpose of conveniently transferring the cars to or from the boat, at whatever height the boat may stand in the water, substantially as described.

No. 22,760.—GEORGE W. WILLIAMSON, of Scranton, Pa.—*Improvement in Heating Apparatus.*—Patent dated January 25, 1859.—The nature of this invention consists in so arranging, within a fire-chamber, smoke-flue, or steam-boiler, a series of plates D, so that the heat will in its passage be delayed or retarded as it were within combustion-chambers formed by said plates, and thereby throw off or give out a greater amount.

*Claim.*—The application to fire-chambers or smoke-flues of a double series of plates, when the same are constructed, combined, and arranged, in the manner and for the purpose set forth.

No. 22,761.—GEORGE W. WILSON and ANDREW JOHNSON, of Walnut Grove, Ill.—*Improved Washing-Machine.*—Patent dated January 25, 1859.—The operation is as follows: The clothes to be washed are secured to the cylinder C by means of the plate g, which is secured by a rod i. The part a of the box A is supplied with suds, and the cylinder C is rotated. The clothes are carried around on the cylinder C, saturated as they pass through the suds, and are rubbed by the rubber D.

The inventors say: We *claim* as an improved article of manufacture a washing-machine, having upon the central cylinder C a plate g, arms h h, curved slats j, and rod i, for securing the clothes; and in the upper part of the cover B a rubbing device D, consisting of a slat m, with slats or corrugations o at its sides, and rollers p, and otherwise constructed as shown and described.

No. 22,762.—GEORGE WINGATE, of Philadelphia, Pa.—*Improved Rotary Pump.*—Patent dated January 25, 1859.—The bucket-wheel, which is secured to a flanch m on the shaft E, has its periphery divided into a number of chambers i by a partition j, and each chamber is furnished with a snugly fitting piston or sliding block n, the position of which within the chamber is controlled by the cam K, secured to the sleeve G.

The inventor says: I *claim* the revolving bucket-wheel, with any suitable number of pistons, operated by the cam K, in combination with the exterior casing B, its chambers and partitions; the whole being arranged for joint action, substantially as and for the purpose set forth.

No. 22,763.—HERMAN WINTER, of New York, N. Y.—*Improvement in Valve-Gear of Oscillating Steam-Engines.*—Patent dated January 25, 1859.—The nature of this invention



consists in causing a shaft *e*, attached to an oscillating cylinder, to revolve by means of the combination of a crank *d* on such a shaft, with a cam *l* on the main shaft of the engines, by means of a lever; and in combining a cam upon a revolving shaft, with an adjustable swinging toe *m*<sup>1</sup>, and with a toe *m*<sup>1</sup> attached to a lifter for moving a valve.

The inventor says: I *claim*, first, the method, substantially as specified, of causing a shaft, by means of which the valves of an engine are moved, to revolve through the agency of a cam, a lever, and a crank, and the oscillation of the cylinder to which the shaft is attached, all the parts being substantially such as specified, and acting in combination, substantially in the manner specified.

Second. I claim the combination of a toe keyed to a rod, which actuates a valve or valves, with an adjustable swinging toe and a revolving cam, the combination being substantially such as set forth, to serve the purpose described.

No. 22,764.—GEORGE L. WITSIL, of Wilmington, Del.—*Improved Washing-Machine*.—Patent dated January 25, 1859.—In the engravings A is the tub; B is the corrugated or ribbed centre-piece which revolves in the act of washing; C is the cross-piece which holds the centre-piece in its place, being attached to the uprights *d d*, fastened to the stand D which holds the tub in place; *e* is the false bottom; *f*, the space between it and the bottom of the tub *g*; *h* is the lever or arm which moves the centre-piece.

The inventor says: I *claim* the combination of the corrugated or fluted conical cylinder, placed vertically with the corrugated or fluted sides of the conical tub, arranged and operated as shown and described, for the purpose specified.

No. 22,765.—ROBERT ALFRED WRIGHT and LOUIS JULES FOUCHI, of Paris, France.—*Improvements in Process for Decomposing Fats*.—Patent dated January 25, 1859.—The inventors say: The superheated water in the boiler *a* acquires an ascending motion on account of the difference in the temperature of the two capacities *a* and *h*; a current is thus created whence it results that the heated water in the boiler *a* ascends through the tube *g* into the cylinder *h*, and, being forcibly driven out through the holes in the rose-jet, passes through the fatty bodies and descends again through the tube *f* to the bottom of the boiler *a*, where it is again warmed in order to recommence its ascending motion, and so on.

*Claim*.—Producing a continuous automatic circulation of highly heated water in a very finely described state through the bodies under treatment, by means of an apparatus constructed and employed substantially as shown and described.

No. 22,766.—WILLIAM D. YOUNG, of Baltimore, Md.—*Improved Boot-Jack*.—Patent dated January 25, 1859.—The nature of this invention consists in combining, with an ordinary chair, an arrangement for aiding the removal of boots from the feet of the wearer, and also in the construction of the jack by the addition of a self-adjusting toe-piece.

The inventor says: I *claim* the construction of a boot-jack substantially as set forth, when used in combination with a chair, as described.

No. 22,767.—DANIEL C. COLBY, of Keene, N. H., assignor to Himself and DAVID W. RANSOM, of Croydon, N. H.—*Improved Clothes' Frame*.—Patent dated January 25, 1859.—In the engravings D is a lever attached to the shaft G, its upper arm entering the socket *x*; E is a lever connected by the stud *n* with the lever D, and with the lever F by the metallic socket *q* and the rivet *r*; *o* is the fulcrum upon which the lever E revolves; F is a lever connected by the socket *q* and the rivet *r* to the lever E.

The inventor says: I *claim* the arrangement of the levers D, E, and F, as above described, in combination with the pawl K and the shaft G, operating substantially as set forth.

No. 22,768.—SILAS C. DURGIN, of Holyoke, Mass., assignor to Himself and AMMON R. DURGIN, of Nashua, N. H.—*Improvement in Drawing Frames for Drawing Fibrous Materials*.—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* the arrangement of the conical draft rollers between the gauge trumpet and the other reducing rollers, and supporting such trumpet by a mechanism essentially as described, or the equivalents therefor, which will enable the said trumpet to operate both as a gauge to the sliver and to guide it to the rollers, and to be vibrated with regard to the conical rollers, in the manner and for the purpose explained.

I also claim the combination of mechanism for supporting and vibrating the trumpet, the same consisting of the bent lever E<sup>1</sup>, the overbalance carrying lever F, and the stationary stud, and when such combination of mechanism is employed in the manner and for the purpose described.

I claim the arrangement of the supporting arm *g* of the weight *h* above the fulcrum of the lever F in such a manner as to operate with reference to the lateral drag of the sliver on the trumpet as specified.



No. 22,769.—JONATHAN HILLER and JOSEPH BULLOCK, of Cohoes, N. Y., assignors to WILLIAM SMITH, of Albany, N. Y.—*Improvement in Knitting Machines*.—Patent dated January 25, 1859.—The slide  $G$  is drawn inwards and kept in that position by a pawl  $g$ , with its spring pivoted upon the plate  $G$ , the pawl having two arms, the one letting into a notch  $h$  and the other extending over the slide  $H$ , upon which slide a movable gauge  $i$  is fixed. As long as the slide  $G$  shall be held by the pawl, its outer end will pass behind the pins  $p$ , but the moment that the outward pressure of  $H$  by the gauge touching the pawl trips  $g$  and releases  $G$ , its outer end springs between the pins and by contact with one moves the ring  $R$  and disengages the driving power.

The inventors say: We *claim* the apparatus attached to the top carriage, viz: the combination of the slides  $H$  and  $G$ , pawl  $g$ , gauge  $i$ , and arm  $m$ , operating together upon the breaking of the fabric to uncouple the driving powers by and in combination with the ring  $R$ , pin  $J$ , and spring  $d$ , which releases the detent  $V$ , substantially in the manner and for the purposes set forth in the specification.

No. 22,770.—DAVID E. HUGHES, of New York, N. Y., assignor to the American Telegraph Company, of said New York —*Improvement in Telegraphing Machines*.—Patent dated January 25, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, giving to the key, while still pressed by the operator, a second motion at the instant that the circuit is closed or broken, as the case may be, so that an indication of said closing or breaking will be given to the operator for the purposes set forth.

Second. The method described for governing the position of the letters upon the type-wheel, with respect to that of the platen or roller over which the paper travels, in order to insure an exact position of my particular letter at the moment of printing the same, viz: by so advancing or retarding the said type-wheel upon its shaft, whenever it has lost or gained in time in regard to the travel of the circuit breaker at the distant station, that the letter indicated will be certain to stand directly over the said platen, at the moment the latter brings the platen into contact with said letters.

Third. Effecting the printing of each letter without arresting the motion of the type-wheel, by causing the platen to revolve in the same direction and with the same speed as the type-wheel, while said platen is bringing up and holding the paper in contact, whereby the paper advances with the type or letter from which it is receiving an impression.

Fourth. The devices by which the type-wheel is started from its zero by an operator at a distant station, consisting of the shaft  $g$ , set in motion by the electric current, and acting in combination with the clutch lever  $n$  and the wheel  $E$ , whereby the type-wheel will be advanced up to the time that it becomes engaged with its driving shaft, substantially as set forth.

No. 22,771.—HEZEKIAH KNOWLES, of New London, Conn., assignor to FELLOWS, HOFFMAN & Co., of New York, N. Y.—*Improvement in Lamps*.—Patent dated January 25, 1859.—Above the wick-tube is placed the deflector  $i$ , it is formed in the shape of a semi-sphere, with an elongated aperture at the top of the form of a horizontal section of the wick-tube, but a little larger. The base spreads out and is provided with a cylindrical ring  $j$  to fit over the upper part of the ferule. A series of holes  $k$  are made around through the base for the admission of air to feed the flame above the wick.

The inventor says: I *claim* the lower or diaphragm reflector surrounding the wick-tube at or near its upper edge, substantially as and for the purpose specified, in combination with the upper deflector and the chimney, having suitable openings for the supply of a draught of air to the inside and to feed the flame outside of the upper deflector substantially as and for the purpose specified.

No. 22,772.—GEORGE W. RICHARDSON and ROBERT GLOVER, of Grayville, Ill., assignors to Themselves, J. B. WILLIAMS, and WILLIAM A. HERRALL, of White county, Ill.—*Improvement in Harvesters*.—Patent dated January 25, 1859.—This invention refers to certain improvements in machinery for raking-in harvesters, by means of which the operator is enabled to gather the cut grain into sheafs upon the platform and deposit the same upon the ground behind the platform as the machine moves forward.

The inventors say: We *claim*, first, the jointed spring-arm  $a^2$ , arranged and operating in the manner and for the purposes set forth, in combination with the spring-catch  $i^1$ , operating so as to catch and hold the arm  $a^2$  when it has gathered the grain, and retain it in this position until the bundle is ready to be deposited free from the platform  $p$ .

Second. The raker  $a^1 a^2$ , in combination with the rod  $r$ , crank  $c$ , rest  $n^2$ , and retracting weight  $w$ , arranged and operating to produce the reciprocating movements for gathering and delivering the gavel in the manner described.

Third. In combination with the arm  $a^2$ , the connecting rod  $m$ , and bent lever  $l$ , operated through the medium of rod  $n^1$ , pin  $n^2$ , and rest  $n^3$ , by the driving wheel  $C$ , substantially in the manner and for the purposes set forth.

No. 22,773.—MANOAH ALDEN, of Philadelphia, Pa.—*Improved Apparatus for Raising and*



*Forcing Fluids.*—Patent dated February 1, 1859.—This improvement consists in a bucket of a peculiar construction, in combination with a wheel-race, or chamber adapted to the form of said bucket-wheel, and a spiral chamber. The whole being arranged so that a steady and uniform supply of water may pass through the apparatus without causing excessive and detrimental friction.

*Claim.*—The wheel B, with any convenient number of buckets formed by the opposite curved vanes *e*, said vanes being placed obliquely to the plane of rotation, and being of a tapering form, so that the buckets may be broader near the centre of the wheel than at the edge of the same, in combination with a wheel-race or chamber adapted to the form of the buckets, and with the spiral channel D, the whole of the parts being arranged in respect to each other and constructed as and for the purpose set forth.

No. 22,774.—CHARLES F. ALLEN, of Indianapolis, Ind.—*Improvement in Burners for Vapor Lamps.*—Patent dated February 1, 1859.—A is a tube designed to be attached to the supply-pipe by the screw B, and leading to the retort C. The tube A is filled with metallic filings or other substance which will allow the fluid to pass gradually through and prevent a rapid flow. D is a tube leading to the burner E from the retort C. The tube F is a tube leading from the tube *a* to the lighter G, which is a small metallic cup containing a roll of gauze wire. H and J are valves for checking and regulating the flow of the fluid in the tubes A and F.

*Claim.*—The combination and arrangement of the tube F and lighter G, when constructed and arranged substantially as and for the purposes set forth.

No. 22,775.—ZACHARIAH ATKINSON, of Richmond, Ga.—*Improvement in Cotton Presses.*—Patent dated February 1, 1859.—Upon turning the windlass G and drawing up the ropes H, the lower ends of the levers D are brought towards each other. This pushes the upper ends of levers E towards each other and rocks the rollers F upon the cross-bar of the frame A. As the levers D are elevated, the cams *f* come more and more into action, so as to operate more powerfully at the last moment of motion when the levers D and E approach the perpendicular position, and the force of the windlass upon them is increased.

*Claim.*—The cam rollers F, in combination with the levers D and E, substantially as set forth for the purposes described.

No. 22,776.—J. B. ATWATER, of Berlin, Wis.—*Improvement in Car-Couplings.*—Patent dated February 1, 1859.—When it is desired to connect two cars, the several parts seen in the illustrations stand in the position there represented, the tumbler *c* is erect, and the pin is raised in order that the link may pass in. When the link *e* strikes the tumbler it is thrown down in the position seen in the figure. As it falls it turns the rod C, which, by means of its crank, operates upon the piece D, and it in turn operates upon the lever E, which serves to throw the pin *d* down into the link, and thus secures it.

*Claim.*—The arrangement of the tumbler *e*, rod C, connecting piece D, lever E, which is provided with a foot piece *o*, pin *d*, rollers *m n*, and door or platform *i*, the whole being combined and operated in the manner and for the purpose specified.

No. 22,777.—CHARLES F. BELLOWS, of Seneca Falls, N. Y.—*Improvement in Pumps.*—Patent dated February 1, 1859.—The nature of this invention consists in providing two sets of screws—one set of which is composed of what is usually termed a right hand and left hand screw on the same axis, and the other set is also composed of a right hand and a left hand screw on the same axis—as shown in figure 2, and arranging them in such a manner as that the threads of one set of screws move in the grooves of the other set as they revolve on their respective axes; and then placing the screws, thus arranged, in a case fitted to their peripheries, as nearly water and air tight as will admit of their revolution.

*Claim.*—The arrangement and construction of a pump, as set forth, by means of right-handed and left-handed screws, the threads of one operating within those of the other, as described, or other mode substantially the same.

No. 22,778.—D. P. BURDON, of Brooklyn, N. Y.—*Improvement in Ovens.*—Patent dated February 1, 1859.—The claim and illustration explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of a series of hinged cars *a* around a disc plate *d*, so that they will deliver bread pans with their contained bread at the proper place of discharge, and also receive the said pans in their revolution, substantially in the manner set forth; and in combination therewith I claim the circular track A A, so arranged as to support the ends of said cars *a* upon friction rollers *n*, while at the same time allowing each car *a* to deposit its pan at the proper place, and restore said cars *a* to their proper positions to receive the return pans with their bread, in the manner and for the purposes set forth.

Second. I claim operating the sliding doors E B by means of the radial arms *b*, or their equivalents, projecting from the driving shaft *g*, so that the doors E B will be alternately opened and closed at the proper time for delivering and receiving the bread to be baked.

Third. I claim operating the traversing follower *rr*<sup>1</sup> by means of radial arms *c*, or their



equivalents, for feeding the pans into the oven, when the same is so arranged that the pans will be fed into the cars *a* while the door B is open; and in combination therewith I claim the compensating pulley wheel *w* and weight *v* for equalizing the motion and returning the traversing follower *r r*<sup>1</sup>.

No. 22,779.—JOHN BURNISH, JAMES TALBOT, and THOMAS W. YARDLEY, of Pottsville, Pa.—*Fluxes for Puddling Iron*.—Patent dated February 1, 1859.—This invention consists in the use as a flux during the process of puddling “red short iron” of a composition of silicious sand, loam, alum, clay, lime, oxide of iron, and talcose rocks, so that the iron may be deprived of its “red short” quality, and rendered available for many purposes from which its use has been hitherto excluded.

*Claim*.—Silicious sand, loam, alum, clay, lime, oxide of iron, and talcose rocks, when used collectively, in or nearly in the proportions described, as a flux in the process of puddling iron.

No. 22,780.—ZIBA CASTERLINE, of Liberty, Ind.—*Improved Washing-Machine*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The employment of balls *h h h* attached to the rubber E of a washing-machine, when said rubber has a reciprocating movement in the tub, constructed and operating in the manner and for the purpose set forth.

No. 22,781.—REUBEN CAVE, of Louisville, Ky.—*Improved Machine for Polishing Metals*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The running of two polishing grit stones A A edge to edge, in opposite directions, one immediately above the other, and both running at the same time, the upper stone running one third faster than the under one.

No. 22,782.—WILLIS L. CHILDS, of Piermont, N. Y.—*Improvement in Railroad-Car Seats*.—Patent dated February 1, 1859.—This invention relates to that class of car seats which may be used as an ordinary reversable day seat, and rendered capable of being converted into a sleeping couch at night.

The inventor says: I do not claim broadly a reversable car seat; neither do I claim, irrespective of arrangement and construction, a car seat capable of being converted from an ordinary day seat into a sleeping couch at night, and *vice versa*; neither do I claim suspending a seat upon the point *a*, irrespective of arrangement and construction, for many plans have been devised for effecting such purpose.

But I *claim* attaching to each end of the planes or boards A and B curved or segment bars, lapping by each other, so that they will form an arc, having for its centre the point at which the planes or boards A and B are hinged or jointed.

I also claim suspending a car seat upon the point *a* in combination with the hinging of the planes or boards A and B, substantially as shown, so as to enable it to be reversed without concussion, and also to be used as a reclining seat or sleeping couch.

No. 22,783.—WILLIAM COUTIE, of Troy, N. Y.—*Improved Water Wheel*.—Patent dated February 1, 1859.—This invention consists in the use and arrangement of certain stationary plates, by which a rotary motion of the water is prevented and made to act with more effect on a screw wheel. Also in the arrangement of the wheel with the gate and suction tube, the gate being placed at the bottom of the tube and behind the wheel.

The inventor says: I *claim* the stationary plates arranged as described, so as to prevent a rotary motion in the water when acting on a screw wheel.

I also claim placing the gate below the surface of the back water, in connection with the draft tube, for the purpose specified.

No. 22,784.—JOSEPH COWEE, Jr., of Keene, N. H.—*Method of Variegating Wood*.—Patent dated February 1, 1859.—By this invention the timber which is to have a variegated appearance on its surface is placed between the two rollers H and B, that side which is intended to be variegated down towards a fluted roller, and in such a direction that the sides of the rollers are at right angles, or nearly so, with the fibres of the wood, and motion is given to the wheels, and sufficient weight applied to the end of the lever G so that the projections of the roller B leave depressions or indentations on the surface of the timber.

*Claim*.—The employment of rollers B B, in the manner substantially as described, for the purpose of variegating wood, all as set forth.

No. 22,785.—WILLIAM M. C. CUSHMAN, of Albany, N. Y.—*Improvement in Splice for Bar Rails*.—Patent dated February 1, 1859.—This invention consists in making a “splice of bar rails,” with an upper and lower flanch, or rib, so that the lower one shall be directly under the rail, for the purpose of giving greater strength to the base-plate of the splice and better



support the immediate ends of the rails, while the upper one extends outside of the rail and close thereto until it reaches the top thereof.

*Claim.*—In combination with the flat bar rail, the splice-plate, or piece constructed in the manner and for the purposes described.

No. 22,786.—CHARLES G. DICKINSON, of Poughkeepsie, N. Y.—*Improvement in Harvesters.*—Patent dated February 1, 1859.—In operating this machine the platform is attached to a harvester, the harvester and platform moving together, the grain as cut falls upon the front of the platform across the slots G, the upright arms O are moved through the endless chains, or belts, through the slots, outside the curb, towards the fore end of the platform where they turn at K, pass through the openings H, and moving toward each other along the front of the platform, commence gathering and compressing the grain lying and still falling across the slots, and having arrived at curve P turn, bringing the arms in the position as shown in the engraving.

*Claim.*—The combination of the curved arms O, curved feet E, and braces or compressors F, with endless belts or chains B, when arranged with relation to each other and to the platform A, and operating together in the manner described and for the purpose specified.

No. 22,787.—PORTER DODGE, of Frankestown, N. H.—*Improvement in Stoves.*—Patent dated February 1, 1859.—This stove is constructed of an iron frame and stone panels, put together in a peculiar manner. The iron frame is composed of a base A, which may be wholly or in part of cast-iron, or formed with a cast-iron rim *a*, a cap rim, or frame B, and vertical corner posts *c*. Each of said posts has a flange *d* extended from each outer edge. It is also provided with a flange *e* projecting inward. These flanges are intended to secure in place an inner and outer series of stone panels D, which are arranged in them, and extend upwards from the bottom.

*Claim.*—An improved air-tight stove, the several parts being constructed and arranged in relation to each other substantially as shown and described.

No. 22,788.—JAMES B. DUFF and THOMAS W. KEATING, of New York, N. Y.—*Envelope Machine.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We do not claim, broadly, the invention of oscillating lappers to fold envelopes. Nor do we claim the arrangement and combination of a half circle with the heels or base of the lappers.

We distinctly disclaim the folding flaps projecting from the centre, or nearly so, from the end of a shaft or shafts, and having their bearings on one end or on each end thereof, whether with or without the half circles, as set forth in the third claim of Milton G. Puffers' patent, November 23, 1858, and we hereby disclaim all and every part covered by said Puffers' invention.

First. We *claim* the combination of the pasters *a a*, the grooved pressure fingers S S, and the spring plates K<sup>1</sup> K<sup>1</sup>, the whole being applied to operate substantially as set forth.

Second. In combination with a feeding table, having its surface composed of India rubber or other elastic substance, we claim the use of a plunger operating through a die above the said table, and provided with sharp projecting edges for the purpose, after it has forced the blank through the die, and thus turned back the flaps, of making a sharp crease where the fold is to be made, by pressure between said edges and the elastic surface.

Third. We claim placing the faces of the lappers I<sup>1</sup> I<sup>2</sup> I<sup>3</sup> I<sup>4</sup>, in front of their centres of motion, and their axes above the level of the table, as shown and described, so that the plunger E, when it descends, shall pass close against the faces of the lappers and the heels of the lappers, when the latter close, will move outward away from the paper, as shown and described.

Fourth. We claim having an open space between the heel of the lappers I<sup>1</sup> I<sup>2</sup> I<sup>3</sup> I<sup>4</sup>, to receive and hold the edges of the paper, when it is pressed therein by the descent of the plunger, as and for the purposes shown and described.

No. 22,789.—WRIGHT DURYEA, of Glen Cove, N. Y.—*Improvement in Apparatus to Manufacture Starch.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the described system of arranging and combining the grinding, washing, and bolting apparatus, to wit: the arrangement of all the stoves side by side, with their respective washers conveniently placed below them, with the arrangement of the bolting cylinders below their respective stones in horizontal series, with one or more interposed endless chain elevators P, combining them with the stones next in order of succession in the series, as set forth, whereby the whole apparatus is brought within two stories of a building, and convenience is afforded for its supervision, and the other advantages set forth are obtained.

Second. The combined arrangement of the lower bolting cylinders I I, and inclined plane or table O, with the troughs or gutters *m* and *t*, substantially as described, whereby I am



enabled to convey away the starch water and the tailings from the said cylinders by a single conductor for each purpose.

No. 22,790.—CHARLES O. FARRINGTON, of Brewer, Me.—*Improvement in Machines for Turning or Edging Bricks.*—Patent dated February 1, 1859.—The nature of this invention consists in having a series of slats attached by joints or hinges to a suitable frame and connected to a spring; the whole being arranged so that the unburned bricks, during the process of drying, may be turned from a flatwise position, as they are left in the moulds, to a position edgewise.

*Claim.*—The slats E, attached by joint hinges *a* to the bars A A, and connected by joint *c* to the bar F, which has the spring G attached to it, the whole being arranged substantially as and for the purpose set forth.

No. 22,791.—CHARLES FASOLDT, of Rome, N. Y.—*Improved Escapement for Time-Keepers.*—Patent dated February 1, 1859.—L is a straight detent lever, having its centre C between and in a right line drawn from centre to centre of the balance and escapement wheels. H is a hook attached to the lever with the like centre of motion. One extremity of the lever terminates in a fork F, vibrating in the partial rotation of the balance wheel. The other extremity of the lever has a peculiar form, such that the tooth of the escapement wheel may, at stated periods, rest against it, and be readily unlocked so as again to allow the rotation of the wheel.

*Claim.*—The employment of a straight lever and collateral hook in the position and form indicated and described.

No. 22,792.—SAMUEL F. FIELD, of Worcester, Mass.—*Improved Machine for Manufacturing Wooden Troughs.*—Patent dated February 1, 1859.—The object of this invention is to saw out the curved groove in the stick to form the gutter, so that the part sawed off will be in one piece, and also to manufacture the piece while sawed out into some other article as spouts or mouldings.

The inventor says: I *claim* arranging the bearings of the saw and the mechanism by which it is driven, substantially as described, whereby the upper surface, and also the interior of the saw, are left unobstructed, for the purpose set forth.

I also claim, in combination with a cylindrical saw, a secondary cutter, arranged substantially as described, so as to groove the core of the stick while it is sawed out by the cylindrical saw.

No. 22,793.—JOSEPH FOX, of Lansingburg, N. Y.—*Improved Cracker-Machine.*—Patent dated February 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the depressions in the spaces between the grooves in one or both of the rollers that form the strips of dough from the sheet, as described, for the purpose specified.

Second. I also claim forming short sections of skin-covered strips of dough into discs or crackers by pressure applied to the ends of the sections by the devices substantially as described.

Third. I claim the rollers, substantially as described, by which the crackers are rolled on the apron, and by which the skin on the upper surface of the pressed crackers is improved.

Fourth. I also claim the combination of the straight edges for evening the rows of crackers before rolling, and also for docking, as specified, with the dockers, substantially as set forth.

Fifth. I also claim the employment of the clamp bars II<sup>1</sup> in combination with the knife H, as described, to cut off and hold the sections of the strips of dough as the strips are fed through the bars G, as specified.

Sixth. I claim the plane T, follower U, and second endless apron S, substantially as combined and arranged among themselves and with the other endless apron, for the purpose of taking rows of crackers from a moving endless apron and placing them upon the bake-pans.

No. 22,794.—JAMES FREELAND and ROBERT H. LECKY, of Allegheny, Pa.—*Improvement in Slide-Valves of Steam-Engines.*—Patent dated February 1, 1859.—The nature of this invention consists in a mechanical arrangement for avoiding a full pressure of steam on the upper side and around the slide-valves of steam-engines, and for making the pressure on the lower sides of the valve about equal.

The inventors say: We *claim*, first, the arrangement of the armed flange M on the steam-pipe L, the columns R, the studs O, with nuts P, and the cap K, the whole being arranged and secured to the valve seat A as described and represented.

Second. The arrangement of chamber G with opening H, as described and represented, and for the purpose set forth.

Third. The combination and arrangement of the armed flange M on the steam-pipe L, columns R, studs O, with nuts P, stuffing-box N, cap K, and slide-valve B, with the valve-seat A, the whole being arranged, combined, and operated as described and for the purpose set forth.



No. 22,795.—JOSEPH W. GARDNER, of Shelburne Falls, Mass.—*Improved Handles for Table Cutlery*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* as an improved article of manufacture a table-knife having its handle composed of two or more parts *a b*, the ends of which are encompassed by ferules *d* and otherwise constructed as shown and described.

No. 22,796.—DWIGHT GIBBONS, of Rochester, N. Y.—*Improvement in Spermatic Rings*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the employment, in a ring encircling the penis, of a sharp pin or point attached to a spring, which is held by a roller *i* or other equivalent rest, so as to prevent the protrusion of the said pin within the interior surface of the ring till distension of the penis occurs and by its action on the spring causes its liberation from the roller or rest, and thereby permits the said spring to force the pin or point into the penis, substantially as described, with a sudden action, instead of with the gradual action peculiar to the points of other rings for the same purpose.

Second. The combination of the two semi-circular or nearly semi-circular springs with the two rigid sockets, substantially as described, by means of a slot and set screw in one of the sockets, which permits the ring of the instrument to be adjusted to organs of various sizes.

No. 22,797.—JOHN W. GOULD, of Elmira, N. Y.—*Improvement in Railway-Chairs*.—Patent dated February 1, 1859.—This improved railway-chair is applicable either as a chair proper, resting on the cross-tie, as shown in the engraving, or as a "splice" uniting the ends of the rails between the cross-ties or sleepers, in which case the lock-wedge C acts as a "fish piece."

*Claim*.—The self-securing "lock-wedge" C, arranged in combination with the rail A, chair-seat B, and key D, substantially in the manner and for the purpose specified.

No. 22,798.—NATHANIEL B. HATCH, of Lawrenceville, Pa.—*Improvement in Retorts for Distilling Coal Oil*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the application and use in retorts used in distillation of coal, or other substances from which oil or gas is produceable, of a sweep-bar B B or arm, with plates attached, substantially as described, and operated so as to push or spread the material placed within over the floor or bottom and at intervals discharge the same continuously in openings A at or near the edge of the retort, substantially as set forth in the specification and drawings.

No. 22,799.—ASA P. HAWSE and LUTHER J. ADAMS, of Morrisville Vt.—*Improved Scrubbing Pail*.—Patent dated February 1, 1859.—The rollers R R<sup>1</sup> constitute the handle of the pail by which it is transported, and in their natural position permit the insertion of the mop on either side thereof. To wring the mop, the toe of the operator is inserted under portion D of piece C, producing a movement of said piece about pins *b* and causing a separation of the rollers R R<sup>1</sup>. The mop is inserted between them, the feet of the operator are placed upon both bow pieces B and D, and the mop is drawn up between the rollers, the moisture being extracted therefrom by the pressure of the rollers.

*Claim*.—The combination of pail P, rollers R R<sup>1</sup>, and pieces *a a* and C, arranged and operated substantially as and for the purposes set forth.

No. 22,800.—GEORGE W. HEARD, of Boston, Mass.—*Improvement in Shirt Collars*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* as an improvement in the "turn down collar," the construction of the same with four cravat-slots or passages *a b c d*, arranged therein, or with respect to the ends of the inner fold of the collar, and for the purpose of receiving a cravat or tie-ribbon, substantially as specified.

I also claim the described mode of applying or arranging a cravat or neck tie in the collar, constructed with the four slots or passages *a b c d*, arranged within it or with respect to the ends of the inner fold essentially as explained.

No. 22,801.—JOHN HEBDEN, of Medford, Mass.—*Improved Washing-Machine*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The machine constructed substantially in the manner and to operate as described, that is to say, with a removable dasher, or its equivalent, and a removable platform combined and arranged with the suds reservoir and mangle rollers, essentially as set forth; the whole not only aiding the operations of washing the clothes, expressing the water from them, and mangling them to be carried on consecutively, but causing clothes to be drawn out of the suds reservoir and the express water to be received into it, as specified.



No. 22,802—ISAAC A. HEDGES, of Cincinnati, Ohio.—*Improvement in Mills for Grinding Cane, &c.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, surrounding the openings in the top and bottom plates with annular ledges, when employed in connection with rollers having recesses corresponding with them in their top and bottom ends, substantially as described.

Second. I claim the regulator and adjuster, substantially as for the purposes described.

Third. I claim the oil-tubes H, when used in connection with a recess containing waste oil to conduct the same through the rollers to the bearings below.

Fourth. I claim the corrugated shells, in combination with the rollers, for the purpose of readily converting the mill into a corrugated mill, constructed and adapted substantially as set forth.

No. 22,803.—JAMES A. HENDRICK, of Providence, Pa.—*Improved Machine for Grinding and Polishing Saws.*—Patent dated February 1, 1859.—This invention consists in the employment of a grindstone, or polishing-wheel, in connection with feed-rollers placed in an adjustable frame and arranged relatively with a stone or wheel, whereby a very simple device is obtained for grinding edge-tools.

*Claim.*—The grindstone or emery-wheel B, in combination with the feed-rollers D D, placed in the adjustable frame C, the whole being arranged to operate substantially as and for the purpose set forth.

No. 22,804.—DEXTER HENSHAW, of Fitchburgh, Mass.—*Improved Clothes-Frame.*—Patent dated February 1, 1859.—When this frame is in use the arms stand, as shown in the engraving, at an angle of about forty-five degrees to each other; *d d* is a cord, or cords, on which the clothes are to be placed, running around the arms through the staples *e*, placed in the arms at different distances from the block *c*; *f f* are two braces which are attached at the end to opposite arms to hold them firm and steady when the frame is open.

*Claim.*—The combination of the four arms and the block with the cords, screws, and braces, as described and for the purposes aforesaid.

No. 22,805.—W. T. HILDRUP, of Harrisburg, Pa.—*Improvement in Rotary-Harrows.*—Patent dated February 1, 1859.—The nature of this invention consists in rendering the harrow adjustable by the resistance to be overcome in the operation.

*Claim.*—Giving the sleeves B B an invariable connection at one extremity, and a variable connection attached to the draft-bar at the other, substantially as and for the purpose set forth.

No. 22,806.—GEORGE W. HOLMAN, of Beloit, Wis.—*Improvement in Machines for Making Meal and Flour.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim adjustable knives for the purpose of grinding grain, or screws for feeding grain to grinding surfaces in mills, or cone-pulleys, or tangent-screws, or emery-wheels for sharpening knives.

But I *claim* placing a series of knives supported by gudgeons in a circle, or part of a circle, so that the thickness of the shaving cut by the edge of one knife shall be gaged by the back of the knife next to it, as and for the purpose specified.

And I also claim the placing of a series of knives, supported by gudgeons, so that the rankness of set of all of them may be uniformly graduated by one operation, and so that their faces may be thrown back into one uniform surface for grinding or sharpening, as set forth.

I also claim the band *f*, at the end of the knives, constructed and operating substantially as described.

I also claim the arrangement of the reversed screw-threads on the arbor *n*, and the reversed screw-threads on the core, for the purpose of moving grain in opposite directions at the same time, as combined with the other parts of my machine, substantially as set forth.

No. 22,807.—WILLIAM H. HOPE, of Washington, D. C.—*Improvement in Mills for Grinding Grain.*—Patent dated February 1, 1859.—The nature of this invention consists in making a triplicate portable mill, (requiring but small power to drive it,) of cylinders running in concaves, for the purpose of grinding different materials, such as corn on the cob, corn meal, and wheat flour. Also in the mode of setting the stone and cylinders to grind coarse or fine, as the case may require.

The inventor says: I *claim* the combination of a cylindrical corn and cob-cutter and crusher for grinding food for cattle, with two sets of grinding surfaces, arranged and operating substantially as and for the purposes set forth.

Second. I claim the arrangement by which the cylindrical rollers or cutters and crushers and grinding surfaces may be operated together or separately, as and for the purposes set forth and described.



Third. The mode of regulating the cylinders and stone for the purpose of grinding coarse or fine by the use of the screw-lever *l*, attached to the journal-boxes *e*, which move on cars or lugs firmly attached to frame *F*, in the manner described and specified.

No. 22,808.—WILLIAM S. HUDSON, of Paterson, N. J.—*Improved Apparatus for Regulating the Draft of Steam-Engines.*—Patent dated February 1, 1859.—The nature of this invention consists in arranging a vertical diaphragm transversely in the upper portion of the smoke-box, in front of the steam-pipes and between them and the exhaust-pipes, and extending from near the top of the smoke-box down to near the level of the lowest tubes for the purpose of compelling the gaseous products, or a portion thereof, to descend and pass under it. It also consists in making the opening or openings above the base of said diaphragm of such area that when the fire is kindling, and when the locomotive is standing still, the small quantity of gases flowing from the tubes passes freely through these openings, and when the combustion is increased by the action of the blast, a large portion is compelled to pass underneath.

The inventor says: I *claim*, first, the interposition of a perforated diaphragm *E*, constructed substantially as described between the steam and the exhaust-pipes, and extending down to or near the level of the lower tubes, substantially as and for the purpose shown and described.

Second. Making the apertures above the base of the diaphragm *E* of such area that when the locomotive is standing still the gaseous products of combustion may flow through without serious obstruction, but that, when the combustion is increased by the blast, a large portion is compelled to pass underneath, substantially as set forth.

No. 22,809.—GEORGE C. JENNISON, of Ware, Mass.—*Improvement in Ovens.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim an endless carrier, in combination with and arranged in a baking chamber separated from a furnace or chamber of combustion by a partition wall, or equivalent, through which the heat from the furnace has to pass in order to obtain access to the baking chamber.

But I *claim* the application of the baking chamber of the endless carrier to the furnace in such manner that the air within the said baking chamber may come into direct contact with the furnace charge or heated volatile products arising therefrom, and be heated thereby, without the heat having first to pass through any dividing wall or partition, or its equivalent.

I also claim the arrangement of the baking chamber with respect to the furnace and its discharge flues, substantially as described and as represented in the drawings, whereby the advantage of the ascending power of the heat is secured, while the smoke is carried off by the flues.

I also claim the arrangement of the charging and discharging orifices of the baking chamber, with reference to it and the lower smoke eduction passage leading into the discharge flue of the oven.

I also claim the arrangement and application of the pendulous platforms and the endless carrier, together and within the vertical baking shaft.

I also claim the combination and arrangement of one or more openings *i*, and their dampers, with the baking chamber and its furnace and flues, arranged as specified.

No. 22,810.—O. W. JIPSON, of Rochester, N. Y.—*Improvement in Weighing-Scales.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim, separately, any of the parts shown and described.

But I *claim*, first, the sliding block *H*, when provided with the rollers *k l* and slide or supplemental weight *I*, arranged and combined as shown, for the purpose specified, and with or without the rack *j* and pinion *m*.

Second. The adjustable block *J*, provided with the slide or weight *s*, graduated bar *r*, in combination with the nut or supplementary weight *q*, as and for the purpose set forth.

Third. The attachment of the lever *C* to the platform frame, whereby the same may be adjusted further in or out from the frame, as circumstances may require.

Fourth. The arrangement of the bars *L L L L K K* with their sockets *v v b b<sup>1</sup>*, and with the frame *B*, substantially as shown, to admit of the adjustment of the bars to receive platforms of greater or less size, as required.

Fifth. The employment or use of the sleeve *E*, attached or applied to the beam *C*, as and for the purpose specified.

No. 22,811.—EDWARD JONES, of Brooklyn, N. Y.—*Improvement in Floating and Revolving Derricks.*—Patent dated February 1, 1859.—The nature of this improvement in derricks consists in making the turn table, or frame, which carries the derrick, to turn on the bottom of the scow below its deck; also, in supporting the turn table, or frame, which carries the derrick, by means of a circle and wheels at or about the height of the deck of the scow which carries it.

The inventor says: I *claim* the arrangement of the turn table, or frame, which carries the derrick, when placed on the bottom of the scow, or below the deck, substantially as described.



I also claim supporting the upper turn table or frame of the derrick by means of a circle and wheels, substantially as described.

No. 22,812.—WILLIAM W. LEWIS, of Cincinnati, Ohio.—*Improved Horse-Shoe Machine*.—Patent dated February 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination in a pair of rolls of a groove  $b b^1$  and creasers  $a$ , which will, by their joint operation, exert pressure in a lateral as well as a longitudinal direction, substantially as and for the purposes set forth.

Second. In combination with the above, I claim dividing the rollers radially and vertically, substantially as and for the purposes described.

No. 22,813.—HENRY MARTIN, of Louisville, Ky.—*Improved Tool for Crozing and Chamfering Barrels*.—Patent dated February 1, 1859.—This invention consists in the use of a stock or gauge, constructed or arranged in a novel way, so as to admit of the attachment of either of the crozing or chamfer tools, or a trowel, and whereby one and the same stock is rendered capable of being applied to casks of various dimensions.

*Claim*.—The stock A, provided with the rollers C C, arranged so as to be capable of being adjusted longitudinally and laterally in the stock, substantially as and for the purpose set forth.

No. 22,814.—J. B. MARTIN, of Wilmington, N. C.—*Improvement in Apparatus for Increasing the Draft of Furnaces*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of a fan, with the exhaust, when arranged within the smoke-stack, substantially as described, so that the exhaust steam, as it issues from the exhaust-pipe, acts directly on the blades of the fan, and then passes with the products of combustion in a direct path through the fan and through the smoke-stack, thus causing the fan to turn with high velocity, and thereby accelerating the draught of the furnace, as set forth.

Second. The combination of the deflecting plates with the blades of the fan, for the purpose of intercepting sparks and cinders, as described.

No. 22,815.—THOMAS E. McNEILL, of Philadelphia, Pa.—*Improvement in Sleeping Cars*.—Patent dated February 1, 1859.—This improvement consists in a peculiar construction of the back and seat of this class of car-seats, whereby the same may be readily converted into couches for sleeping purposes.

The inventor says: I *claim*, first, constructing the seat C of the swing seat of a railway car, with guiding strips, or their equivalents, and padded leaves H and H hinged together and to the seat, so that the latter may be extended and form a comfortable couch for sleeping purposes.

Second. The frame  $e^1$  arranged to receive the padded board  $e$ , when the frame is hung to one end D of the couch, and the board to the opposite end by rods  $f$ , and when the whole is combined with the swing seat of a railway car, so as to form a rest for the back during the day, and a sleeping couch for the night, as set forth.

No. 22,816.—C. A. MERCHANT and G. L. PATTERSON, of Frankfort, Ky.—*Improvement in Coffee Pots*.—Patent dated February 1, 1859.—In using this invention the boiler A is filled with hot water and coffee; the reservoir B is placed on the top and filled with cold water, a red-hot iron is then put in to the tube C; as soon as the steam generates in the boiler it passes through tube D into cylinder H, and is condensed and turned back to the coffee boiler through tube E.

*Claim*.—The combination and arrangement of the cylinder H in the reservoir B, and the tubes D E and F C, in the manner and for the purpose described.

No. 22,817.—WILLIAM T. MILLS, of Galesburgh, Mich.—*Improvement in Clover Pickers*.—Patent dated February 1, 1859.—The nature of this invention consists in constructing a clover picker in such a manner that the heads of the clover may be removed without the employment of a knife scraper.

*Claim*.—Providing the teeth F F with the holes  $i i$  and angular plate H, when arranged at the front edge of the adjustable platform or box A, and in relation to each other, in the manner described and for the purpose specified.

No. 22,818.—STEPHEN F. PALMER, of New York, N. Y.—*Improvement in Discharging Water from Floating Dry Docks for Canals*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The manner of discharging the water from a floating dock by means of the underground trunk in combination with the flexible apparatus, to convey the water from the dock without interfering with its rise and fall. Not confining myself to any particular manner,



provided it produces the same result of giving the water a self-acting discharge, substantially as before described.

No. 22,819.—WILLIAM P. PARROTT and STEPHEN H. HEAD, of Boston, Mass.—*Improved Variable Exhaust-Pipe*.—Patent dated February 1, 1859.—By this invention the regulation of the orifice of the blast-pipe of locomotive and other furnaces is placed under the control of the engineer, which is done by the use of the contracting nozzle.

*Claim*.—The described contracting orifice for blast-pipes, constructed and operating in the manner and for the purpose, substantially as set forth.

No. 22,820.—JONES PATRICK, of Chicago, Ill.—*Improvement in Variable Exhaust-Pipes*.—Patent dated February 1, 1859.—The nature of this invention consists in the manner in which it combines the rotating cylinder of adjustable exhaust openings with a mechanism in convenient position to the engineer or fireman, for the purpose of turning said cylinder, and thus to increase or diminish the area of exhaust opening at pleasure.

*Claim*.—In combination with a revolving cylinder or plate of variable sized exhaust openings, the rock shaft, pawl radius bar, their several connections, substantially in the manner and for the purposes set forth.

No. 22,821.—JOHN F. PEABODY, of Salem, Mass.—*Improvement in Sash-Supporters*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The inventor says: I do not claim the invention of a rack and a catch, nor the arrangement of a rack, or its equivalent in the grooved jamb of the window-frame, so as to be covered by the sash while in the act of rising; whether such rack be placed on the bottom of the groove and against the edges of the sash, or against the rear side of the groove and against the rear or outer side of the sash.

But I *claim* my improved application or arrangement of the rack-bar *D*, with reference not only to the groove *a* of the window-frame, but to the inner side of the sash *B*, and to the catch applied thereto, as described, the rack-bar, under such arrangement, not only being in full view with the catch, at any altitude at which the window-sash may be placed in the frame, but operating not only to support the sash at such altitude, but to maintain it within the groove *a*, as specified.

No. 22,822.—SYLVESTER W. PEARSALL and WASHINGTON L. PEARSALL, of New York, N. Y.—*Photographic Plate Vise*.—Patent dated February 1, 1859.—This invention consists in a peculiar spring-clamping jaw and releasing lever, combined with an adjustable sliding jaw fitted to move on a rod and retained by a thumb-screw; these jaws are so mounted on a vertical stud that they can be turned around horizontally into the desired position and held firmly.

The inventors say: We *claim* the spring rocking jaw and lever *f*, in combination with the movable jaw *e*, substantially as described and shown.

We also claim the jaw pieces or facings of hard rubber or gutta-percha, for the purpose specified.

And we claim the arrangement of the rod *d*, stock *c*, and gudgeon *b*, entering the socket *a*, and having the set screw *k*, by which the apparatus is retained in position horizontally, as specified.

No. 22,823.—G. W. PENNISTON, of North Vernon, Ind.—*Improvement in Cotton-Bale Press*.—Patent dated February 1, 1859.—The nature of this invention consists in the peculiar manner of constructing the iron tie, or friction key, and its ready adjustment to the ends of the piece of hoop made use of in baling cotton and other materials, and also in the ready manner of detaching it from the bale.

The inventor says: I *claim* the tie *A*, or friction key, constructed as described, with convex inner bearings, 1 and 2, figure 3, when constructed and operated in the manner and for the purposes specified.

No. 22,824.—SYLVESTER PEARSONS and ALFRED M. CONE, of Panama, N. Y.—*Improvement in Harvesters*.—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: First, we *claim* arranging and operating the chain cutters upon an adjustable and vibrating cutter frame, in the manner and for the purposes substantially as described.

Second. We claim the arrangement of two or more rollers *J J*, relatively to the chain cutters, multiplying wheel *c*, and adjustable vibrating cutter frame, so that the rollers will form a bearing for the chain cutters, and support and hold the chain in gear with the multiplying wheel, whatever may be position of the adjustable vibrating cutter frame in passing over unlevel surfaces, substantially as set forth.

No. 22,825.—J. E. RICE, of Oneida, Ill.—*Improvement in Fanning Mills*.—Patent dated February 1, 1859. Within the spout *E* a curved plate *F* is placed, the lower end of said plate



being connected with the spout by a hinge, or joint *k*. To the upper end of the plate *F* a rod *l* is attached, said rod leaning down below *F*, and connected to a vertical slide *m*, which works by the side of a ledge *n*, between the spout *E* and chamber *D*.

*Claim.*—The arrangement and combination of the suction chamber *D*, spouts *E j*, plate *F*, and shoe *B*, substantially as and for the purpose shown and described.

No. 22,826.—NATHAN F. RICE, of New Orleans, La.—*Improvement in Filtering Apparatus.*—Patent dated February 1, 1859.—The nature of this invention consists in receiving the water to be filtered at the bottom of the cistern or other receptacle, and filtering it upwards through a filtering medium.

The inventor says: I *claim*, first, passing the water through the filtering medium from below upwards in the manner described.

Second. I claim the concavo-convex perforated false bottom or diaphragm, constructed and arranged substantially as described.

Third. I claim the air tube *K*, leading from the lower chamber *F*, as and for the purpose specified.

No. 22,827.—JOHN W. RICHARDS, of New York, N. Y.—*Improved Fire and Ventilating Apparatus for Ships.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, arranging and applying the pipe *F F*<sup>1</sup>, or their equivalents, leading to the different parts of the vessel, in combination with suitable connections with a boiler and blower, or air forcing apparatus, that the said pipes may be used as required, to supply either air for ventilation or steam for the extinction of fire, substantially as described.

Second. Applying the several lengths of pipe in a train so that they are capable of being turned in their joint boxes or supports, for the purpose of giving such direction to the ventilating air supplied by each length, as the occupants of the berth or part of the vessel supplied by it may desire, as described.

No. 22,828.—THOMAS RUSSELL, of New York, N. Y.—*Improvement in Ovens.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim to be the first inventor of an oven in which the substance to be baked travels horizontally from a door where it enters to a door on the same side where it is discharged.

But I *claim* the employment in such an oven, in combination with permanent ways or tracks, arranged at right angles to each other within, without, and through the doorways, substantially as described, and with a series of carriages to run on such ways, of a system of horizontal screws and endless chains, applied substantially as specified, and of teeth, or their equivalents, on said carriages, to connect with said screws and chains, the whole operating substantially as and for the purpose set forth.

And I also claim the opening of the oven doors to admit the carriages and permit their exit by the direct action of the doors of the carriages themselves, substantially as described, thereby dispensing with special machinery for that purpose.

No. 22,829.—GELSTON SANFORD, of Poughkeepsie, N. Y.—*Improvement in Burr Stone Mills.*—Patent dated February 1, 1859.—The nature of this invention relates to the securing a burr block of conical form to a shaft, and also in fitting two other blocks of burr or other stone thereto in such a manner that each piece shall form a half circle, and fitted together with a vertical joint, and also the manner of securing the last mentioned blocks to a bed-piece, or frame of a mill.

The inventor says: First, I *claim* the mode of constructing the casing or shaft with a vertical or upright joint *J*, in combination with the lever *G* and edges *R* as a fastener for the shell.

Second. I claim the grinding part *Q Q*<sup>1</sup>, and the elevating part *1*, in combination with the cone *B* and shell *B*<sup>1</sup>, when constructed and operated in the manner and for the purposes specified.

No. 22,830.—SAMUEL S. SQUIRE and THEODORE SCHARFENBERG, of Brooklyn, N. Y.—*Improved Hinge.*—Patent dated February 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The inventors say: We are aware that hinges have been constructed with a separate pin for each core, and also that centres have been cast on one leaf, and fitted by recesses on the other leaf by means of cores or chills, and we therefore disclaim such devices.

We *claim* providing the half leaves on one side of a butt with the hinge pins *G G* or *I*, which are solid, with the pattern, and form part thereof when cast in the manner specified.

No. 22,831.—ALBERT SHEEK, of Smith Grove, N. C.—*Improvement in Dressing Mill Stones.*—Patent dated February 1, 1859.—The nature of this invention consists in making a



slight shoulder or depression where the "land" and "furrow" unite, and making the furrow convex from that point to where it unites with the shoulder of the next land. The object being to crack or crush the grains between the two convex surfaces of the runner and bed, preparatory to its being ground or reduced, at the slight shoulders formed where the furrows join the lands.

*Claim.*—In combination with a plane surfaced land *a*, the depression *c*, and convex furrow or surface from *c* to *e*, the whole forming a new milldress, for the purpose and in the manner described.

No. 22,832.—H. B. THOMAS, of Portage City, Wis.—*Improved Rotary Steam Engine.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, so constructing and combining a piston wheel and sliding pistons with two eccentric cylinders, one outside and the other inside the said wheel, that with a proper arrangement of induction and eduction passages, those parts of the pistons within the rim of the wheel, as well as those without, are rendered effective in the operation of the engine, as described, and it is thereby rendered double-acting, either in its employment as a motor or as a pump, or as a combined motor and pump.

Second. The combined arrangement described of the passages and cavities in the cylinder head B, ring-valve I, and bonnet N.

No. 22,833.—WILLIAM W. WADE, of Longmeadow, Mass.—*Improvement in Sewing Machines.*—Patent dated February 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the application to sewing machines of the ratchet C or corrugated wheel and pawl, the pawl B being kept in place by a friction cam D, or its equivalent, and the motion being communicated to the machine, either by a double crank, as described, or by a single crank, or other appropriate means.

I do not claim a pawl and ratchet operated by a lever moved by a limb of a person using the machine.

No. 22,834.—GEORGE WALKER, of Port Jervis, N. Y.—*Improved Machine for Grinding Saws.*—Patent dated February 1, 1859.—The engraving exhibits the application of this invention to the grinding of circular saws, but the same machinery there represented can be made applicable by changing the rotating for a reciprocating saw-bed to the grinding of straight saws.

The inventor says: I *claim*, first, the arrangement and combination of the wheel I, and bed-plate F, substantially as shown and described, whereby said driving wheel is made to drive the bed-plate, and also to compensate for the pressure of the grindstone, as set forth.

Second. I claim the flat-bottomed water recess *c c* in the face of the bed-plate F, as shown.

No. 22,835.—CHAPMAN WARNER, of New York, N. Y.—*Improvement in Cast-Iron Pavement.*—Patent dated February 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—I *claim* the mode of constructing pavements of iron frames of any size, substantially of the form described and illustrated by the drawings, placed at right-angles to each other, each surmounted by a single boss, which constitutes the travelling surface, it being so arched and placed upon the frame, and the frames so connected with each other, that the pressure arising from a weight imposed upon any boss, or upon any part of it, shall not be borne exclusively by one part of the frames, but shall be diffused over it, and over the adjoining frames, the manner of connection, at the same time preserving the regularity of the surface, by preventing the elevation or depression of any one boss above or below the surface of the others; the space left by the frames to be filled with any material which the circumstances of each particular case may determine.

No. 22,836.—CHARLES WILLIAMS, of Philadelphia, Pa.—*Improvement in Sizing for Colored Papers.*—Patent dated February 1, 1859.—The nature of this invention is described in the claim of the inventor.

*Claim.*—The employment or use, in a sizing for marbled and other colored papers of the solution of the gum resin lac, in combination with a solution of either soap or beeswax or both, the said solutions being made and incorporated together in sizing, substantially in the manner and for the purposes described.

No. 22,837.—AURIN WOOD, of Worcester, Mass.—*Improved Machine for Shaving the Heads of Screw Blanks.*—Patent dated February 1, 1859.—This invention relates to machinery for separating the blanks, one by one, from a column moving between ways, and delivering them in a horizontal position, and inserting them at the required distance into suitable jaws by which they are gripped and rotated that the heads may be shaved or turned by a suitable cutter.



The inventor says: I *claim* the wheel with its volute and twisted slot, substantially as described, in combination with the ways, or the equivalents thereof, to present the blanks in order, by means of which combination the blanks are separated, one by one, and gradually brought to a horizontal or nearly horizontal position, as set forth.

I also claim, in combination with the wheel, having a volute and twisted slot, substantially as described, for receiving the blanks, one by one, from the separating wheel, as set forth.

And I also claim the combination of the inclined ways, the separating wheel, with its volute and twisted slot, the feeding tube and punch rod, or the equivalent thereof, with the jaws on the mandrel as described, and for the purpose set forth.

And I also claim communicating motion to the separating wheel by an interposed spring spur or catch or the equivalent thereof, substantially as described, that the spring connection between the impelling mechanism and the separating wheel, or its equivalent, may yield to any obstruction, and thus prevent injury to the mechanism, as set forth.

No. 22,838.—JAMES LEE, of New York, N. Y., assignor to Himself and MILTON FINKLE, of said New York.—*Stereoscopic Apparatus*.—Patent dated February 1, 1859.—The object of this invention is to combine in one machine an apparatus by which an indefinite number of stereoscopic views may be brought before the object glass with ease and facility.

The inventor says: I am aware that revolving stereoscopic machines have been in use previous to this time, operated in a variety of ways, one of which is by an endless band, patented by Alexander Beckers, April 7, 1857, of the city of New York, but to my knowledge there is none constructed and operated upon the principle here claimed.

I, therefore, *claim* the fan or segment hinge I, fig. 2, or its equivalent, in combination with the picture-holders F F, for the purpose specified.

I claim the controlling band H, or equivalent, for the use specified.

I claim the elastic band E, or its equivalent, in combination with the pulley B, and rollers C C and D, for the purposes specified.

I claim the picture-holder, figs. 4 and 5, as described for the purposes set forth. Finally, I claim the combination as set forth and described, but do not confine myself to the exact proportions, as I may vary the same while I obtain the same end by means essentially the same.

No. 22,839.—EZRA POLLARD, of Albany, N. Y., assignor to Himself and JOHN GRAY, of Westfield, Mass.—*Improved Meat Cleaver*.—Patent dated February 1, 1859.—The nature of this invention consists in a meat masticator at one end of a stock, and a cleaver or axe on the other end and combining both to the same stock, which is formed with an eye to receive a handle so that either can be used at pleasure.

*Claim*.—I claim the meat masticator C, in combination with the cleaver D, substantially and for the purposes specified.

No. 22,840.—REUBEN SHALER, of Madison, Conn., assignor to IRA W. SHALER, of New York, N. Y.—*Fly-Trap*.—Patent dated February 1, 1859.—This invention consists in the combination of a cover or door, which closes the entrance to the upper story or chamber of the trap, with a post or stop attached to the lower portion by which attachment of the upper portion of the lower part of the trap is made to open the door or lid, which otherwise closes the entrance.

*Claim*.—The combination of the stud E, and cover g, when arranged in connection with the chambers B and C, as described and for the purpose set forth.

No. 22,841.—SAMUEL E. TOMPKINS and JOHN MACLURE, of Newark, N. J., assignors to SAMUEL E. TOMPKINS, aforesaid.—*Improvement in Harness Saddle-Trees*.—Patent dated February 1, 1859.—This invention consists in a novel way of attaching the seat-block of the saddle to the tree, whereby a wooden seat-block, or one constructed of any soft materials, may be secured to the tree equally as firm and without any greater liability of working loose than the ordinary metal seat-block.

*Claim*.—The tubular projection *a* on the bow A of the tree, substantially as shown, so as to form a case for the bolt D, and permit the securing of the wooden seat-block to the tree, without injuring the same or allowing it to work loose, and at the same time securing the check-rein hook C to the tree.

No. 22,842.—MILTON D. WHIPPLE, of Charlestown, Mass., assignor to the WHIPPLE FILE COMPANY.—*Improvement in Machines for Cutting Files*.—Patent dated February 1, 1859.—The object of this invention is to cut files by machinery, and its main feature consists in the employment of a circular chisel, which, in lieu of being brought up to the blank and forced into its surface by the pressure of the blow of a hammer, is allowed to roll over it, it being so adjusted to the surface of the blank that it shall sink a given distance into it whether it be more or less wide.

The inventor says: I *claim* the circular rolling-cutter *f*, operating in the manner substantially as set forth.



Second. I claim holding the face of the blank which is cut up to a face-plate or rest by pressure upon its opposite sides, for the purpose specified.

Third. I claim clamping the blank rigidly, while a cut is made, and releasing it preparatory to its being fed, as set forth.

Fourth. I claim the wedges *o*, operating as set forth, for the purpose of clamping the blanks, as described.

Fifth. I claim the shield *z* against which the blank rests, and which is fed up with the blank in the manner and for the purpose substantially as set forth.

Sixth. I claim the described machine for cutting files, consisting essentially of the combination of the elements above claimed, and operating in the manner substantially as set forth.

No. 22,843.—CHARLES B. ALLEN, of Philadelphia, Pa.—*Improved Machine for making Rivets, Bullets, &c.*—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I claim the revolving shafts C C with their inclined planes *e e<sup>1</sup> e e<sup>1</sup>* and former, as described, and the mould-wheels or formers D D attached thereto, in combination with the yoke F and wheel G, whereby the extremities of the shafts to which the mould-wheels or formers are attached are made to approximate and separate.

I also claim the bar N and the inclined plane *n*, in combination with the rod *f* and cutter-wheel *g*, constructed and operated substantially as described, whereby the portion of metal which has been moulded or formed may, when so desired, be severed or detached.

No. 22,844.—GILES S. APPLETON, of Burlington, Vt.—*Improvement in Railroad Safety-Switches.*—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I claim, first, the combination of the broad and even switch-rails E E<sup>1</sup> with the broad and even traverse-rails F F<sup>1</sup>, long guide-rails H H<sup>1</sup>, and short lift and guide-rails *a b c* and *a<sup>1</sup> b<sup>1</sup> c<sup>1</sup>*, when the same are arranged in relation to each other substantially as shown and described.

Second. Allowing the wheels to play upon the wide traverse and switch-rails, after leaving the short lift-ways and guide-rails, before they reach the main track, substantially in the manner and for the purposes as described.

No. 22,845.—J. A. AYRES, of Hartford, Conn.—*Improved Method of Opening and Closing Gates by the weight of the Carriage.*—Patent dated February 8, 1859.—This is an improvement in that class of automatic gates in which a movable or vibrating platform is employed and actuated in the first instance by the gravity of the vehicle or team approaching the gate, the platform being connected with the gate by mechanism so as to open and close it as the platform rises or falls.

The inventor says: I claim the counterpoised or loaded platform E, formed of two parts *d d*, connected by joints or hinges *g*, and placed in the carriage-way A beneath the gate, and extending a requisite distance at either side of it, when said platform is connected by suitable mechanism with the gate, substantially as described, to operate said gate, as and for the purpose set forth.

I further claim, in connection with the platform E, the locking device formed of the drop-bars L L, the jointed levers M M connected with the bars N N, which are provided with the upright arms *r r* extending through the platform, the whole being arranged to operate conjointly, as and for the purpose set forth.

No. 22,846.—BENJAMIN BARKER, of Ellsworth, Maine.—*Improved Sawing-Machine.*—Patent dated February 8, 1859.—The object of this invention is to enable the circular saw to cut lumber while moving in either direction, so as that the time hitherto spent in "gigging back" will be more usefully employed. It also has for its object the trimming of the ends of the lumber, so that the edging and slitting or trimming may be performed at one operation.

The inventor says: I claim, first, the sawdust-spout H, arranged relatively with the edging-saw D and feed-table C, substantially as and for the purpose set forth.

Second. The trimming saw K, when used in connection and arranged relatively with the edging-saw D, to operate conjointly therewith, as described.

No. 22,847.—JOSEPH P. BARKER, of Wayne, Ohio.—*Improvement in Earth-Excavators.*—Patent dated February 8, 1859.—This invention relates to a new method of arranging and adjusting an apron, so as to conveniently discharge the earth taken up at any desirable point.

The inventor says: I claim the manner of arranging and adjusting an apron, and operating the same by means of the bent-levers J, for the purpose of conveniently discharging the earth taken up at any desired point, as set forth and used in connection with the adjustable wheels, as described.

No. 22,848.—SAMUEL K. BASSETT, of Galesburg, Ill.—*Improvement in Steam-Ploughs.*—Patent dated February 8, 1859.—This invention consists in a peculiar manner of arranging



the wheels of the track of a traction steam-engine, whereby the track may be readily guided and turned, and the engine rendered available for drawing a gang of ploughs to turn over the earth in the usual way.

The inventor says: I *claim* having the wheels B of the truck A attached to separate axles C, with pivoted or swiveled inner bearings *b*, the outer bearings of the axles being fitted in guides D and the outer ends of the axles being connected by rods E, with racks F into which the pinions of the shaft G gear, the shafts being connected by the endless chains J passing around cone pulleys I, placed in reverse positions on the shafts, the whole being arranged to operate substantially as shown and described, to facilitate the guiding and turning of the machine, as set forth.

No. 22,849.—HENRY I. BEHRENS, of New York, N. Y.—*Improved Billiard-Register*.—Patent dated February 8, 1859.—The nature of this invention is described by the claim and engraving.

The inventor says: I *claim* the use of numbers instead of balls—technically called “points”—so arranged and worked by mechanism that any number of points made by the player may be readily marked on the number itself, and the amount of the thus successively marked points is made to be shown by the register, the whole arranged and operated by mechanism substantially the same as described.

No. 22,850.—JACOB BERGSTRESSER, of Berrysburg, Pa.—*Improvement in Monumental Daguerreotype-Cases*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the central frame encased by a central raised bead *b* on the rear side of a glass plate, with the outer frame encased by an outer raised bead *a*, the central frame and outer frame being cast together on the same glass-plate, and the outer one being deeper than the inner or central frame, substantially as and for the purposes set forth.

No. 22,851.—WILLIAM G. A. BONWILL, of Dover, Del.—*Improvement in the Application of Electricity in Dental Operations*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim the application of electricity to dental purposes as this is shown in the patent of J. B. Francis.

But I *claim*, in the application of electricity to dental purposes, the mode described of extracting or extirpating the dental pulp or internal nerve of teeth, to wit: by the application of a current of electricity, through the instruments made use of in the performance of said operation, directly and constantly to the dental pulp, or internal nerve, during the operation of cutting out or extracting the same, as set forth, and for the purposes described.

No. 22,852.—CHARLES B. BOYLE, of Albany, N. Y.—*Improvement in Photography on Wood*.—Patented in England January 7, 1859; patent dated February 8, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim*, first, the described or substantially equivalent method of applying albuminous matter and afterwards coagulating it by heat, so as to form an insoluble base within the pores of the wood, for the purpose set forth.

Second. Taking photographic pictures upon wood, the pores of which have been filled with gelatine, or its equivalent, and subsequently removing the gelatine from the block, without injury to the picture, by the application of a warm solvent.

No. 22,853.—JOHN L. BROWN, of Indianapolis, Ind.—*Improved Machine for riving Laths from the Blocks*.—Patent dated February 8, 1859.—In operating this machine, the lumber being placed against the upright posts H H, between the guides O O, drops upon the rests I I, in front of the knife E. The crank B operating the yoke D, which is attached to the knife-bar C, forces the knife E through the lumber in a direction parallel to the motion of the guides F and G, which govern the direction of the knife's movement, thus producing a drawing cut, instead of cutting straight across the grain of the lumber. As the crank D continues its revolutions the knife is withdrawn. The pitman N, by its connection with the elbow extension upon the guide bar G, operates the lever L.

*Claim*.—The combination and arrangement of the yoke D, knife-plate C, guides F and G, with the pitmen N and M, elbow-levers K and L, rests I and I, when constructed and operated substantially as and for the purposes set forth.

No. 22,854.—JOHN H. CHEEVER, of Boston, Mass.—*Improvement in Manufacture of Rubber Hose-Pipes*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim the vulcanizing process, or any compounds of rubber referred to, because, with the exception of the cross-fibre compound, they are old; nor heat-



ing the hose or pipes on rods or tubes of iron; nor any peculiarity in the construction of the machine.

Neither do I intend, in this application, to claim forming a cross-fibred fabric, as these will constitute the subject of other patents.

But I *claim* the new article of manufacture consisting of hose or pipe made of fibrous rubber by powerful pressure, and without seams or joints, substantially as described.

No. 22,855.—GEORGE E. CHENOWETH, of Baltimore, Md.—*Improvement in Harvesters*.—Patent dated February 8, 1859.—The nature of this invention consists in the construction and arrangement of parts for the better and more convenient communication of the power of the driving wheel to the knife-bar of the machine.

The inventor says: I do not claim making the shells of the cam cylinder adjustable, to compensate for wear, as that has been secured to me in a former patent.

But I *claim* the combination of the cam-cylinder with the cross-arm, slide-bar, and slotted or jaw lever, constructed, arranged, and operating substantially in the manner and applied to the purpose specified.

I also claim a slide-bar having two cross-arms provided with friction-rollers and working in the slotted box L, as described.

No. 22,856.—E. HALL COVEL, of New York, N. Y.—*Improvement in Coffee-Pots*.—Patent dated February 8, 1859.—This invention consists in providing a largely increased amount of surface against or in which the vapor of the boiling coffee is condensed, to be returned to the body of the pot to mingle with its contents, and in placing a water-valve in the steam-pipe of the pot to act as a safety-valve.

The inventor says: I *claim*, first, the combination of the chamber C with the condensing chamber D and condensing pipes E E<sup>1</sup>, as and for the purpose set forth.

Second. The combination of the condensing pipes E E<sup>1</sup> with the steam pipe F and trap G, as described, and for the purposes set forth.

No. 22,857.—FLORIAN DAHIS, of Williamsburg, N. Y.—*Improved Valve-Bung*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A bung A, provided with an air-passage *a*, terminating in a recess or chamber *b*, in which a disk-valve *c* of rubber or other suitable material, is placed and secured therein by a plate *e*, provided with a hole *f*, specifically as and for the purpose set forth.

No. 22,858.—BERIAH DOUGLAS, of Appleton, Wis.—*Improved Washing-Machine*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: My claim is not for the tub or rocker described, which are novel only in part.

But I *claim* the washing-seat and the foot-box, as combined with the washing-rocker and the hand-supporters, and the clothes-holder or wringer, as combined with the washing-tub, all for the purposes assigned to them.

No. 22,859.—JAMES DUNDAS, of Little Rock, Ill.—*Improvement in Cultivators*.—Patent dated February 8, 1859.—The nature of this invention consists in arranging a number of plough shaped shovels to a proper frame, suspended to a single axle, which is sustained by a pair of common wagon-wheels having a tongue attached for the purpose of harnessing thereto a pair of horses or other animals; also by a peculiar arrangement of the shovels by which the earth is thrown from the young corn plants, and the same shovels readily arranged to throw the earth toward the plant; also in arranging the shovels so that they may be raised above the surface of the earth when required.

*Claim*.—The arrangement of the half-shovels *w w*, in connection with the bars *h h* and *i*, to be moved to the right or left at pleasure of the operator.

No. 22,860.—GEORGE ESSINGTON, of Plainfield, Ohio.—*Improvement in Cultivators*.—Patent dated February 8, 1859.—The nature of this invention consists in the arrangement of mould-boards and centre-piece in the combination with the standard point and shares.

*Claim*.—The arrangement of the mould-boards T T, centre-piece P, in combination with the coulter or standard H, point I, and shares J J, the whole being constructed substantially as described and for the purpose set forth.

No. 22,861.—SQUIRE M. FALES, of Baltimore, Md.—*Improved Furnace for Smelting Iron*.—Patent dated February 8, 1859.—The nature of this invention consists in connecting with the cone of a furnace one or more arched recesses or chambers, with openings in the crown of each for the introduction, from the outside, of any fluxes necessary to make the furnace work properly, through which the blast is made to circulate before it rises to the cone of the furnace; also in introducing a movable "tymp," to be applied to the outer ends of the arched recesses, instead of the permanent tymp now in use.

*Claim*.—The combination with the ordinary furnace of the arched chambers or recesses at



the sides of the furnace, as described, the opening in the crown of the arched recess or chamber, as set forth, and the movable tympan at the external openings of the arched chambers or recesses, as specified.

No. 22,862.—DANIEL P. FARNHAM, of Johnstown Centre, Wis.—*Improvement in Cattle-Pumps*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim raising water by the weight of an animal upon a platform.

But I *claim*, first, the combination of the lever and rod, or their equivalents, with the gate and inclined platform, arranged and operating substantially as described and for the purpose set forth.

Second. The strips of metal *e*, secured on the inside of the barrel of the pump *G*, to prevent the valves from coming in contact with the plunger *H*, as it works up and down, in combination with the barrel, as set forth.

Third. The packing ring *I*, constructed as described, and kept up to the plunger by weights on the back side, as set forth.

No. 22,863.—J. B. FISHER, of Beaver Dam, Wis.—*Improved Mortising Chisel*.—Patent dated February 8, 1859.—This tool is formed with two cutting edges, the cutting portion at one end being considerably shorter than the other; they are so arranged that the mortises may be cut without reversing the tool.

*Claim*.—Constructing the tool with two cutting edges or portions *a*<sup>1</sup> *b*, of different lengths, substantially as shown and described, for the purpose set forth.

No. 22,864.—PERRY G. GARDINER, of New York, N. Y.—*Improvement in Manufacture of Cast-Steel*.—Patent dated February 8, 1859.—The claim explains the nature of this invention.

The inventor says: What I claim is not simply the gradual and prolonged cooling of the metal after melting.

But I *claim* the process, as a whole, of pouring the melted metal into intensely heated moulds, and then placing them, thus filled, immediately into the heated oven or furnace where they congeal, away from the external atmosphere, down to a cherry red heat, and then immediately plunging the ingots or bars into the highly heated oil, and retaining them immersed in it for a considerable time, as described.

No. 22,865.—PERRY G. GARDINER, of New York, N. Y.—*Improvement in Manufacturing Tools from Cast-Steel*.—Patent dated February 8, 1859.—The claim explains the nature of this invention.

*Claim*.—The process of treatment of the cast-steel, by pouring it, in a molten state, into moulds of the shape and size required for tools, instruments, axes, &c., previously heated to a high degree of heat, the steel being melted in a closed oven or furnace, and then replacing the moulds so filled in an oven or furnace, away from the external air, and keeping them there until they have been cooled down to a cherry red heat, and then immersing the tools, axes, &c., into the fluid mixture, of a temperature of from 100° to 150° Fah., as described.

No. 22,866.—JOHN C. GARLAND, of Chicago, Ill.—*Improvement in Mail-Bag Fastenings*.—Patent dated February 8, 1859.—This invention consists in a sliding steel strap having oblong slots working in connection with stationary pins.

*Claim*.—The employment of a slotted sliding-strap *F*, when made of a single steel-spring, and used in combination with a series of narrow stationary iron guides *E*, attached to the perforated flap of the bag, and with the steel-spring *R*, having headed stop-pins *C*, fitted between the front portion of the binding and the upper edge of the mail bag, substantially as and for the purposes set forth.

No. 22,867.—GEORGE W. B. GEDNEY, of New York, N. Y.—*Improvement in Rotary Spading-Machines*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of the invention.

The inventor says: I *claim* a series of spades *e*, which are operated substantially as set forth, so as to descend edgewise into the soil, successively in each other's track, and then to move laterally to detach the slice of soil upon which they operate from the undisturbed land.

I also claim combining an endless series of spades, operating substantially as set forth, with a cam *H*, or its equivalent, that controls their positions by means of spade-handles, or their equivalents, that are connected with the blades of the spades.

I also claim adapting the machine to be moved either end forward, by constructing the device that imparts lateral movement to the spades in such manner that its position may be changed, and that it may be made fast in either position.



No. 22,868.—JAMES C. GILBERT, of Winthrop, Me.—*Improvement in Skirt Hoops*.—Patent dated February 8, 1859.—In the engraving A denotes the hoop, it being composed of a series of stationary spools or abutments *a*, movable abutments *b*, helical springs *c*, and sundry wooden cylinders *d d*, strung on an inelastic cord *e*.

*Claim*.—In connection with the movable spools and springs placed or strung on the cord, a series of stationary abutment blocks *a*, fastened at intervals to the cord, and operating in the manner and for the purpose specified.

No. 22,869.—JOHN A. GOEWEY, of Albany, N. Y.—*Improvement in Padlocks*.—Patent dated February 8, 1859.—The upper tumbler E has its under side cut out so that the key does not operate upon it until it strikes the face *d*<sup>2</sup>; it is held up by the spring *d*<sup>1</sup>; it has also another spring F, working under the point *e*<sup>1</sup>, for the purpose of throwing out the shackle B when the tumblers are down. The stump G is fastened to the lower tumbler D, and prevents the upper tumbler E from being forced back until the lower tumbler is raised to a sufficient height to release it.

*Claim*.—The combination of the tumbler E, having attached to it the spring F, with the tumbler D, having attached to it the stump G, when arranged and operated in the manner set forth.

No. 22,870.—HENRY J. HALE, of Indianapolis, Ind.—*Improvement in the Arms of Broadcast Seeding-Machines*.—Patent dated February 8, 1859.—In this invention the arm has an extension beyond the slide C, which is hinged at D, and adjusted and held at any desired angle of elevation or depression by means of the slotted segments and set screws E E.

*Claim*.—The combination and arrangement of the segments E E and hinge D, when constructed and arranged as and for the purposes set forth.

No. 22,871.—SAMUEL HICKOK, of Buffalo, N. Y.—*Improved Refrigerator*.—Patent dated February 8, 1859.—The nature of this invention relates to the construction and use of a cold water tank and tube, for receiving, holding, and distributing into each apartment of the case a stratum of cold water.

*Claim*.—The combination of the tube B, arranged as shown, with the tank A, when combined with the case G G G, for the purposes substantially as described.

No. 22,872.—JOSEPH S. HOARD and VALOROUS O. SPENCER, of Mansfield, Pa.—*Improved Door-Latch*.—Patent dated February 8, 1859.—The nature of this invention is explained by the claim and engraving.

The inventors say: We *claim*, first, the combination of the key with the flange *h* and plate H, by which the key is made to operate as a detent to prevent the return of the plate H, which covers the outer key-hole, as set forth.

Second. The combination of the stop *j* upon the bolt with the key in such manner that, when the key is in the position represented in figures 3 and 5, the stop *j* will strike against the key and prevent the return of the bolt.

Third. The stop *i*, on the flange *h*, when combined with the key in the manner described, to prevent said key from being turned too far, as stated.

No. 22,873.—ALBION P. HOWARD and ALLEN ROWE, Jr., of Stoneham, Mass.—*Improvement in Sole-Cutting Machines*.—Patent dated February 8, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: What we *claim* is arranging the sole-cutter on the lower end of and at right angles to a vertical shaft, and combining with such mechanism, not only for elevating and depressing such shaft in the line of its axis, but mechanism for producing successive semi-rotations of such shaft and cutter, the same operating so as to carry the sole-cutter toward and away from the bed, and to give to such cutter an intermittent rotary motion, in the manner and for the purpose specified.

And in combination with the mechanism for elevating and depressing the cutter, and that for rotating it under an arrangement of the said cutter, with respect to its shaft, as specified, we claim the guide-tooth *y* and the clutch recesses *x x*, arranged to operate in the manner and for the purpose as set forth.

We do not claim the combination of a sole-bender with a sole-cutter, unprovided with a sole-discharger, as such is found in the United States patent No. 11,147.

But we claim the combination and arrangement of the concave sole-discharger and the convex sole-former or bender with the cutter, and so as to operate together, in the manner and for the purpose specified.

No. 22,874.—GILBERT L. HUDSON, of Conneaut, Ohio.—*Improvement in Door-Springs*.—Patent dated February 8, 1859.—The nature of this invention, as an improvement for a gate and door closer, consists in a standard A, coil-spring B, stirrup C, crotch-lever D, connecting wire E and the connecting link F to the gate or door G.

*Claim*.—The use of the standard A, coil-spring B, stirrup C, crotch-lever D, connected



with rod F, link F, as operating *vice versa*, to the gate or the door G; the whole arranged and connected, and operating substantially in the manner and for the purpose set forth.

No. 22,875.—FREDERICK HULL, of Derby, Conn.—*Improvement in Ladies' Hoop Skirts*.—Patent dated February 8, 1859.—This invention consists in arranging the bustle springs so that the ends of the springs are brought near to and in contact with the upper hoop, while the end of each successive spring, from the upper to the lower one of the series constituting the bustle, is attached to the skirt further back from the front than the one next above, and in connecting the bustle thus arranged, by means of the skirt-tapes, with a waistband H, so constructed and arranged as to be capable of being contracted and expanded both at the back and front.

*Claim*.—The combination of the sloping bustle springs with the waistband, adjustable at the back and front, the whole arranged substantially as described, whereby the adjustment of the bustle is effected by the waistband alone.

No. 22,876.—MARSHAL INGERSOLL, of Grafton, Ohio.—*Improved Surveying Instrument for Determining Inaccessible Heights and Distances*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the construction of a surveying instrument for taking distances and altitudes upon the general principle set forth in the description and specification.

I claim, especially, the arrangement of the three sights E F G, or their telescopic equivalents, one of which is adjustable upon a scale, by which means, and the adjustment of a target having the same horizontal scale, the distance of any object within the range of vision can be determined.

In this claim I do not intend to confine myself to the precise arrangement set forth, but to use a telescope in which a similar adjustment of hair-sights (or filaments of silk) are provided for upon a definite scale, as set forth; neither do I intend to confine myself to any particular scale, but to adopt a decimal scale, or any other that I may see fit.

I also claim, especially, a horizontal target, having marked upon it a scale corresponding to that of the accompanying instrument, which target is to be used in connection therewith, as described, the same forming a part of my invention.

I further claim the scale of altitude, in combination with the scale of distance to be used, in the manner and for the purpose specified.

No. 22,877.—AUGUSTUS JOUAN, of San Francisco, Cal.—*Improved Deep Sea Sounding Apparatus*.—Patent dated February 8, 1859.—A description of this invention is too long for a place in this report. The reader is referred to the specification and drawings.

The inventor says: I do not claim the external form of the instrument; neither the mode of calculating the depth by the time of submersion; neither that, as set forth, for testing the highest pressure.

I *claim* the combination and arrangement of the several essential devices described, operating in the manner and for the purposes set forth.

No. 22,878.—FREDERIC KUHLMANN, of Paris, France.—*Improvements in Methods of Varnishing and Protecting Surfaces*.—Patent dated February 8, 1859.—This invention relates to a new process for printing, painting, and dressing, on walls or fibrous and textile surfaces.

The inventor says: I *claim*, first, the process described of fixing the surfaces of fabrics (fibrous or textile) or solid surfaces, as walls or masonry, by the application of a weak solution of an alkaline silicate, as the silicate of potash and soda, to said paint basis.

Second. I also claim, for a similar purpose, the method described of laying a coating of artificial leather, produced as set forth, over the surface of the basis pigment.

Third. I also claim the described method of fixing and rendering printed papers and fabrics water-proof, and fixing the same by hot calendaring.

Fourth. I also claim the described method of rendering the surface of plaster of Paris water-proof, and of preserving the same by forming a coating of artificial sulphate of baryta upon said surface.

No. 22,879.—RUFUS LAPHAM and RILEY P. WILSON, of New York, N. Y.—*Improved Churn*.—Patent dated February 8, 1859.—The nature of this invention consists in churning butter, by means of the combined action of compressed or expanded atmosphere and agitation in an air-tight vessel.

*Claim*.—The use of an exhausting or condensing pump, in connection with the cream reservoir, as set forth, for the purpose of forcing air upon the upper surface of the cream or withdrawing it from it, in the manner described and for the purpose set forth.

No. 22,880.—C. V. LITTLEPAGE, of Austin, Tex.—*Improved Water Wheel*.—Patent dated February 8, 1859.—This is an improvement in horizontal water wheels, which are provided with curved buckets, and placed over a spiral water passage into which the water passes



from the penstock, and acts upon these buckets as it passes through them, the water being discharged at the outer ends of the buckets above the spiral water passage.

The inventor says: I do not claim, separately, the curved buckets *f*.

But I *claim* the wheel *G*, provided with curved buckets *f*, and attached to the shaft *E*, stepped in the block *D*, and otherwise arranged as shown, in connection with the spiral water passage *C*, in the block or bed *D*, the whole being arranged to operate as and for the purpose set forth.

No. 22,881.—JAMES A. LOWE, of New York, N. Y.—*Improvement in Gunlocks*.—Patent dated February 8, 1859.—The cock *A* is connected to the trigger *C* by the link *L*, which has the rule joint *E* at or near the middle, the pivot of which joint passing slightly beyond the line drawn through the pivots of connection on the cock and the trigger forms a set joint, which enables the link *L* to act as one piece until the cock is raised so that the pivots on each end of the link are on a line with the pivot on which the trigger moves.

*Claim*.—The rule joint, or its equivalent, in the link, substantially as described and for the purpose set forth.

No. 22,882.—LUCIUS LYMAN, JAMES P. HODGKINS, and EDMUND RAWSON, of Carthage, N. Y.—*Improved Machine for Riving Staves from the Block*.—Patent dated February 8, 1859.—The object of this invention is to obtain gauges that will rise and fall simultaneously with the knife, in order to perform their proper function without interfering with the operation of the knife, and at the same time admit of being set with facility for the purpose of cutting "stuff" of various thicknesses.

The inventors say: We *claim*, first, having the tube *j*, of the rod or gauge *o*, fitted in blocks *k*, which are adjusted by the screws *l m*, or their equivalent, for the purpose specified.

Second. Placing the rod or gauge *o*, in tube *j*, in the lower end of which spring *p* is placed, and on which springs the rod *o* rests, for the purpose set forth.

No. 22,883.—JOHN F. MASCHER, of Philadelphia, Pa.—*Improvement in Alarm Clocks*.—Patent dated February 8, 1859.—The nature of this invention consists in applying a ratchet or other shaped pinion wheel *A* to the arbor of one of the wheels of the running part of a clock. The clock so constructed is designed to be used for the purpose of timing and starting passenger-railroad cars, omnibuses, &c.

*Claim*.—The application of the rack, pinion, and snail, in the manner set forth, to the running part of a clock or watch, for the use and purpose described.

No. 22,884.—JOHN MAY, of Columbus, Ga.—*Improved Paddle-Wheel*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—So applying and arranging a frame *I* outside of the wheel, and in combination with the axle, or centre *H*, on which the floats rotate, or its equivalent, that the said frame may be turned about the wheel, and by being so turned will change the position of the said axle, or centre *H*, or its equivalent, relatively to the centre of the drum, and thereby cause the floats to be projected from the drum, in such positions relatively to the axis thereof, as may be desired, substantially as and for the purpose set forth.

No. 22,885.—WILLIAM K. MILLER, of Canton, Ohio.—*Improvement in Harvesters*.—Patent dated February 8, 1859.—This invention relates, first, to the manner of connecting the finger bar to the frame of the machine through the intervention of a rock shaft, so that it may swing up, over, or underneath said frame; and secondly, to an adjustable hinge plate, at or near the point of connection between the finger bar and the braces.

The inventor says: I *claim*, first, the combination of the braces and rocking bar, substantially as and for the purpose set forth.

I also claim the adjustable hinge plate *K*, for the purpose described.

And finally, I claim the combination of the shoe hinge plate, braces, and rocking bar, substantially in the manner and for the purposes described.

No. 22,886.—NELSON W. NORTHRUP, of Greene, N. Y.—*Improvement in Stoves*.—Patent dated February 8, 1859.—The nature of this invention consists in the peculiar construction and application of the coal box, or drawer, and the manner of adjusting it with keys; also the front fire plate used instead of doors, in the usual way, and of extending the partition, or division plates between the ovens, for the purpose of equalizing the heat upon the upper oven.

*Claim*.—In a stove constructed as described, the combination and arrangement of the partition *K*, with the flues *H H*, and dampers *I I*, in the manner and for the purpose specified.

No. 22,887.—WASHINGTON ABRAM PEASLEE, of Indianapolis, Ind.—*Improved Soot and Spark Arrester*.—Patent dated February 8, 1859.—The inventor says: When this invention is placed upon a stove, and the heated current, or smoke, is passed into the flue *E* and wall



G, forming a curve at the bottom of the wall G, it passes up between the walls G and D over the wall D, and passing down under the wall F it rises between the wall F and the casing, or outer wall C, passing under the wall A over the wall Q, and out at the flue B. The force of the current, or draft, is regulated by operating the windlass P, thereby increasing or lessening the passage between the plate L, and wall A or D, and the bottom of the case C.

*Claim.*—The combination and arrangement of the cap L, rod H, walls G F and Q, with the case, or outer wall C, flues B and E, and wall D, when constructed, arranged, and operated, substantially in the manner and for the purposes set forth.

No. 22,888.—HENRY PEMBERTON, of East Tarentum, Pa.—*Improvement in the Process of Manufacturing Caustic Alkalies.*—Patent dated February 8, 1859.—The inventor says: By my invention I have entirely surmounted the obstacles to the successful use of filtration for the separation of the caustic soda from the residuum of carbonate of lime. This is accomplished by pouring the solution of soda, after it is mixed with the hydrate of lime, through a filter made of bricks or tiles of fire clay, or other similar material.

*Claim.*—The mode described of separating the solution of caustic soda or other caustic alkaline liquid, from an insoluble precipitate, by the use of a filter, constructed substantially in the manner described.

No. 22,889.—JOSEPH A. PERLEY, of Lynn, Mass.—*Improvement in Heel and Spoke Shaves.*—Patent dated February 8, 1859.—This invention consists in forging the blade of two shanks in one piece, and in applying to said shanks, beveled in a peculiar manner, an adjustable gauge, thus making the gauge adjustable to the knife.

*Claim.*—The combination and arrangement of the adjustable gauge C, and beveled shanks A A, substantially as described, so that the gauge may be moved in a plane but slightly inclined to the convex side of the knife toward the edge or from it, for the object specified.

No. 22,890.—N. B. PRATT, of Deep River, Conn.—*Improved Carpet Sweeper.*—Patent dated February 8, 1859.—This invention consists in the use of a rotating brush cylinder, formed in two parts, and placed loosely on a stationary rod within a suitable box or case, the bottom of which is formed of yielding or elastic flaps or aprons, the edges of the aprons bearing upon the floor or carpet.

*Claim.*—The arrangement of the bearings of the friction driving rollers *e e*, in oblong slots *g g*, of the box A, and the rollers *d d*, in the specified relation to the ends of the revolving broom or brush, substantially as and for the purpose set forth.

No. 22,891.—F. A. REDINGTON and GEORGE McCLUER, of Fredonia, N. Y.—*Improvement in the Manufacture of Cheese.*—Patent dated February 8, 1859.—This invention consists in the employment of a boiler, hot water box, hot water reserve box, and suitable water pipes connected therewith and with the boiler, and used in connection with a six-way cock and milk pan or vat, whereby the milk in the vat may be heated to the proper temperature, and the temperature checked when at the proper height.

*Claim.*—I claim the combination of the water box A, milk vat B, the reserve water box G, boiler E, pipes *g h j k*, and the six-way cock F, arranged to operate substantially as and for the purpose set forth.

No. 22,892.—DAVID REYNOLDS, of Ogden, Ind.—*Improved Device for Preventing Tremulous Vibration of Saw Gates.*—Patent dated February 8, 1859.—The nature of this invention consists in securing to the frame work, in which the saw sash is worked, a straight bar of wood, iron, or other metal, as near the saw as possible, and near the middle of the lower part of the sash, and passing through boxing which fits it accurately.

*Claim.*—Combining the guide bar D and boxing E, with the sash saw and fender posts, for the purpose set forth and substantially as described.

No. 22,893.—ALBERT W. ROBERTS, of Hartford, Conn.—*Improvement in Machines for Stretching Leather.*—Patent dated February 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the constructing of the jaws B of leather stretchers, with ways for the wedges E to slide on, that the wedges may be so relieved from the leather when drawn back that the leather can be put in without removing the wedge from the jaw.

I also claim making the frames of hollow tubes A, on which the jaws slide, and also the application of steam to said frame, for drying purposes. Also the shaft and gears for throwing back the wedge, all of which is set forth and described.

No. 22,894.—WILLIAM N. ROWE, of Sharpsburgh, Md.—*Improvement in Corn Huskers.*—Patent dated February 8, 1859.—The nature of this invention consists in so arranging the parts of the machine that the ears of corn in the husk when presented to it may have their



butt, or stalk ends cut off, and then be received within it, stripped of their husks, and be discharged clean at the rear end.

*Claim.*—The combination of the adjustable plate K, armed with spikes, with the endless apron I, and knives D and E, when these several parts are constructed, arranged, and operated in the manner described for the purposes specified.

No. 22,895.—N. C. SANFORD, of Meriden, Conn.—*Improvement in Skates.*—Patent dated February 8, 1859.—In this invention the runner of the skate is attached to the stock by means of elliptic or other shaped springs, for the purpose of giving elasticity to the stock, and connecting the stock and runner durably together.

*Claim.*—Attaching the runner *b*, of the skate to its stock *a*, by means of the spring *c c*, substantially as and for the purpose set forth.

No. 22,896.—SILAS T. SAVAGE, of Albany, N. Y.—*Improvement in Cast-Iron Pavement.*—Patent dated February 8, 1859.—This invention consists in a method of connecting or combining polygonal, or circular blocks to form a continuous cast-iron pavement, by means of dovetails upon the said blocks, and locking pieces of peculiar construction fitting between said blocks and into the dovetails thereon.

*Claim.*—Combining the blocks by the peculiarly arranged dovetails cast on the blocks, and the locking pieces composed of heads and feet fitting between the blocks and into their dovetails, substantially as described.

No. 22,897.—WILLIAM SIMS, of Dayton, Ohio.—*Improved Refrigerator.*—Patent dated February 8, 1859.—The object of this improvement is to freely carry off all septic gases without producing a wasteful circulation of air in the portion of the refrigerator in which the ice and articles to be preserved are placed.

*Claim.*—The described arrangement of the ventilating passages E and F, communicating with the upper part of a receptacle C, in the lower part of which are placed ice and articles to be cooled or preserved, and in whose lower part the circulation of air is avoided, in the manner and for the purpose set forth.

No. 22,898.—JEREMIAH P. SMITH, of Hummelstown, Pa.—*Improvement in Corn Shellers.*—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement of the groups of short teeth *f f*, alternating with the smooth space *d*, which is provided with raised ribs, in combination with the sharp-edged teeth *h* (with curved or straight edges), when arranged circularly in lines parallel with the axis of the wheel, and operating in connection with the ear-holder D so as to act on the ears of corn nearly lengthwise thereof, substantially in the manner and for the purposes specified.

No. 22,899.—JOEL SMITH, of Northbridge, Mass.—*Improvement in Regulating the Twist in Throstle-Frames.*—Patent dated February 8, 1859.—The nature of this improved mode of regulating, graduating, and equalizing the twist of yarn or ring-traveller spinning frames, consists in communicating a gradually accelerated motion to the delivering rollers by means of a gradually expanding pulley, arranged to increase the speed of the rollers which yield the slivers to form the yarn spun.

*Claim.*—The expanding pulley D, arranged to operate as described, for the purpose set forth in the specification.

No. 22,900.—JOHN B. STONER, of Bennington, Ill.—*Improvement in Grain Weighers.*—Patent dated February 8, 1859.—This invention is designed to be used on all occasions where it is desirable to ascertain the quantity of grain passed from one spot or locality to another, as in transferring it from a storehouse to a vessel, a barn to a wagon, &c.

The inventor says: I *claim*, first, the rotary hopper, constructed and operating substantially as described.

Second. I claim suspending the rotary hopper upon the lever or scale arms, as set forth.

Third. I claim the arrangement of means described for operating and controlling the valve or door to the chute of the stationary hopper.

Fourth. I claim operating the indicators by means deriving their motions from the weighted end of the scale arms, in combination with the springs or their equivalents, as described.

Fifth. In combination with the suspending of the rotating hopper as described, I claim the suspending of the weight as described.

No. 22,901.—JOHN TEMPLE, of Middletown, Ohio, assignor to TEMPLE, MILLS, & STOUT, of said Middletown.—*Improved Sluice for Water Wheels.*—Patent dated February 8, 1859.—This invention relates to a construction of scroll sluice gates, whereby the feed passages while retaining their ratio of conveyance may be expanded or contracted with facility and accuracy under any head of water.



*Claim.*—The winged gates B C, constructed, arranged, and operating in combination with a series of scroll shutes A, substantially in the manner and for the purpose set forth.

No. 22,902.—JOHN TEMPLE, of Middletown, Ohio, assignor to TEMPLE, MILLS, & STOUT, of said Middletown.—*Improvement in Water Wheels.*—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The construction and arrangement in central discharge water wheels of buckets E, which have the described compound cyma-reversa and downward and outward curve, whereby the water acts on the wheel by percussion, reaction, and gravitation, and escapes freely without back action, as set forth.

No. 22,903.—WEBSTER THOMAS, of Oxford, Ohio.—*Improved Machine for Tenoning Spokes.*—Patent dated February 8, 1859.—Beneath the cutter *d* is the bed I, resting upon a fulcrum piece, so as to possess the power of rocking, and thus adjusting itself to the inclination of the lower edge of the spoke for cutting the shoulder to the desired disk of the wheel T is the support point of the spoke whose elevation is regulated by the wedge V to the required disk of the wheel. The bed B is attached and regulated in inclination by the support T and the wedge V. The cutters *e e*, operate in connection with this bed for cutting the square shoulder after the tenon has been formed by the lower cutter *d*.

*Claim.*—The combination of the beds I and B, constructed as described, with the support pieces T, the wedge V, and the double series of cutters *d e*, in the same cutter bearer, the construction and operation being as described.

No. 22,904.—DANIEL M. TRUE, of Rockland, Maine.—*Improvement in Lasts.*—Patent dated February 8, 1859.—This invention consists in arranging within the last block a bolt which passes into the last diagonally with the face of the block, thereby preventing the block from rising or slipping from its place.

*Claim.*—As a fastening for last blocks the bolt *a*, when formed with the notches *f* and *g*, and combined and arranged with the spring *b*, the pin *c*, and last hook hole *e*.

No. 22,905.—JOHN WALCH, of New York, N. Y.—*Improvement in Revolving Fire-Arms.*—Patent dated February 8, 1859.—The nature of this invention consists in constructing a revolving chamber, with two ranges of nipples connecting with the middle and rear part of the breeches, in combination with double hammers so fitting and acting that upon pulling the trigger the hammers fall, the one before the other, and explode the caps upon the nipples, that fire in succession charges contained in the forward and rear parts of each breech.

*Claim.*—The revolving chambers or breeches fitted with two ranges of nipples, and firing the respective charges in succession, substantially as specified.

No. 22,906.—AUGUSTUS WATSON, of Walnut Run, Ohio.—*Improvement in Underground Drain Ploughs.*—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—So hanging a coulter C, to which a mole is attached as that by revolving a key, or its equivalent, that restrains said coulter, and by advancing the plough, said coulter and mole will run out of the ground, substantially as described and represented.

No. 22,907.—A. H. WEBSTER, of Hudson, N. Y.—*Improvement in Apparatus for supplying Hydro-Carbons with Oxygen.*—Patent dated February 8, 1859.—This invention is designed for supplying, by mechanical means, coal tar, naphtha, benzole, and other hydro-carbons, with a necessary amount of oxygen to support proper combustion for illuminating purposes, in such a regular manner that a steady flame will be produced without the least flicker.

*Claim.*—The bellows B actuated by the tappit-wheels D and attached to the chest C, provided with a cover or weight *d*, and an eduction opening *e*, combined and arranged to operate as and for the purpose set forth.

No. 22,908.—WILLIAM L. WEST, of Elmira, N. Y.—*Improvement in Bee-Hives.*—Patent dated February 8, 1859.—The inventor says: I attach an elliptic-spring *d* to the outer side of each section, at or near the centre. This spring is made large enough to press against the inner side of the case when the sections are shrunk to their smallest dimensions, and exert a constant pressure, which serves to keep the movable partitions F F in contact at all times.

*Claim.*—The use of the opposing springs *d d* for the purpose of insuring a contact of the parts contiguous to the passage-way *c*, substantially as described.

No. 22,909.—SYLVANUS A. WHEAT, of Franklin, N. Y.—*Improved Apparatus for Drawing Water.*—Patent dated February 8, 1859.—This invention consists in constructing a bucket so as to fill and empty from the bottom; also in constructing a windlass so as to wind the rope upon the barrel without a tendency to overlap the preceding coil.

*Claim.*—Giving the barrel a longitudinal motion on the shaft, also connecting the valve to the rope by the rod, substantially for the purpose described.



No. 22,910.—THOMAS WILLIAMS and WILLIAM C. JOSLYN, of Fisherville, Conn.—*Improved Ellipsograph*.—Patent dated February 8, 1859.—This invention consists in having a slotted bar supported by legs, and a slide fitted into the slot, the slide having the axis of a circular disk passing through it, to the lower end of which axis a bar is attached, carrying an adjustable pencil stock. The disk is perforated with holes, in any of which the pin of an arm, which is pivoted to the slotted bar, may be fitted.

*Claim*.—The slotted bar A provided with the slide B, the arbor *c* passing through the slide B with the disk C and slotted bar D attached, and the elastic bar G pivoted to the bar A, and connected eccentrically with the disk C the bar D having the pencil stock E attached, and the whole arranged substantially as and for the purpose set forth.

No. 22,911.—JOHN P. WILSON, of Frankfort, and JOHN F. THOMAS, of Ilion, N. Y.—*Improvement in Burglar's Alarm*.—Patent dated February 8, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We do not claim securing the alarm by means of a screw to the casing of the door, or the use of fire-arms *a* as a means of alarm and defence in cases of attempted robbery.

But we claim, first, the employment, in connection with the described gun-alarm, of an adjustable gimlet-screw D which is secured in a dovetailed groove in the body while in use, and which is secured in the barrel or bore by a screw when not in use, substantially as is set forth.

Second. The employment of the two sides A<sup>1</sup> A<sup>1</sup> between which the hammer falls, which serve to prevent particles of the cap from flying off, and at the same time forming a snug protection for the hammer, and causing a louder report of the cap, as is fully set forth.

No. 22,912.—THOMAS K. WORK, of Hartford, Conn.—*Improved Odometer*.—Patent dated February 8, 1859.—This improvement is intended to prevent any inaccuracy in the registration of distances, by the jolting of the weight, when the vehicle passes over uneven roads.

*Claim*.—The curved or segment weight *m* pivoted to the arm *l* which is attached to the pinion *e*<sup>1</sup>, and fitted between the annular ledges *n o*, substantially as and for the purpose set forth.

No. 22,913.—FREDERICK YEISER, of Lexington, Ky.—*Improved Instrument for taking Altitudes of the Sun*.—Patent dated February 8, 1859.—This invention consists in determining the plane of the meridian at any time in the forenoon, or afternoon, by means of a spirally slotted cylinder, which is attached to a horizontal rotary frame in such a relation to a vertical pin, and to a line which is strongly defined on the upper surface of the frame, and which is provided with a toothed sector gearing into cogs on the top of a stationary disk in such a manner that when this cylinder is placed in such a position that when the ray of the sun passes through the inner end of the spiral slot, and the frame is slowly rotated on its axis, the ray of the sun ceases to pass through said spiral slot at the moment when the plane, which is determined by the above named vertical pin, and by the strongly defined line on the upper surface of the rotary frame, coincides with the plane of the meridian.

The inventor says: I *claim* the arrangement of the spirally slotted cylinder L on a rotary frame E, in such relation to a pin G and to a strongly defined line 3 4, that it operates substantially as and for the purposes specified.

And in combination with the rotary frame E, I also claim operating the cylinder L, by means of a toothed sector I, which gears into cogs J, attached to the stationary disk C, in the manner and for the purpose substantially as described.

No. 22,914.—JOHN K. BIGELOW, of Waltham, Mass., assignor to APPLETON, TRACY & Co., of said Waltham.—*Improved Mechanism for Stopping Watches*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* a peculiar mode of making the ratchet, viz., with trapezoidal teeth, and with a notch in each of them, as described and represented.

I also claim the arrangement or application of the stop-lever E with respect to the stopping stud and the ratchet, so as to serve not only as a carrier and actuator of the former, but as a stop to the latter under the circumstances specified.

No. 22,915.—MICHAEL BOYER, of Germantown, Ohio, assignor to CHARLES S. ROHNER and WILLIAM GUNCKEL, of said Germantown, Ohio.—*Improvement in Seed Drills*.—Patent dated February 8, 1859.—The object of this invention is to enable the discharge spouts of seeding machines to pass over firm obstructions without injury to themselves or the machine. When one of these spouts is drawn back by any obstacle in the passage of the machine the spring is acted upon, and the moment the spout passes the obstacle the spring draws the spout forward to its proper position.

*Claim*.—Arranging the spring C, ratchet-wheel *b*, ratchet *a*, link D, drag-bar A, arm E, and discharge-spout B, substantially in the manner and for the purpose specified.



No. 22,916.—JOHN N. DENNISON, of Newark, N. J., assignor to Himself, JOSEPH DENNISON, and DAVID BAKER, of said Newark.—*Improvement in Steam Condensers*.—Patent dated February 8, 1859.—The nature of this invention consists in providing for the escape of the air, gas, and steam.

When the plunger in the pump K rises and the water follows it in the barrel of the pump, the water will also rise up the pipe g.

*Claim*.—A feed-pump with its attachments and connections, substantially as described, in combination with a condenser, constructed and arranged as set forth.

No. 22,917.—E. B. HALL, of Woodbury, N. J., assignor to Himself and JOSEPH C. FARLEY, of Pine Grove, N. J.—*Improvement in Stump Extractors*.—Patent dated February 8, 1859.—This invention consists in the combination of a cam of peculiar construction with two sliding rods, having rollers against which the cam operates, and two hooks, the whole of the parts being arranged in respect to each other so that a stump may be extracted by a continuous rotation of the single cam.

The inventor says: I am aware that in the stump extractor, for which letters patent were granted to Jason S. Wood, on the 3d February, 1857, cams, in conjunction with other appliances, are used. I, therefore, do not claim broadly such a device, but I *claim*, as an improvement, on the patent of J. S. Wood, the cam J, when constructed in the peculiar manner herein described, in combination with the rods G and G<sup>1</sup>, their respective rollers and hooks K and K<sup>1</sup>, the whole of the above parts being arranged in respect to each other for joint action, substantially as set forth.

No. 22,918.—PETER HOFFNER, of Rising Sun, Ind., assignor to Himself and SAMUEL F. COVINGTON, of Indianapolis, Ind.—*Improved Die for Cutting Screws*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The construction of a solid die, in which the bottom of the groove is so thrown up in the rear of the cutting point or edge of the same as to avoid the friction occasioned by the rubbing upon the top of the thread of the bolt cut or threaded.

No. 22,919.—GEORGE HINMAN, of New Haven, Conn., assignor to Himself and CHARLES MONSON, of said New Haven.—*Improved Knife Sharpener*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I am aware that cutting edges set at different angles have been used for knife sharpeners for many years, but in all such cases the angle varied as the cutting edges were more or less separated at the upper ends. I therefore do not claim a knife sharpener made of two pieces of steel, with the edges fitted to abrade the sides of the edge of the knife, as such, as my invention.

But I *claim* the use of the two cutters (B and C) when made susceptible of being adjusted to any desired angle, by means of a slot while using any portion of the length of the cutting edges, and the whole is constructed and made to operate, substantially, as described.

Second. I also claim the rest D, in combination with the adjustable cutters B and C, when the whole is constructed and fitted for use, substantially as described.

No. 22,920.—WILLIAM LEACH, of Clarkson, N. Y., assignor to Himself and GEORGE P. TISDALE, of Chili, N. Y.—*Improvement in Self-acting Cheese Press*.—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim simply a self-acting press, but I *claim* the pitman D D, arranged substantially as described, in combination with the pairs of cross levers B B so as to keep said cross levers at equal heights at opposite ends of the press, and consequently at the same relative angle to the table A, in all positions, for the purpose of securing uniformity of pressure upon all parts of the articles pressed.

I also claim the combination of the rod l, handle r, and pawls m, mounted in one pair of cross levers B B, with the notches o o o, or their equivalents, in the other pair of cross levers, arranged and operating substantially in the manner and for the purpose set forth.

No. 22,921.—HORATIO LEONARD, of New Bedford, Mass., assignor to Himself and H. RYDER, of said New Bedford.—*Improvement in Moulding Paraffine Candles*.—Patent dated February 8, 1859.—The object of this invention is to make a paraffine candle not only with an external surface smooth and free from external cavities, but having a regular semi-lucent, or semi-pellucid appearance.

The inventor says: I do not claim manufacturing candles by means of moulds, but I *claim* in moulding paraffine candles the improved process, substantially as described, the same involving the employment of a heated mould and water and air baths at temperatures and in the manner substantially as mentioned.

No. 22,922.—EDWARD MAYNARD, of Brooklyn, N. Y., assignor to Himself, R. K. SLAUGHTER, and THOMAS E. PURDY, of said Brooklyn.—*Improved Method of Covering with*



*Fibrous Material Submerged Spiral Electrodes for short Distances.*—Patent dated February 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Constructing submarine telegraph cables of metallic conductors, twisted in helical form, in combination with layers of cords or strings, parallel, or nearly so, with the axis of the cable, that are confined together by serving or winding, and are saturated with water-proof non-conducting material, as set forth.

No. 22,923.—LOREN J. WICKS, of Racine, Wis., assignor to Himself and THOMAS BURBECK, of said Racine.—*Improved Boot-Jack.*—Patent dated February 8, 1859.—The arms A and B are pivoted together at *d* in such a manner as to allow them to play freely like a pair of scissors. *a* represents a pin secured to the arm A, against which the rear of arm B strikes when said arms are separated for use as a boot-jack. The arm A is provided at its heel with a hammer, which consists of the head D and claws E, the front end of this arm being so constructed as to form a screwdriver.

*Claim.*—The described boot-jack, as a new article of manufacture, with the tools formed on the rear or front of its arms, said arms being made to open or shut, substantially in the manner specified.

No. 22,924.—GEORGE C. AIKEN, of Nashua, N. H.—*Improvement in Bee-Hives.*—Patent dated February 15, 1859.—In the arrangement of the honey boxes two of them, viz: G G<sup>1</sup>, are larger than the others, and meet together in the middle of the hive, while the other two are disposed at right angles and lap on them. This arrangement of the boxes forms, with the sides *m m* of the hive, four chambers K K K K, for the reception of bell-glasses or tumblers, or separate boxes.

*Claim.*—The arrangement of the boxes G G<sup>1</sup> H H<sup>1</sup> in the hive so as to form, with the case thereof, the auxiliary or bell-glass chambers K K K K, in the manner described.

No. 22,925.—JOSEPH ARMSTRONG, of Woburn, Mass.—*Improvement in the Treatment of Hides and Skins.*—Patent dated February 15, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim* the described improvement on my patented process of treating hides, or, in other words, I claim in combination with the application and use of a press, in connection with the impregnation of the hide with grease, by a peg-lined cylinder, or any equivalent means, the employment of scraps of hide, or other suitable absorbents, in the press, and against the edges and other necessary parts of the hides, so as, during the operation of the press, to absorb the liquor from such edge or parts on or in which it would be likely to remain, as specified.

No. 22,926.—H. H. BAKER, of New Market, N. J.—*Improved Arrangement of the Feed-Roller in Wood Planing Machines.*—Patent dated February 15, 1859.—This invention consists in placing the feeding device under the complete control of the attendant or operator, so that the said device may be thrown in and out of gear with the work without stopping the working parts of the machine.

*Claim.*—Arranging the feed-roller N, substantially as shown, to wit: connecting it with a vibrating shaft K, box L, slide O, spring P, and with the necessary gearing, so that said roller may be kept to the work or moved out free from it without stopping the working or running parts of the machine.

No. 22,927.—FREDERICK H. BARTHOLOMEW, of New York, N. Y.—*Improvement in Hydrants.*—Patent dated February 15, 1859.—The nature of this invention consists in so constructing and arranging the several parts of the hydrant and stop-cock as to afford increased facility for detaching, withdrawing, replacing, repairing, and keeping in order various parts of the same, so as to avoid the necessity of shutting off the water at other places than at the hydrant, or of digging up when repairs or thawing out is required.

The inventor says: First, I *claim* the combination of the valve E with the main valve, and its fixed valve seat C, the whole constructed, arranged, and operating substantially as and for the purposes described.

Second. I claim the arrangement of chamber D, within the trunk of the hydrant surrounding the seat of the main valve, having a waste passage at the bottom, substantially as and for the purposes described.

Third. I claim the arrangement of the waste passage, the waste plug, and rod, in combination, substantially as and for the purposes described.

No. 22,928.—MOSES BALES, of Big Plain, Ohio.—*Improvement in Mole Ploughs.*—Patent dated February 15, 1859.—This invention relates to certain improvements in mole ploughs for subterranean draining, by means of which the operator is enabled to arrange one or more ploughs upon a cutting shaft in such manner as to produce drains at any desired depth from the surface of the ground.

*Claim.*—The adjustable mole ploughs D *d d*<sup>1</sup> *g g*<sup>1</sup> *e*, upon a cutting shaft A, arranged and operating substantially as and for the purposes set forth.



No. 22,929.—CHARLES E. BISHOP, of Brooklyn, N. Y.—*Improvement in Reefing and Furling Sails*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the employment of supplementary sheets to the topsails and other upper square sails of a vessel, in order that said sails may be kept more "flat," and that the strain upon the ends of the yard may be lessened, as set forth.

Second. I claim constructing topsails in the manner described, that is to say, with supplementary sheets, clew-lines, and lee-ropes, and with a central tackle, by the employment of which in due order, as set forth, the topsail may be reduced and secured in successive portions, substantially as described.

No. 22,930.—ISAAC W. BRAGG, of Cincinnati, Ohio.—*Improved Carpet Stretcher*.—Patent dated February 15, 1859.—This invention relates to a device adapted for attachment at the side of the room toward which the carpet is to be stretched.

The inventor says: I *claim*, first, the dog E c, operating substantially as described, to attach the stretcher to that part of the floor next the wall, toward which the carpet is to be stretched.

Second. The combination and arrangement of the trip lever F, for disengaging the dog, as set forth.

Third. The combination and arrangement of the apron C, feet B, and slides G, operating substantially as described, in combination with the rake H, to prevent the teeth from grazing the floor.

Fourth. The combination and arrangement, substantially as set forth, of the stock A, dog E e, driver H I K, and actuating worm M, operating in the manner and for the purpose explained.

No. 22,931.—JOSEPH H. BRINTON, of West Chester, Pa.—*Improved Method of Operating Yielding Feed Rollers*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* a pair of feed rollers, one of which is yielding, and both driven by the same screw-shaft, and in gear with it at all times, substantially in the manner described.

No. 22,932.—THOMAS W. BROWN, of Boston, Mass.—*Improvement in Skates*.—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the rocker and angular heel or straight-edge runner, made substantially in the manner described, and applied to the bearing plates or their equivalent, so as to be capable of being reversed with respect to the same, and used with either edge downward, as may be desirable.

I also claim the application of the heel plate to the heel screw, so as to be adjustable on, or with reference thereto, substantially in the manner and for the purpose described.

No. 22,933.—JAMES D. BRUNER, of Alton, Ill.—*Improvement in Stoves*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, connecting and arranging with an oven which has no bottom, and between which and the passages of the products of combustion there is no communication, and the fire-box of the stove, air chambers or cells, as and for the purposes set forth.

Second. Combining with a detachable grate surface the detachable air cells or chambers, as described.

No. 22,934.—S. S. BURLINGAME, of Warwick, R. I.—*Improvement in Instruments for Threading Needles*.—Patent dated February 15, 1859.—This instrument is made of a thin flat piece of steel, of a width not greater than the length of the eyes of the needles for which it is to be used, having one end curled as shown at *a*, or otherwise formed so that it can conveniently be held between the thumb and fingers, but having the whole remaining portion straight and its opposite end in the form of a fork, whose prongs *b b* are provided with barbs *c c*.

*Claim*.—The needle-threader, consisting of an internally barbed elastic pronged fork, substantially as described.

No. 22,935.—ADAM SCOTT CAMERON, of New York, N. Y.—*Improved Cut-off Valve for Steam-Engines*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the employment of the trip hinged valves, with their hook rods *k l*, and appendages for operating them, or the equivalents thereof, in combination with the side valve *b*, substantially as described, for cutting off the steam in steam-engines, as described.

I also claim, in combination with the slide and the trip hinged valve, operated substantially



as described, the so forming of the seat *c* of the slide valve relatively to the steam passages in the slide valve, as to admit the steam to the under face of the hinged valve and balance the pressure before they are opened, as set forth.

I also claim, in combination with the slide and trip hinge valves, combined and operating substantially as described, the employment of the adjustable cone, or its equivalent, to regulate the period of cutting off the steam, as described.

And I also claim the cone, or its equivalent, in combination with the eccentric tube, or its equivalent, substantially as described, as a means of adjusting the relative periods of closing the two valves, as set forth.

No. 22,936.—DANIEL CLOW, of Janesville, Wis.—*Improvement in Harvesters*.—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim constructing the main supporting wheel thereof in such a manner as to form therein an outer and an inner zigzag groove, but this I only claim when the said grooves have differently proportioned reaches, and bear such a relation to the T-headed sliding bar *n*, and the other parts of the machine which are connected with said bar and with the cutting apparatus, that the number of the movements imparted to the cutter bar *g* can be varied at pleasure by shifting the bearings of the said sliding bar *n* from one position to another, substantially as set forth.

No. 22,937.—HENRY COGSWELL, of Greenwich, N. Y.—*Improvement in Hames*.—Patent dated February 15, 1859.—The nature of this invention consists in applying to the "eye" a movable slide *A*, so constructed that the eye and slide shall form a solid piece, which slide, by means of a screw *B*, can be raised and lowered upon a hame so as to change the point of draft to any desired position.

*Claim*.—I claim the application of the shifting slide, to hames as they are now used, by means of which slide the point and position of the draft of the hames can be altered as desired.

No. 22,938.—BENJAMIN COLE, of Brooklyn, N. Y.—*Improved Pen-Holder*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The construction of a pen-holder with three or more elastic shanks or fingers *b*, so arranged that the spring of said fingers will hold the pen by pressing it against and under the shoulder *c* of two lateral fingers, and thus admit the introduction of, and be adapted to, pens of any ordinary size or thickness.

No. 22,939.—JOHN B. CORNELL, of New York, N. Y.—*Improvement in Fire-Proof Floors*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Constructing a fire-proof foundation upon a series of wooden girders *a a*, for the reception of a flooring surface formed of boards or other suitable materials, substantially as set forth.

No. 22,940.—FREDERICK CURTISS, of Saugus Centre, Mass.—*Improvement in Breech Loading Fire-Arms*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: When a breech slide is used in connection with the barrel of a fire-arm, I claim a movable breech, separate from the breech slide, and arranged and applied therein, so as to be adjustable to the rear end of the barrel, substantially in the manner and for the purpose described.

I also claim the arrangement of the priming-nipple and the touch-hole thereof, with respect to the movable adjustable breech *B*<sup>1</sup>, applied to the breech slide *B*, as specified, or with respect to the same, and a primer arranged in the stock, substantially as explained, such arrangement being productive of advantages as before mentioned.

No. 22,941.—AUGUSTUS B. DAVIS, of Philadelphia, Pa.—*Improvement in Railroad Car Springs*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I lay no claim to any specific part or any particular device, when viewed as disconnected from the entire spring.

But I claim as a new and useful article of manufacture and merchandise the entire railroad car spring described; that is to say, a spring composed of a box or casing, with a lid attached to the same by means of a bolt or bolts, the said box containing a number of spiral springs confined longitudinally between the bottom of the box and the lid, and retained in their proper position laterally by means of lugs, or other suitable devices, the said lid having a limited movement in the direction of the springs, but having no lateral movement independent of the box, so that each spiral spring may be independent of the other, although the whole act in combination, the entire spring thereby retaining its elasticity, even should one or more of its spiral springs be broken or damaged.



No. 22,942.—JOHN C. F. DEECKEN, of New York, N. Y.—*Improvement in Shoe-Lasts*.—Patent dated February 15, 1859.—The nature of this invention consists in so constructing a last that the wooden pegs of the boot or shoe may be cut conveniently while the boot or shoe is on the last.

The inventor says: I do not limit myself to the particular shape of the endless chain, the wheels, or the knives.

But I *claim* the endless chain or band in combination with a knife or knives, operated in the manner and for the purpose substantially as described.

No. 22,943.—CHARLES DE SAXE, of New York, N. Y.—*Improvement in Umbrella Fastenings*.—Patent dated February 15, 1859.—This invention consists in such an arrangement of parts that the two parts of the rods may be easily extended or shut together, and such that when extended they may be firmly and quickly fastened together; and also in having a tube or socket attached to the ends of the two parts of the rod, which tubes or sockets are hinged together by a solid hinge, one of the tubes having a sliding or revolving bolt, working into the other tube.

*Claim*.—The arrangement of the bolt *a*, substantially as described, operating without springs, and by a double or sliding and rotating motion in combination with the tubes or sockets B B, for the purposes set forth.

No. 22,944.—MARTIN D. ELSOM, of Howardsville, Va.—*Improvement in the Mode of Squeezing and Straightening Tobacco*.—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Squeezing and straightening bundles of tobacco, with a view of their being afterwards “struck” by passing them through a straightening and compressing mechanism, substantially such as represented.

No. 22,945.—JOHN U. FIESTER, of Winchester, Ohio.—*Improved Churn*.—Patent dated February 15, 1859.—A is the tub in which the milk is put, B the lid or cover, C the shaft or spindle, F the cross tie attached to the spindle, D the dasher blades, E a yoke attaching the dasher blades to the spindle, *c* is the crank, *d* are beveled mortices cut partly through the dashers, and serve to retain a portion of the atmosphere during the downward motion of the dashers, which is thus carried down to the bottom of the milk, *e* is a journal box, *f* holes in the dashers for the cream to pass through and be better agitated.

*Claim*.—The adjustable dasher, constructed with two blades D, yoke spring E, cross tie F, with slots *a*, and pins *b*, together with holes *f*, and air cavities *d*, operating substantially as set forth and described.

No. 22,946.—WILLIAM P. FORD and THEODORE H. FORD, of Concord, N. H.—*Improvement in Cultivator-Teeth*.—Patent dated February 15, 1859.—This invention consists in so forming the front edge of a cultivator-tooth that it shall tend to run into the ground to the required depth, and yet shall not be liable to be clogged; also, in bringing the top of the wings together at a point so low down on the body of the tooth that the surface soil may close back over the path of the tooth and not leave a furrow.

*Claim*.—The described cultivator-teeth, formed substantially as specified.

No. 22,947.—DANIEL P. FOSTER, of Shelburne Falls, Mass.—*Improved Wrench*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Making the hinge-joint between the stationary and movable jaws of the wrench at *a*, viz: by the projections *c* on the stationary jaw and the depression *e* in the washer that is on the shank of the movable jaw, for the purpose of allowing the movable jaw to change its position in relation to the stationary one, as set forth and for the purpose explained.

No. 22,948.—GEORGE GILMOUR, of Chelsea, Mass.—*Improvement in Shackles of Telegraph Cables, &c.*—Patent dated February 15, 1859.—In the engraving, A denotes the frame of the shackle, the same being applied at one end with an eye *a* for suspending the apparatus from a rope. At or within the other end of the frame is a friction drum or roller, arranged in the frame and made to turn on an arbor or pin *b* connecting the two sides *cc* of the frame. At a suitable distance from arbor *b* is another arbor or pin *d*, which also extends through and connects the sides and serves to support one or two turning and sliding jaws C.

The inventor says: I *claim* the telegraph cable or rope shackle, as constructed with one or more jaws, and mechanism to operate the same, substantially as described.

I also claim combining either the wing *l* or the knife *m*, or both, with the shackle, so as to operate therewith in the manner and for the purpose or purposes specified.

No. 22,949.—GEORGE HAMMER, of Philadelphia, Pa.—*Improved Cork Cutting Machine*.—Patent dated February 15, 1859.—This invention relates to that class of machinery for cutting corks in which a revolving cylindrical cutter is employed, and consists in an improved arrangement for guiding and feeding the cork while undergoing the process of cutting.



The inventor says: I do not desire to confine myself to the described construction and combination of the parts in minutiae.

But I *claim* the described arrangement of guiding rollers O and P and sliding wedge S, or their equivalents, in combination with the stop s, the whole being constructed and operating substantially in the manner and for the purpose set forth.

No. 22,950.—GORGES HELY, of Laporte, Ind.—*Improvement in Horse-Power Equalizer*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, connecting the eveners G I by a rope or chain that passes over a pulley at the centre of the shaft A, substantially as described.

I also claim, in combination with the eveners, the method of connecting the points or parts to which the horses are hitched, and by which they draw, by means of a system of ropes or chains and pulleys connected with the draft bars, substantially as described.

No. 22,951.—Cancelled.

No. 22,952.—W. W. HOPKINS, of Amelia, Ohio.—*Improved Method of Lighting Gas by Galvanic Battery*.—Patent dated February 15, 1859.—In this invention a gas burner is combined with an electro-magnetic seat to control the letting on and shutting off the gas; and there is also a certain arrangement of the conducting wires, in which an electro-magnetic valve is placed, by which a piece of platinum, constituting a part of the same circuit, and occupying a position over the burner, is heated by the same action by which the valve is opened, and so ignite the gas.

*Claim*.—The arrangement and combination of the hollow permanent magnet A, valve chamber C, coil F, electro-magnetic valve E, and tube D, as and for the purpose shown and described.

No. 22,953.—MOSES G. HUBBARD, of Penn Yan, N. Y.—*Improvement in Harvesters*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* connecting the cutting apparatus with the machine by an adjustable attachment, which can be changed from a free hinge to a joint, rigid in one direction or in both directions, for the purposes and in the manner substantially as set forth.

I also claim the employment of a raising lever of the second order with a gradually increasing purchase, by which it is made self-sustaining.

And I also claim keeping the lever in a convenient position for the operation by the hand of a driver, by means of a spring, substantially as and for the purpose specified.

No. 22,954.—WILLIAM HUEY, of Christiana, Pa.—*Improvement in Elevators for Window Sashes*.—Patent dated February 15, 1859.—This invention is designed to facilitate the raising and lowering of the sashes and supersede the weights and other appliances that have been previously used.

The inventor says: I *claim* the arrangement and combination of the rods E E, pawls f, ratchets  $d^2$ , loose drums  $c c^1$ , sliding shaft D, pins  $d e$ , and cords  $b b$ , as and for the purpose shown and described.

No. 22,955.—SAMUEL HUSE, of Chicago, Ill.—*Improved Rotary Engine*.—Patent dated February 15, 1859.—The operation of this engine is as follows: Steam enters through the inlet pipe  $h$  to the steam space  $e$ , thence through the holes  $o^1 o$  to the space 8 between the head  $m$  and cam E and behind the valve  $n$ , which happens to be in position to receive the pressure of the steam, by which this valve is driven, in the direction of the arrow on the head  $m$ , and the shaft B is revolved. The steam continues to act on this valve  $n$  until cut off from it by the next valve passing the port  $o$ . The valves are thus acted upon in succession by the steam, and as each one passes the port  $p$  the steam exhausts through this port into the space  $e^2$  on the outside of the cylinder C and thence through the eduction pipe  $i$  as indicated by the arrows.

*Claim*.—The cams E E<sup>2</sup> with their steam and exhaust ports, in combination with the heads  $m m^2$ , pistons  $n n^2$ , and cylinder C, operating in the manner substantially as set forth

No. 22,956.—JOHN JAMESON, of 10 Catharine Terrace, Gateshead, county of Durham, England.—*Improved Apparatus for Compressing Elastic Fluids*.—Patent dated February 15, 1859; patented in England March 13, 1858.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the compression and expansion of aeriform fluids by an apparatus of the nature described, the same consisting of a combination and arrangement of a series of cylinders or vessels, perforated or tubular pistons, induction and connecting pipes, valves, a reservoir, a rotary shaft, and means of heating or heating and cooling the cylinders



or vessels, the whole being constructed and made to operate in manner and for the purpose substantially as described.

No. 22,957.—THEODORE T. S. LAIDLEY, of the United States Army.—*Improvement in Tape Primers for Fire-arms.*—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of two different materials in the manufacture of tape primers—one a metal or like substance to receive and protect the percussion powder, into which it can be firmly pressed; and the other to connect the former into a series—something that can be easily severed by the edge of the hammer.

No. 22,958.—RICHARD S. LAWRENCE, of Hartford, Conn.—*Improvement in an Adjustable Sight for Fire-Arms.*—Patent dated February 15, 1859.—The nature of this invention consists in a spring-base *a*, the forward end of which is secured to the barrel with either a stud or a screw. On the rear end of the base spring is constructed a hinge-joint, in connection with an elevator *c*, so as to hold the elevator with the requisite firmness in either a perpendicular or horizontal position.

*Claim.*—The application of said hinge-joint to the spring-base and elevator, constructed and arranged substantially as described.

No. 22,959.—C. A. LILLIENDAHL, of New York, N. Y.—*Burglar's Alarm.*—Patent dated February 15, 1859.—This invention is intended to be applied to a door or window, and when either are interfered with so as to press upon a slide, the slide discharges a cartridge filled with some highly explosive material.

*Claim.*—The arrangement of the slide *C* and plate *A* with the lips *c* and *b*, so that a cartridge placed on the slide and between the two lips is exploded by pushing the slide in, substantially as and for the purpose specified.

No. 22,960.—S. N. LEMMON, of Deposit, N. Y.—*Improvement in Railroad Signal Lanterns.*—Patent dated February 15, 1859.—A signal switch lamp was patented by this inventor July 27, 1858. The present one is an improvement on it, and is designed to simplify, to a considerable extent, the patented article so as to reduce the cost of construction.

*Claim.*—Suspending within the lantern *A* at two opposite sides, and over or behind the colorless glass plates *a a*, the frames *C C*, provided with the colored glass plates *c d*, and arranged as shown, or in an equivalent way, to operate as and for the purpose set forth.

No. 22,961.—CLARK MARSH, of New Millford, Mass.—*Improvement in Sewing Machines.*—Patent dated February 15, 1859.—This invention consists in a gauge applied to or in combination with the slide-ring, by which the bobbin is confined in proper relation to the rotating hook for the purpose of adjusting the ring to permit exactly the amount of play to the bobbin between the face of the hook and the bobbin.

*Claim.*—The ring-gauge *D E*, with the pins *c c c*, spring *d* and cam *e*, or their equivalents, constructed or applied in combination with the slide-ring *B C*, substantially as and for the purpose set forth.

No. 22,962.—JAMES F. MARTIN and HENRY C. NICHOLSON, of Mount Washington, Ohio.—*Improvement in Preserve Cans.*—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, as a new and useful article of manufacture, a fruit or provision can, to be hermetically sealed, constructed of metal, lined on the inside with a vitrious enamel, capable of withstanding the action of the acids contained in the fruits, &c., to be preserved, substantially in the manner set forth.

We also claim the combination of a metallic cover, vitriously enamelled on the inside, with a fruit or provision can, substantially as set forth.

No. 22,963.—DAVID N. MARTIN, of Lawrence, Mass.—*Improvement in Stoves.*—Patent dated February 15, 1859.—In the operation of this stove the heat and volatile products of combustion, when the direct damper is open, will pass through its opening and rush directly into and through the air-register case, but when the damper is closed they will descend through the flues *D D* and enter the ascending flue *E* and pass upward through the same before escaping into the air-register.

*Claim.*—The arrangement of the air-register *G* at the upper part of the ascending discharge flue *E*, and with respect to the direct damper *F*, substantially as described and represented, the ascending discharge-flue being arranged between the two descending flues of the stove-case, substantially as set forth.

No. 22,964.—JOHN M. MAY, of Jonesville, Wis.—*Improvement in Wind-Mills.*—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, a standard *D* arranged in the head *a* of the frame-work,



and so constructed that it serves as a guide for the central vertical shaft B, receptacle for gear E, or gear E<sup>1</sup>, or gear E<sup>2</sup>, support and axis for the horizontal axle or shaft of the wind wheel, and as a guide for the sliding thimble O, substantially as and for the purpose set forth.

Second. Furnishing each of the stems of the sails with a cogged segment, for the purpose of revolving the sails on their radial axis, the segments being operated by cogged rack bars attached to the sliding thimble K, substantially as and for the purpose set forth.

Third. The arrangement consisting of the main governor and the forked adjusting rod N, connected with each other for the purpose of operating the thimble O in regulating or controlling the wind wheel as set forth.

Fourth. Providing each of the stems of the sails with a weighted arm, projecting forward of the front surface of the sails, for the purpose of governing the velocity of the wind wheel by regulating the obliquity of the sails to the wind current, substantially as set forth.

Fifth. The covering made in two sections, which are constructed and arranged as shown, the tubular section T revolving with the wind wheel, independently of section S, when the wind wheel moves in the path of a vertical circle and with it when the wind-wheel moves in the path of a horizontal circle, as and for the purposes set forth.

No. 22,965.—JOHN M. MAY, of Janesville, Wis.—*Improvement in Wind-Mills*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the peculiarly constructed stationary central vertical shaft A, in combination with the peculiarly constructed revolving tubular shaft or hollow column B, the shaft A providing axes for the wind wheel and the tubular column B to revolve upon in the paths of horizontal circles, and serving as a support and guide of the structure of the wind wheel, and the tubular column B serving for receiving the power of the wind wheel and transmitting it to machinery, substantially as set forth.

Second. Enlarging the axle C at its shoulder, in the form of a hub or pipe-box *c*, that the axis *d* of the shaft A may pass up directly through it, so that the centre of the axis of the shaft A and axle C intersect, and in themselves form vertical and horizontal centre bearings within the angle formed by the gear-wheels D and E, and the shaft A and axle C also serve as bearings for the gear-wheels, substantially as and for the purposes set forth.

Third. The combination of a horizontal lever S, the vertical governing rod or bar Q, guide bar R, and thimble G on the tubular column, substantially as and for the purposes set forth.

Fourth. The employment of a revolving conical cover, for the purposes of protecting the mechanism of the wind wheel, and dividing the wind current at the front and centre of the wind wheel head and guiding it upon the sails, and relieving the weighted elbow levers used for revolving the sails on their radial axis of the countervailing influence of the wind current so as to enable them to act by centrifugal force with certainty in governing the velocity of the wind wheel, substantially as set forth.

No. 22,966. JOHN McCOLLUM, of New York, N. Y.—*Improved Cracker Machine*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of these improvements.

The inventor says: First. I *claim*, in combination with the carrying apron B, the roller A, with its doffer F, or the equivalent thereof, and the supporting or feed roller D and supporting table C, or their substantial equivalents in the combination, the rollers and apron moving with simultaneous intermittent progressive motion, the whole being so arranged and operated, substantially as set forth, described, and shown, as to progressively flat pellets of dough suitable for crackers, ship biscuit, and similar articles, placed in proper order upon the apron, and at suitable distances from each other to permit of the extension of diameter resulting from the operation as they pass under the roller A without materially disturbing the order of their arrangement on the apron.

Second. I claim the reciprocating docker in combination with the carrying apron, bed, and stationary perforated clearer plate, substantially as described and for the purposes set forth, and with or without adjustable springs in combination therewith to make yielding pressure at the docking point, substantially as described.

Third. I claim the flattening apparatus, as set forth and described in the specification and in the first claim, when combined with or used in combination with a docking apparatus, such as is set forth and described in the specification and the second claim, or the substantial equivalent thereof, when used, combined, and operated for the purpose of docking flattened pellets of dough for crackers as they are progressively brought to and under the docker from the flattening apparatus without materially disturbing the order of their arrangement on the apron, substantially as set forth and described.

No. 22,967.—W. A. McDONALD, of Mott Haven, N. Y.—*Improved Dovetailing Machine*.—Patent dated February 15, 1859.—This invention consists in a cutter head constructed in a novel way and used in connection with an adjustable bed so as to form one portion of dovetailed joints by a continuous operation.

*Claim*.—Cutter head D formed of a screw thread *g* on a cylinder *f*, the screw thread being



provided with cutters *h*, and arranged substantially as described and for the purpose set forth.

No. 22,968.—GORDON MCKAY, of Boston, Mass.—*Improvement in Printing Presses*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of an impression cylinder and nippers operating in conjunction with a blast-pipe or mechanical means for producing an inequality of atmospheric pressure on the sheet when released by the nippers, and as said sheet is forced onwards by or with the impression cylinder in its rotary movement, substantially in the manner and for the purpose set forth.

No. 22,969.—HENRY H. MCKENNY and FREDERICK GOTH, of Biddeford, Maine.—*Improvement in Repeating Fire-Arms*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We do not claim a fire-arm constructed only with its nipples or primers arranged one in advance of the other on the barrel, but with a lock having a hammer or striker to operate with each nipper or primer.

But we *claim* the combination of two strikers, one trigger, and a mechanism which will not only enable each striker to be set and maintained at full cock, but by retraction of the trigger will cause both strikers, when at full cock, to be discharged or set free consecutively, so as to be forced against their respective nippers, or the percussion caps, or priming thereon, or the equivalents of such, and cause explosion of the priming of the charges in the order as specified.

We also claim the specified application of the lock-case with respect to the barrel in combination with the construction and arrangement of the trigger-rod or slider in separate parts, and in such manner as to be capable of being locked together, and of being unlocked or disconnected under circumstances as specified.

We also claim the application and arrangement of the two main springs of each striker in the lock-case, as explained.

We also claim the combination of the trigger-slide *F* and the lever-sears, arranged and operating with respect to the two strikers, as specified.

No. 22,970.—JOHN O. MEAD, of Philadelphia, Pa.—*Improved Cruets or Bottles for Castors*.—Patent dated February 15, 1859.—This invention consists in so constructing the cruets and bottles of cruet-stands that they may be adapted to each other and to the stand, in order that they may occupy but little space without any diminution of their requisite capacity.

The inventor says: I do not desire to confine myself to the use of four bottles, or cruets, only, inasmuch as more or less than that number may be adapted to each other, and comprised within a small compass in the same manner as the four.

But I *claim* constructing the cruets or bottles of cruet-stands so that they may be adapted to each other and to the stand, substantially as set forth and for the purpose specified.

No. 22,971.—THEODORE S. MINNISS and THOMAS S. MINNISS, of Meadville, Pa.—*Improvement in preventing Friction on Axles*.—Patent dated February 15, 1859.—This invention consists in a shaft, or other moving body, so prepared with alternate bearings and depressions, that in combination with sectors *a a* and stays *j j*, all friction will be taken from the moving surface in the direction of the points of vibration of the sectors, whether in a vertical or horizontal position.

The inventors say: We *claim* the employment of sectors, to avoid friction on rolling or sliding surfaces, substantially as set forth.

We also claim the combination of the shaft-sectors and their adjusters, the whole being arranged, constructed and operating substantially as described.

No. 22,972.—A. R. MORRILL, of Northfield, Vt.—*Improvement in Wheels for Railroad Carriages*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim the interposition of wood between the hub and rim of railroad wheels, when the wood is arranged in a tapering block, the grain of which runs radially the wheel; neither do I claim any wheel having a wrought-iron rim or tire, as such wheel would by no means attain the ends which I have in view.

But I *claim* a wheel for railroad purposes, having a cast-iron hub *B* and rim *C* and a body of wood formed of double plates, as described, and secured to the hub and rim by bolts, as set forth.

No. 22,973.—JOHN NICHOLSON, of Allegheny, Pa.—*Improvement in Retorts for Distilling Oils from Coal*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not confine myself to any particular number or to any peculiar form of the agitators, or to any number of shafts armed with agitators, as three or more shafts



may be arranged as represented in figure 5, (marked *m*,) nor do I confine myself to any particular manner of arranging the agitators *h* or the shaft or shafts, neither do I claim a revolving or oscillating retort.

But I *claim*, first, furnishing retorts used for extracting the oleagenous matter from coal and other substances with agitators, or a shaft or shafts armed with agitators, as described and for the purpose set forth.

Second. In so arranging the supply and discharge openings 1 2, and the exit pipes, in connection with the trunnions, that when one portion of the retort is weakened by the action of the fire another part may be exposed to it, as described and represented.

No. 22,974.—EDWARD NUGENT, of Brooklyn, N. Y.—*Improvement in Machines for making Bullets, &c.*—Patent dated February 15, 1859.—The object of this invention is to provide means of casting and cooling small projectiles more rapidly and with less labor than heretofore. It consists in making the cavities in which the shot are cast in the sides of thin rings, the peripheries of which work in tight contact with a mouth on the side of the kettle or reservoir of melted metal, the lead in the kettle pressing constantly against the peripheries of the rings, and each cavity being filled as it passes the open mouth or slot, no superfluous metal being allowed to escape.

The inventor says: I *claim*, first, the revolving self-cutting mould *E E*, working in contact with the mouth *D* of the lead kettle, through which the cavities *e e* are supplied with metal, substantially in the manner and for the purposes set forth.

Second. I claim the end motion of the two series of mould rings *E E*<sup>1</sup> and the opening and closing of the several rings in one series, while the cavities in the other series are filling, substantially as set forth.

Third. I claim the tumbling-bars, or their equivalents, operating substantially as described, by which a concussion is produced when the mould rings are opened, and allowance is made for any obstruction between the rings when closed, as set forth.

No. 22,975.—N. B. PRATT, of Deep River, Conn.—*Improved Carpet Sweeper.*—Patent dated February 15, 1859.—The nature of this invention consists in the arrangement of the rotating brush on adjustable swinging lever bearings, in connection with an elastic driving belt, whereby the brush can be adjusted so as to compensate for any considerable wear, and is held down to its work with a greater or less spring pressure, so as to allow it to rise and fall as may be required.

*Claim.*—The arrangement of the rotating brush, on adjustable swinging lever bearings *G*, in combination with an elastic driving belt *H*, substantially as and for the purposes set forth.

No. 22,976.—CLARK S. PUTNAM, of New York, N. Y.—*Improved Apparatus for Vulcanizing Caoutchouc.*—Patent dated February 15, 1859.—The object of this invention is to simplify the construction of an apparatus by making it of a portable, compact form, and adapting its size to the articles to be vulcanized, and to save room, trouble, and expense, by dispensing with the pump and its gearing.

*Claim.*—The combination of the boiler *A*, the vulcanizing chest *B*, and the condensing chamber *G*, constructed, arranged, and operating substantially in the manner described, the same constituting a portable automatic apparatus for the purposes specified.

No. 22,977.—B. F. RAY, of Baltimore, Md.—*Improvement in Harvesters.*—Patent dated February 15, 1859.—This invention consists in actuating the means that operate the reciprocating cutter-bar, by a conical anti-friction roller traversing a cam groove *a* in the main or power-wheel *b*.

*Claim.*—The conical roller, in combination with the cam groove, for actuating the means that operate the cutter-bar.

No. 22,978.—JESSE REED, of Marshfield, Mass.—*Improved Windlass.*—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of the windlass drums *D E*, pawls *g*, with the wheel *F* and knee or sampson post *H*, whereby the central wheel *F* is supported on both sides, and the windlass rendered more simple and sure in its action, substantially as described.

No. 22,979.—ADOLPHE ROESLER and CHARLES FREY, of Warsaw, Ill.—*Improved Pocket Match-Box.*—Patent dated February 15, 1859.—The nature of this invention consists in having two tapering cylinders so that when one is set in the other, a space, the thickness of a match, is left between them. To the bottom of the outside cylinder a rod or tube *E* is attached, to which is slipped loosely through an opening in both the bottom and top of the inside cylinder. A spiral spring *O* is wound around the tube and attached to one end of it, the other end of the spring is fastened to the inside cylinder, which is provided with a catch for the purpose of winding the spring up.

The inventors say: We *claim*, first, the cylinders *A* and *B*, provided with strips *a* and *e*, and spring *d*.



Second. The tube E with spring O, the whole being arranged substantially as described and for the purpose specified.

No. 22,980.—AMOS ADAMS RICHARDS, of Urbana, Ohio.—*Improvement in Locks*.—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of the wheels *a* and *a*<sup>1</sup>, with their rings *x x*<sup>1</sup>, and the spring *e* and slides *c* for producing friction between them, and the arrangements of the bolt B and its stems *o* and *o*<sup>1</sup>, and the use of the hands *h* and *h*<sup>1</sup>, and dial *d*, by which the principle of the above friction-wheels and rings is applied to this lock, as described.

And I also claim the arrangement of the eccentric E, brake *k*, brake-lever L, check-bolt C, and catch *l*, by which the pressure of the stems *o o*<sup>1</sup> on the rings *x x*<sup>1</sup>, simultaneously with the revolution of the hands *h h*<sup>1</sup> and rings *x x*<sup>1</sup>, is prevented, as described.

And I further claim the manner or arrangement above described of revolving the dial *d*, by removing the screws L L, as detailed.

No. 22,981.—GELSTON SANDFORD, of Poughkeepsie, N. Y.—*Improved Steam Engine*.—Patent dated February 15, 1859.—This invention relates to elongating the cylinder, by which means it becomes a part of the frame used for the support of the crank-shaft, and so constructed that when bored out forms a guide and rest for the crosshead to which the piston rod and connecting rod are attached.

*Claim*.—The inside head H, in combination with the crosshead E, and elongated cylinder A B, when constructed and operated in the manner and for the purposes specified, as an article of manufacture.

No. 22,982.—JOSEPH SAXTON, of Washington, D. C.—*Improved Mode of Sealing Letters, &c.*—Patent dated February 15, 1859.—The metal to be used in this invention is one of the more fusible metals, such as tin, or one of the alloys of bismuth, lead, and tin, known as "fusible metal." The proportions for the metals in this alloy is two parts of bismuth, one of lead, and one of tin, forming an alloy which melts at a temperature between 200° and 201° Fahrenheit.

*Claim*.—The process of sealing, by means of fused metals or alloy, whereby the impression is made and the seal secured simultaneously, substantially as described.

No. 22,983.—GEORGE SHONE, of St. Louis, Mo.—*Improved Machine for Punching Railway Bars*.—Patent dated February 15, 1859.—In this invention a sliding gate is fitted in a suitable framing, and provided with punches operated by means of cams and yokes, the punches working over a steel bolster, and the gate being recessed over the rail.

The inventor says: I do not claim, broadly, the employment or use of cams for operating punches, for cams are a well known mechanical device, and have been previously used for the same and analagous purposes.

But I *claim* the arrangement and combination of the recessed gate H, triple cam shaft C, clamping screws J K, and adjustable buttons M, substantially as and for the purpose shown and described.

No. 22,984.—E. A. SMEAD, of Tioga, Pa.—*Improvement in Converting Reciprocating into Rotary Motion*.—Patent dated February 15, 1859.—This invention consists in having an adjustable wrist-pin attached to a fly-wheel, and fitted within a slotted vibrating arm, which has a rod pivoted to it at right angles, the parts being arranged so that the conversion of a rotary into a reciprocating motion, and *vice versa*, is attained by a simple arrangement of means.

*Claim*.—The fly-wheel A, with the adjustable wrist-pin *h*, attached in connection with the slotted bar or rod B, and rod C, the whole being arranged to operate substantially as and for the purpose set forth.

No. 22,985.—T. BRIGGS SMITH, of New York, N. Y.—*Improved Method of Burning the Threads on Wooden Screws*.—Patent dated February 15, 1859.—Patented in England, January 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the application of a screw made on a bung, and another screw made in the stave corresponding with that upon the bung, both being formed by burning. This bung is to be used for all casks or vessels made of wood for liquids.

I also claim forming a screw C, by burning, on a bung J, or stopple, to be used in any vessel made of any material, whether wood, metal, glass, or other material.

No. 22,986.—STEPHEN WILLIAM SMITH, of Brooklyn, and HUBBARD BIGELOW, of New York, N. Y.—*Improved Fly-Trap*.—Patent dated February 15, 1859.—The object of this invention is to attract the insects to an endless web, kept in motion by machinery, and move the web over a fluted or serrated roller by which they are either killed, stunned, or injured, and drop those that are stunned or injured into water, or a fluid mixture to destroy them.

The inventors say: We *claim*, first, the combination of the endless web or apron B, with



the plate or scraper H, and the rollers C C<sup>1</sup> and F, operated as described and for the purpose set forth.

Second. The combination of the endless web B, with the roller F, and the pan G, in the manner and for the purpose described.

No. 22,987.—WATSON SNYDER, of Newark, N. J.—*Improvement in Sewing Machines.*—Patent dated February 15, 1859.—This invention consists in the combination with two fixed guides (one for the under edge of the binding and one for the edge of the fold thereof) of an elastic plate, operating in combination with the foot or pressure pad, so as to adapt itself to different thicknesses of binding, and of the materials to be bound, for the purpose of effecting the gradual turning over of the binding on the upper surface of the material to be bound, and of holding the same flat as it approaches the foot piece of the pressure pad.

*Claim.*—The combination of the fixed lipper guide C, for the under edge of the binding, the fixed but adjustable guide D, for the edge of the folder of the binding, and the elastic plate E, operated upon by the pressure pad or foot, the whole applied and operating substantially as and for the purpose set forth.

No. 22,988.—JOHN SPANGENBERG, of New York, N. Y.—*Improvement in Defecating and Clarifying Saccharine Juices.*—Patent dated February 15, 1859.—The claim explains the nature of this invention.

*Claim.*—The application of hydrated oxide of tin, prepared with sulphurous acid, substantially as set forth, for the purpose of decolorizing or bleaching and defecating sirups, saccharine solutions and liquids from sugar cane and other saccharine and vegetable juices, whether the same be used alone or in combination with aluminum, as set forth.

No. 22,989.—OREN STODDARD, of Busti, N. Y.—*Improved Churn.*—Patent dated February 15, 1859.—This machine derives its motion from a weight, so that it is automatic in its nature.

The inventor says: I do not claim, broadly, the employment or use of a weight in connection with the gearing, escape-wheel, and pallets, applied to a churn for operating the same, irrespective of the particular manner of adapting the power to the churn, as shown and described, for such parts form a portion of a simple clock movement, and is a well known device.

But I *claim* the combination of the crutch M, with the interior of the churn-box N, so that the lower end of the said crutch shall act as and constitute the dasher, substantially as described.

No. 22,990.—LUKE TAYLOR, of North Springfield, Vt.—*Improved Mop Head.*—Patent dated February 15, 1859.—In this invention a jaw is secured permanently to the end of the handle of a mop head, and a screw is left fitting loosely in the handle, so that it may turn freely thereon and actuate a nut to which a movable jaw is attached. The movable jaw, by turning the nut, being made to secure or clamp the cloth in the head or free it therefrom.

*Claim.*—As an improved article of manufacture, a mop head having a loose collar C, provided with a screw thread, and otherwise made as described.

No. 22,991.—JOHN TYLER, of Providence, R. I.—*Improved Ice Tongs.*—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of a pick *a* and cutter *b*, or either of them, with a pair of ice tongs, by forming or attaching the same upon or to the back of either leg of the tongs, substantially as described, thus making an instrument of novel character.

No. 22,992.—JOHN L. WAGER, of Deposit, N. Y.—*Improvement in Railroad Signal Lanterns.*—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I am aware that switch lanterns have been previously devised, in which colored glass plates have been operated, or certain parts so adjusted by the movement of the switch-bar or lever, that different colored lights are shown, to indicate the position of the switch. I therefore do not claim, broadly, the automatic switch lamp.

But I *claim* the lantern case B, provided with the colorless glass plates *ff*, and loosely attached or suspended to the rod or shaft O, which is connected with the switch bar or lever A. The case is provided with the oscillating or partially rotating frame C, containing colored glass plates, and connected with the rod or shaft *o*, by means of the arm *n*, the whole being arranged substantially as and for the purpose set forth.

No. 22,993.—LAWRENCE B. WATERMAN, of Chicago, Ill.—*Improved Clothes Frame.*—Patent dated February 15, 1859.—This invention consists in the manner in which the several operating parts are arranged and combined, with a stand or post, so that the weight of the frame that supports the clothes shall come upon the top of the post, and so that said frame may be readily raised and lowered by a device that keeps it at all times under the control of the operator.



*Claim.*—The combination of the stationary top support B, with the movable parts D G, when operated through the segmental racks *e f*, and arranged for the purpose of forming a tipping clothes-dryer frame, substantially as set forth.

No. 22,994.—ELISHA WEST, of Ogden, N. Y.—*Improved Method of Locking and Supporting the Panels of Field Fences.*—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I do not claim panels constructed as described, either with battens alternately on opposite sides, or entirely on one side of the rails, nor do I claim a triangular or brace support for the panels of a fence.

But I *claim* the combination of the panels and the triangular brace or jack G, constructed as described, when so arranged in connection with the recesses *e* of the panels, that by drawing the adjacent panels in opposite directions till the jack G shall enter said recesses *e*, the sections of the fence shall be securely locked together, in the manner specified.

No. 22,995.—CARL WINZEN, of Albany, N. Y.—*Improvement in Coating Metals with Tin.*—Patent dated February 15, 1859.—In describing his improvement the inventor says: To twenty pounds of water add three ounces of sulphuric acid; stir the mixture well together, and then add four ounces of tin; dissolve two ounces of alum in a sufficient quantity of tepid water, and add this solution to the above described mixture; then take a piece of spelter of any convenient size and connect it with the metal to be tinned, either by direct contact or by means of an iron wire of suitable length and flexure. After the lapse of five minutes remove the metal from the fluid and scour it with sand, using for the purpose a stiff brush, piece of woolen cloth, or other convenient thing adapted for the purpose. Then again immerse the metal and spelter it as before.

*Claim.*—The solution composed of the ingredients in substantially the same proportions, applied to accomplish the process of tinning, and used substantially in the manner described.

No. 22,996.—GILMAN WOODWARD and FRANKLIN S. HATHAWAY, of Keene, N. H.—*Improvement in Securing Garments to Hooks.*—Patent dated February 15, 1859.—The nature of this invention consists in securing a hook to a sliding plate, for the purpose of causing an arm to fall upon the head of the hook by means of a weight being suspended therefrom, or by other means forced downward and securing it in its position; also, in providing the arm and hooks at their points of contact with spurs for the purpose of retaining any article of a textile nature that may be secured therein.

The inventors say: We *claim*, first, securing the hook B to the vertical sliding plate C, in the manner and for the purposes described and set forth.

Second. The manner of operating the arm F in combination with the movement of the hook B and sliding plate C.

Third. Arming the hook B and the arm F at their points of contact with movable spurs, in a manner and for the purposes described and set forth.

Fourth. The tumbler S, when operated as described, or otherwise to produce the same effect, as specified and set forth.

No. 22,997.—JOHN DE FRAIN, of Philadelphia, Pa., assignor to WILLIAM CALLAHAN and WILLIAM GRANT, of said Philadelphia.—*Improvement in Corn and Cob Mills.*—Patent dated February 15, 1859.—The main feature of this invention consists in making the hopper of the cob crusher serve the purpose of varying the feed of the cob into the crusher, by making it adjustable on the shell of the same, so as to enable the operator to adjust the one to the other, that either the inner corner edge of the shell at its mouth, or the lower corner of the inner side of the hopper, shall abut the cob while the latter is broken off by the teeth of the rotating crusher or nut.

The inventor says: I *claim*, first, making the hopper N of the crusher M, adjustable on the shell of the same, so as to present to the ear of corn either the corner edge 7 of the hopper N, or the inner edge 8 of the shell M, as occasion may require, substantially in the manner and for the purposes set forth and described.

Second. I claim the carrier K, the inverted cup K<sup>1</sup>, and its adjusting bolt and nut *v*, and arch-piece, in combination with the hopper C and spindle F, the same being constructed and arranged together, substantially as shown, and operating together in the manner and for the purposes described.

Third. I claim the combined arrangement of the scrapers S S, on the bottom of the rotating disk E, the annular groove P, in the diaphragm A<sup>1</sup>, and the outlets and tubes L L, the same operating together, substantially in the manner and for the purpose set forth and described.

Fourth. I also claim the combined arrangement consisting of the outlets L L, and the opening *u*, through the diaphragm A<sup>1</sup>, the same operating together with the rotary disk E, in the manner and for the purpose specified.

No. 22,998.—THOMAS A. DUGDALE, of Richmond, Ind., assignor to WILLIAM M. REED.



of New Castle, Ind.—*Improved Washing Machine*.—Patent dated February 15, 1859.—The nature of this invention consists in resting two wash boards, one fronting the other, upon two inclined planes, and under two double inverted inclined planes, the two first are at the bottom of a box, and are so constructed that when acted upon by the water they will rise, and in rising will raise the wash boards against the two double inverted inclined planes at the top of the wash box.

*Claim*.—Combining and arranging the inclined planes F F, the plate H, and pins I and J, with the double inverted inclined planes D, rollers E, and wash boards A, the whole being constructed, arranged, and operated substantially as described, and for the purposes set forth.

No. 22,999.—**JOSIAH J. DUTCHER**, of Brooklyn, N. Y., assignor to **NOAH MOSHER**, of Norwalk, Conn.—*Improved Pail*.—Patent dated February 15, 1859.—This invention consists in having the body of the pail constructed of porcelain pottery, or glass, or other similar non-absorbent substance, and inclosing the body in a sheet-metal jacket to serve as a protection.

*Claim*.—The pail constructed of the body A and jacket B, of the materials specified, to form a new and useful article of manufacture.

No. 23,000.—**EZRA POLLARD**, of Albany, N. Y., assignor to Himself and **JOSHUA GRAY**, of Westfield, Mass.—*Improvement in Securing Sheet Metal Roofs*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim, broadly, the attachment of the sheet metal coverings of roofs and other portions of buildings by interlocking connections, which have the metal free to move in all directions, as I am aware that slotted plates, set up edgewise, have been attached to the roofs in pairs, to receive small bars attached by loops or eyes to the metal covering, making a much less simple contrivance than any interlocking strips.

But I *claim*, first, securing the edges of sheet metal coverings of roofs and other portions of buildings by means of strips of India rubber *b*, united to the said edges by lap-joints, and nailed to the building, substantially as described.

Second. The interlocking metal strips *fg*, formed, applied, and operating substantially as set forth.

No. 23,001.—**LUCIUS P. PORTER**, of New York, N. Y., assignor to the **NEW YORK RUBBER COMPANY**, of said New York.—*Improvement in Elastic Toys*.—Patent dated February 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of a reed or other speaking device, with a hollow, elastic toy made of caoutchouc or gutta-percha, or their compounds for acting together, the former by the latter, substantially as specified.

And I further claim, the manner described of securing the reed frame to the toy by grooving the frame on its edges or periphery, and inserting it in a hole in the toy, so as to be clasped in the groove by the edges of the elastic material in which the receiving aperture is made.

No. 23,002.—**GEORGE W. RICHARDSON** and **ROBERT GLOVER**, of Grayville, Ill., assignors to Themselves and **JOHN I. TANQUERRY**, of White county, Ind.—*Improvement in Converting Rectilinear into Rotary Motion*.—Patent dated February 15, 1859.—This invention relates to the peculiar arrangements of parts by means of which the use of the crank and pitman is dispensed with in producing rotary motion, the said result being effected by means of alternate racks, with a segment wheel between them, said racks being pivoted at their centres to a working frame.

*Claim*.—The arrangement of the rocking-racks K K, in combination with the segment-wheel I, substantially as described for the purposes set forth.

No. 23,003.—**ARAD WOODWORTH**, 3d, of Boston, **DANIEL WOODWORTH**, of Warren, and **M. T. HITCHCOCK**, of Springfield, Mass., assignors to **ARAD WOODWORTH**, 3d, and **DANIEL WOODWORTH**, aforesaid.—*Improved Rocking-Horse*.—Patent dated February 15, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* as a new article of manufacture a rocking-horse, consisting of the head and neck of a horse, made as in the ordinary rocking-horse, combined with a hollow box or cradle, so that the child can be placed therein, and which rocks longitudinally, thereby uniting the advantages of a rocking-horse and cradle, and preventing the liability of accidents to the child by falling, as set forth.

No. 23,004.—**THOMAS J. ALEXANDER**, of Westerville, Ohio.—*Improved Method of Operating Reciprocating Saws*.—Patent dated February 22, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—Reciprocating the saw by means of right and left hand rocking levers or drivers C, jointed to, or otherwise connected with, the saw, when said levers are separately hung or



pivoted and geared together for reverse action, and so arranged as to admit of being worked by the hands of the operator, substantially in the manner specified.

No. 23,005.—HENRY ADOLPHE ACHEREAU, of Paris, France.—*Improvement in Preparation of Artificial Fuel.*—Patent dated February 22, 1859; patented in France August 11, 1856.—The claim will explain the nature of this invention.

The inventor says: I *claim* producing artificial fuel by stirring, mixing, or incorporating coal dust or small coal, peat, turf, lignite, or other combustible substances, with rosin, pitch, tar, or other resinous, bituminous, or carbonaceous matters or substances, in any suitable proportions, according to the nature of the materials employed, and by causing steam, hot air, or gases, to pass through the mass during the stirring or mixing operation, or while the carbonaceous and bituminous particles are in motion.

I also claim mixing vulcanized carbonaceous matter with melted pitch, tar, or other bituminous substances, when the latter are worked up into a frothy state as described.

No. 23,006.—LUTHER ATWOOD, of Brooklyn, N. Y.—*Improvement in Apparatus for Destructive Distillation.*—Patent dated February 22, 1859.—The nature of this invention consists in combining a vertical combustion tower or fireplace A, in which fuel is burned with a downward draft, with a vertical distilling tower or chamber A, when the substance acted on is placed, and with a continuous strain blast or other controllable means of producing a draft through the apparatus in such manner that the products of combustion from the combustion tower enter the distilling tower at the bottom and pass up through it, and the mass of fragments it may contain.

*Claim.*—The arrangement and combination of the combustion tower, distilling tower, and steam blast, or their substantial equivalents, when arranged and operated substantially as described.

No. 23,007.—HENRY BENTER, of Wheeling, Va.—*Improved Machine for Jointing Staves.*—Patent dated February 22, 1859.—This invention consists in the employment or use of adjustable guides *a b* placed on a frame A, in which a rotary cutter head *e* is secured and used in connection with a carriage C, and clamp *j k*, provided with rollers *i*.

The inventor says: I *claim*, first, the carriage C, provided with rollers *i*, and used in connection with the adjustable guides *a b*, and rotating cutter head *e*, substantially as and for the purpose set forth.

Second. The adjustable plate *s*, in connection with the stationary jaw *j*, and sliding jaw *k*, attached to the carriage C, substantially as and for the purpose specified.

No. 23,008.—EDMUND BIGELOW, of Springfield, Mass.—*Improved Measuring Faucet.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—An improved self-measuring faucet, whose supply valve is closed and discharge valve opened by a single movement, and whose discharge valve is closed and supply valve opened by a single movement, produced by a spring J, and which is supplied with a vent pipe for letting out the air, and another vent pipe for letting in the air when the faucet is to be discharged, which last vent pipe is shut off when the faucet is to be filled or is standing full, substantially as described.

No. 23,009. WILLIAM BLANCHARD, of Washington, D. C.—*Improvement in Casting Stereotype Plates.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim anything new in the method described of fastening the flexible mould plates.

I do not claim the casting of stereotype plates for printing, by immersion, as a novelty.

But I *claim* casting stereotype plates for printing by immersing a metallic mould plate *a*<sup>1</sup> with a mould or matrix *b*<sup>1</sup> formed upon and adhering to it, substantially as described.

I claim the manner of casting any number of stereotype plates, by immersion, or otherwise, in which each mould plate holds, on one of its sides, a matrix *b*<sup>1</sup>, whereon the face of the stereotype plate is cast, in one compartment, while its reverse side, in any compartment, is used as a matrix whereon to cast the back of another stereotype plate, substantially as described.

No. 23,010.—BENJAMIN BURLING, of Buffalo, N. Y.—*Improved Propeller for Canals.*—Patent dated February 22, 1859.—The boat A has a well hole *a* in its stem. This well hole corresponds in shape to a steam-tug B, which is fitted within it, and secured to the boat by a link or shackle *b*, is attached to a stanchion *c* at the bow of the tug B, and fitted loosely over a corresponding stanchion *d* on the boat A, and at the front end of the well hole *a*.

*Claim.*—Propelling canal boats or other craft by means of a steam tug B, placed within a well hole *a*, at the stern, and connected therewith by the shackle *b*, and stanchions *c d*, or their equivalents, substantially as and for the purpose set forth.



No. 23,011.—N. F. BURNHAM, of Laurel Factory, Md.—*Improved Water Wheel*.—Patent dated February 22, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I am aware that the French turbine (Jonval) receives power from the lower part of the bucket the same as mine.

I do not claim, therefore, the lower end of the bucket R.

But I *claim*, first, the concave hub P as represented, in combination with the bucket Q as represented, which forms the wheel.

Second. I claim the chutes or guides H in combination with the wheel, by which one fourth, one half, three fourths, or all the water can be admitted to the wheel, and in each case get the same percentage from the amount of water used.

No. 23,012.—ALONZO CHUBB, of Painesville, Ohio.—*Improved Machine for Bending Wood*.—Patent dated February 22, 1859.—This invention consists in the employment of a band or strap U and a guide M, the former being connected and confined to the latter by an apparatus, so that the said band keeps the wood to be bent always in a line tangent to every part of the curve or circle during the process of bending it, the band being kept taught while traversing the guide, so that the wood is held tightly to the band by the friction of their contact surfaces.

The inventor says: First, I *claim* the combination and arrangement of the strap U with the guides M, in the manner and for the purposes set forth.

Second. I claim making the guides adjustable by the use of the slots therein, and of corresponding ones in the bed timbers, as shown, and for the purposes set forth.

No. 23,013.—THOMAS W. CURRIER, of Lawrence, Mass.—*Improved Triangular Stand for Furniture*.—Patent dated February 22, 1859.—In the drawings A represents the legs of the stand, and are fixed so as to turn on the axle E, with the cog H attached to the plate C. B is a triangular plate with flanges I on the upper end and lower side, so arranged that the cogs H will, when the stand is spread, abut on one side of the flanges and prevent its opening further, and when shut they will abut against the sides of the other flanges.

*Claim*.—The arrangement of the triangular plates B and C, with legs A on the axle E, as and for the purpose specified.

No. 23,014.—WILLIAM C. DAVOL, of Fall River, Mass.—*Improved Vegetable Cutter*.—Patent dated February 22, 1859.—The vegetables to be cut or sliced are placed in the hopper D and the follower E placed on them. The plate-lever B is then vibrated right and left, the operator grasping the handle *e*. The vegetables rest on the plate-lever B, and the knife C cuts or slices the vegetables while moving in either direction, the slices passing down through the slot *h*.

*Claim*.—The bed-plate A, having the hopper D attached, provided with the follower E, the vibrating plate-lever B, provided with the double-edged knife C and hook *f*, and attached to the bed-plate A, the whole being arranged and combined to operate as and for the purpose set forth.

No. 23,015.—HENRY N. DEGRAW, of Green Island, N. Y.—*Improved Boot-jack*.—Patent dated February 22, 1859.—This invention consists in connecting a swinging platform D of two movable jaws C, by means of a guide-piece G of such construction that the jaws open and close by raising or depressing the front end of the platform without the aid of springs.

*Claim*.—The arrangement of a guide-piece G for the purpose of operating the jaws C, as described, in combination with a swinging platform D, which rests on pivots *e*, at points between its front and back ends, so that it can be operated by throwing more or less weight on the heel or on the toes of the foot placed on the same, substantially in the manner and for the purpose specified.

No. 23,016.—BENNEVILLE DEWALT and CHARLES E. SCHRADER, of Reading, Pa.—*Improved Meat Cutter*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The arrangement of the knives D in a screw form in different directions from the ends of the cylinder B to the centre thereof, to discharge the meat at the adjustable opening F in the bottom, in the manner and for the purposes described.

No. 23,017.—M. DOHERTY, of Boston, Mass.—*Improvement in Cricket-Bats*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, constructing the blade A of the bat of a wooden shell with a filling of cork, or other materials, substantially as described.

Second. Constructing the handle B of the bat of a wooden tube, with a central strip of whalebone *d*, or other elastic material of similar character, running down into the blade, substantially as described.

No. 23,018.—JOHN EVANS, of New Haven, Conn.—*Improved Machine for Bending and Setting Springs*.—Patent dated February 22, 1859.—This invention consists in using, in connection with suitable pressure or forming dies, an adjustable bed *i* and side clamps or straighteners



*b e*, so constructed and arranged that the form of the bed may be varied to suit the desired shape of the leaf or portion of the spring to be bent or set, and springs of different sizes.

The inventor says: I *claim*, first, the adjustable or sectional bed, formed of the bars *i*, connected to the weights *k*, and arranged substantially as shown, for the purpose specified.

Second. The adjustable clamps or straighteners, formed of the strips *b e*, placed on rails or bars *F G*, and arranged as and for the purpose set forth.

Third. The adjustable or sectional bed formed of the bars *i*, as described, and the adjustable clamps or straighteners, formed of the strips *b e*, placed on the rails *F G*, in combination with the adjustable dies *M M*, arranged to operate as and for the purpose set forth.

No. 23,019.—JAMES L. FAGAN, of Anaqua, Texas.—*Improved Pump*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim, separately, any of the parts shown and described, irrespective of their particular arrangement and adaptation for a submerged pump, for rotary pumps, or those having a partial rotating reciprocating movement, have been arranged similarly to the described invention.

But I *claim* the cylinder *A* and hollow shaft *B*, connecting with each other as shown, and having a reciprocating partially rotating movement, when said cylinder is perforated, as at *h*, and provided with valves *i*, and also provided with the piston *G*, with the stationary plate *I* fitted within it, the whole being arranged as and for the purpose set forth.

No. 23,020.—WINFIELD S. FOSTER, of Marilla, N. Y.—*Improved Clothes-Rack*.—Patent dated February 22, 1859.—This clothes-rack is composed of a series of single racks or panels, which are each made of two side pieces, connected together by transverse rounds or bars placed horizontally, upon which the clothes are to be placed to dry.

*Claim*.—The combination of the rods *B* and heads *A C* with the side pieces of the expanding clothes-rack, in the manner and for the purpose specified.

No. 23,021.—JAMES H. FREETO, of Wheaton, Ill.—*Improvement in Coffee-Pots*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the arrangement of valves *i* and *l* in the condensing chamber *H*, in connection with the pipes *L* and *K*, whereby the steam which escapes through the valve *i* is carried off and deposited, in a liquid state, into the spout, while at the same time, by the action of the steam, a jet of cold water is admitted into the chamber *H*, substantially as and for the purposes specified.

I also claim closing the opening *C* through which the spout *D* communicates with the coffee-pot *A*, by means of a flat valve *E*, which is operated by a rod *d* when the same is applied to a coffee-pot which is hermetically closed by a gasket *g* in connection with the air tube *o*, substantially as and for the purpose specified.

No. 23,022.—GEORGE W. GARDNER, of Troy, N. Y.—*Improvement in Moulding Covers of Cook-Stoves*.—Patent dated February 22, 1859.—In the engraving, *a* represents that part of the pattern which gives form to the recess, and *c c*<sup>1</sup> the pivoted projections or lips for forming the lifter projections, the projection *c* turns inwardly in the position in which it makes its impression on the sand, and *c*<sup>1</sup> turns outwardly, or in the position in which it does not project upon the sand.

*Claim*.—Combining with that part of the pattern which gives form to the recess of the cover, the pivoted projections, as and for the purposes set forth.

No. 23,023.—JOHN M. HALL, of Warrenton, Ga.—*Improvement in Ploughs*.—Patent dated February 22, 1859.—*A* is the beam or stock, *B* the handles, *C* the adjustable bar to which is attached the shoe by the bolt *k*. *D* is the screw bolt passing through the beam, in which there is a slot, to allow the screw bolt to move front or rear. *E* is the shear, attached to the point *f*<sup>1</sup> of the bar *C* and bolt *D*. *F* is the shoe fitting on the bar *C*; *d* is the band for attaching the sword or cutter *G* to the beam.

*Claim*.—The arrangement of the adjustable coulter bar *C*, point *f*<sup>1</sup>, holes *f*, shoe *F*, mould-board *E*, adjustable screw bolt *D*, attachment *Z*, pins *g*, key *h*, bolts *j*, and slot in beam *A*, operating as described, and for the purposes set forth.

No. 23,024.—JOHN S. HALL, of Manchester, Pa.—*Improvement in Plough Beams*.—Patent dated February 22, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—An iron or steel plough beam *C*, of an inverted *U* form throughout its main length, and welded or compressed at its ends, and so made as to be capable of receiving the top of the standard *c* into its hollow portion, and be otherwise conveniently connected to or with the other portions of the plough, so as to make a cheap and efficient junction of the several parts thereof, and produce a cheap, strong, and durable plough beam, as set forth.

No. 23,025.—W. O. HICKOK, of Pittsburg, Pa.—*Improved Machine for Cutting Straw and*



*Hay*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim, broadly, connecting the pinion on the cutter shaft with the feed rollers, vibrating in guides.

Neither do I claim the arrangement of a shaker between the feed rollers and the cutters.

But I *claim* the arrangement, in combination with the upper or yielding feed roller E, and the cutter shaft *f*, of the coupling lever G, when the said lever G connects the said feed roller E with the cutter shaft *f*, by having its fulcrum around the said shaft *f*, and also carries the pinion 6, which connects the pinion 7 of the shaft *f* with the spur wheel 8 of the near journals of the feed roller E, as set forth, the journals of the said feed roller E working in grooves, which are curved, so as to be concentric with the said cutter shaft *f*, as described, the same operating together in the manner and for the purpose set forth and described.

No. 23,026.—CHARLES HILTON, of Albany, N. Y.—*Improvement in Railroad Splices for Railroad Track Bars*.—Patent dated February 22, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim the use of the plates nor the wedge, broadly.

But I *claim* deep wrought-iron fish plates *a c*, secured to the sides of the rails A B by bolts or keys, and extending downward below the base of the rail, in combination with the gib *g*, and wedge *k*, substantially in the manner and for the purposes set forth in the specification.

No. 23,027.—N. E. HINDS, of Cooperstown, N. Y.—*Improvement in Horse and Ox Shoes*.—Patent dated February 22, 1859.—The nature of this invention consists in constructing the heel calks B B in a semi-circular or curved form with their corners turned inwards, or more towards the central points of the shoe, and in locating both toe A and heel calks B B somewhat away or back from the extreme forward point and heel ends of the shoe, thereby concentrating the calks more towards the centres of the shoes.

*Claim*.—The curved or semi-circular form of the heel calks, with the corners thereof turned inwards or towards the central part of the shoe.

No. 23,028.—L. B. HOIT, of New York, N. Y.—*Improvements in Fountain Brushes*.—Patent dated February 22, 1859.—This invention consists in arranging the passage leading from the cistern to the brush in a screw which screws into the lower part of the cistern A, and in such relation to a stationary valve *c* that by turning the screw D the flow of ink is regulated. It also consists in fastening the brush on the outside of a conical tube G, which forms a passage for the marking ink to the brush.

*Claim*.—As a new article of manufacture a marking brush, consisting of a cistern A which is provided with a stationary valve *c*, and having the brush attached to a conical tube G which fits into a shell E, and otherwise constructed substantially as described.

No. 23,029. MOSES G. HUBBARD, of Penn Yan, N. Y.—*Improvement in Harvesters*.—Patent dated February 22, 1859.—The inner end of the finger bar is hinged to the projecting end of the left side sill at *a*, and this bar is bent on a gradual curve down to the ground at *b*, where it is strongly connected to the spring *d*, which passes up and down and is bolted to the front end of the machine. The wear plate *c* is bolted firmly under the spring *d*, and locked on to the finger bar, and is connected with the inner shoe P by the hinge joints E and F, and the projecting portion of the finger bar is firmly secured to the inner shoe which is located directly behind the supporting wheel G, and runs in the path thereof.

The inventor says: I *claim* the combination of the curved portion of the finger bar hinged at *a*, with the spring *d* forming a yielding and elastic corner or point of attachment of sufficient strength to securely connect the cutting apparatus thereto, substantially as and for the purposes set forth.

I also claim the auxiliary adjustable spring H, or its equivalent, substantially as and for the purposes described.

No. 23,030.—EDWARD KENDALL, of Cambridgeport, Mass.—*Improvement in Steam Boilers*.—Patent dated February 22, 1859.—This invention consists in certain arrangements of water spaces F F, flues H H, and heating surfaces, whereby several advantages are obtained. It also consists in the arrangement of passages for the air, the escaping gaseous products of combustion, and the exhaust steam in a heater for heating air to supply the furnace.

The inventor says: I *claim*, first, the arrangement of the water walls A A B B, the suspended water spaces F F, flues H H, fire box G, lower and upper smoke boxes J M, and tubes L, within the shell of the boiler, substantially as set forth.

Second. In combination with the described arrangement of water spaces and heating surfaces, I claim the arrangement of the hollow fire bridge O, the pipes *a* and *b*, the cylinder N, and pipes *c*, the whole operating substantially as set forth.

Third. The arrangement of the passages for the gaseous products of combustion, the exhaust steam, and the air in the air heater, substantially as and for the purpose set forth.



No. 23,031.—ZEBULON KINSEY, of Dubuque, Iowa.—*Improvement in Packing Bar Lead*.—Patent dated February 22, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The use of the bar or bolt B, made substantially as described, when inserted in perforations made in bars or ingots, and clenched or fastened in the manner substantially and for the purpose aforesaid.

No. 23,032.—THOMAS WILSON LANE, of Merideth, N. H.—*Improved Steam Pressure Gauge*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* so combining the indicating tube E with the pipe C, through which the pressure within the boiler is transmitted to the gauge, that the length of the tube in either direction from its junction with the pipe shall not exceed a semi-circle C<sup>2</sup>, and placing the tube in such a position that it shall descend at every point towards its junction with and drain back into the pipe.

Second. I claim joining the pipe from the boiler with the indicating tube E at a point between its two ends, and bending the latter as set forth, so that the ends of the tube shall be nearly over the points where its two branches are rigidly supported, whereby the tube is rendered less sensitive to the vertical shocks to which it is subjected.

Third. I claim bending the two portions of the indicating tube symmetrically, or nearly so, upon opposite sides of a vertical line, as described, and connecting the two extremities of the tube with the lever *i*, as set forth, for the purpose of preventing the horizontal vibrations of the tube from being transmitted to the index hand.

Fourth. I claim pivoting the lever *i*, to the indicating tube without attachment to the case, for the purpose specified.

No. 23,033.—ROBERT B. LAWTON and WILLIAM H. BLISS, of Newport, R. I.—*Improvement in Hose Couplings*.—Patent dated February 22, 1859.—This invention consists in having a metal thimble or tube C D attached to each end of the hose, one thimble C fitting within the other, and the inner one D grooved circumferentially, to receive one or more taper or conical rollers *g*, that are adjusted by screw caps *i*, so as to secure the two thimbles together.

*Claim*.—The thimble C D, provided with the shoulder *b*, and ground seat or packing *c*, and the thimble D, provided with the groove *e*, with inclined sides and fitted within the thimble C, the above parts being used in connection with the conical roller or rollers *g*, fitted in the screw caps *i*, and the whole arranged to operate as and for the purpose set forth.

No. 23,034.—JOSEPH L. LOWRY, of Pittsburg, Pa.—*Improvement in Fire Plugs*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, making a single chamber serve the purpose of a cross pipe, when each main leading into said chamber is furnished with its own stop-cock, and access is had to each stop-cock through said chamber for repairs, &c., thus making one chamber and one cover common to two, three, four, or more mains, substantially as set forth.

I also claim arranging the fire plug immediately over the chamber, for the purpose of effecting a circulation of the water in the pipe between the main and the fire plug to prevent its freezing, as stated.

I also claim in combination with the valve *v* and its wing *w*, as described, the hollow set screws *s*, for wasting the water from the fire plug when said valve is closed, substantially as described.

I also claim the removable gasket *c*, in the ends of the branches or bowls *y*, so as to renew the seats for the valves *b*, when necessary, without disturbing the main or stop-cock, access to these gaskets being through the common chamber *j*, as stated.

No. 23,035.—LOUIS MABILLE, of New York, N. Y.—*Improvement in Watch Cases*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim the movable plate D when applied and fitted to and combined with the case otherwise than as described.

But I *claim* the construction of the case substantially as described, with the front plate D, fitted to the ring or frame C, with a projecting rim *e*, and bezel *i*, all the way round, when combined with an internal cavity *d d* in the back, to receive and contain the said plate, when removed from the front.

No. 23,036.—SAMUEL MARSHALL, of Wilmington, Del.—*Improved Curtain Lock for Carriages*.—Patent dated February 22, 1859.—The plates A B are made concave, so that a spring stop, or fastening D, may be admitted between the upper plate and the curtain. The spring stop D consists of a scroll spring, which has one of its ends wound round a stationary



pin *d*, and its other end free, and terminating in a knob or handle, and passed loosely down through a space *e*, existing between the lower edge of the outer plate and the curtain.

*Claim.*—The employment of the two metal plates, constructed as described, in combination with the button and button hole of the carriage and curtain, and with the spring fastening, the whole being arranged and used in the manner and for the purposes set forth.

No. 23,037.—ALEXANDER MILLER, of Cleveland, Ohio.—*Improved Water Gauge for Steam Boilers.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim, broadly, attaching an index to the stem of the alarm valve of an alarm water gauge.

But I *claim* operating the valve *d*, of an alarm gauge to produce the alarm when necessary, by means of a cam or wiper *h*, on a valve stem *D*, and a stationary inclined projection *g*, on the socket or tube *A*, or its equivalent, the several parts being arranged and applied in combination with a float attached to the stem, substantially as set forth.

No. 23,038.—JAMES MONTGOMERY, of New York, N. Y.—*Improvement in Corrugated Iron Pavement.*—Patent dated February 22, 1859.—Between the large corrugations *A A*, smaller corrugations *B B* are produced. *C C C* are spurs or projections formed on the corrugations *A*, for the joint purpose of affording foothold for horses, and to prevent the shifting of the concrete or other matter with which the grooves are filled.

The inventor says: I *claim*, first, the arrangement and combination, substantially as described, of the unequal ribs, or corrugations *A* and *B*, for the purposes set forth.

Second. The described form and application of the laterally projecting spurs *C*, for the purposes explained.

Third. The dovetailed groove shown, applied to metallic paving, and employed as set forth, to retain within it concrete and other matter.

No. 23,039.—HENRY MONTGOMERY and SIMEON HOWES, of Siver Creek, N. Y.—*Improvement in Grain Separators.*—Patent dated February 22, 1859.—A current of air regulated in intensity according to circumstances, entering at the aperture *U*, beneath the inclined board *S*, meets the light grain in its descent, and carries the dust and chaff upward, and into the pan, whence it is discharged.

*Claim.*—The aperture *U*, when situated immediately below the inclined board *S*, and in combination therewith, for the purpose specified.

No. 23,040.—L. F. MÜNCHER, of Rochester, N. Y.—*Improvement in Locks.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I am aware that sliding tumblers have been previously used, and also saw plates, or thin flat keys, provided with notches of varying depths, corresponding with the varying positions of the slots in the tumblers. I therefore do not claim separately these parts.

But I *claim* the arrangement and combination of the knob *E*, with the tumblers *C* and bolt *B*, the said knob having studs *g* and *h*, out of line with each other, one stud *h* being in line with the bolt, and the other stud *g* being in line with the tumblers, so that when the key *G* is inserted, one of the studs *g* shall pass by the tumblers, while the bolt *B* is shot out by the other studs *h*, and when the key *G* is withdrawn, and the knob *E* reversed, the stud *g* shall lift the tumblers, and thus prevent the picking of the lock by the insertion of the key, all as shown and described for the purpose set forth.

No. 23,041.—PUTNAM D. NICHOLS, of Hartford, Conn.—*Improved Screw Plate.*—Patent dated February 22, 1859.—The die *B* is connected with the sliding plate *K*, which travels back and forward by the operation of the adjusting screw *G* and rod *H*, which runs up inside of the handle *I*, to which it is fastened by the screw pin *L*, and turned by the pin *M*.

*Claim.*—The adjusting steady pins and set screws, with the sliding plate *K*, attached to the regulating rod and screw *G H*, in the manner as described in combination with the method of adjusting and regulating the dies for operation, in the manner substantially as set forth.

No. 23,042.—HENRY OLIVER, of Philadelphia, Pa.—*Improvement in Brooches, Ear Rings, &c.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I am aware that sun pictures have been produced upon the inner surfaces of planes of transparent material, and that temporary concave fields have been suggested to overcome the spherical aberration of the lenses, in the production of pictures having a plane surface.

But I *claim* photographic or sun pictures upon concave surfaces of glass, and backing them up with cement, in the manner and for the purpose substantially as specified.



No. 23,043.—RUFUS PORTER, of Washington, D. C.—*Improved Blind Fastening*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The combination of the lateral catches *c c* with the elevated finger socket *h*, the whole consisting of a single plate *A*, which is so formed that while the catchend thereof is horizontal, and constitutes right and left catches, and is connected to the bottom of the shutter, the opposite end is vertical, and is connected to the face of the shutter at some distance above the bottom thereof, and constitutes a finger socket or hook *h*, near the hinged edge of the shutter, to be drawn back by a finger for the purpose of unfastening the shutter when open, and closing the same as herein described.

No. 23,044.—CHARLES W. RICHTER, sen., of Madison, Ga.—*Improvement in Lamps*.—Patent dated February 22, 1859.—The tubes *I I* have their outlets in the cap plate *P*, and communicate with the external air by the openings *d*, so that a flow of cold air constantly enters the chamber *D*, which tends to cool the lower portion of the tube *T*. Between the cap and the plate *P* is inserted a disk of cork *c*, to prevent any heat from being conducted to the plate *P*. The wick *B* is connected at the bottom with a piece *f*, held by the guide rod *m* and the screw *b*, and made to move vertically by turning the screw.

The inventor says: I *claim* the combination of the chamber *D*, and the tubes *I I T*, with the non-conducting medium *C c*, above the plate *P*, the arrangement being substantially as described.

I also claim the manner of moving the wick within the tube *T*, in combination with the construction described.

No. 23,045.—SAMUEL SAMUELS, of Brooklyn, N. Y.—*Improved Stalls for Horses on Ship-board*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* suspending a horse box on board of a ship or other vessel, on pivots or centres, having the axis arranged transversely to the box, and parallel or thereabouts with the length of the vessel, substantially as and for the purpose set forth.

And I also claim combining a series of two or more so suspended boxes *D D D*, substantially as and for the purpose described.

No. 23,046.—JOSEPH SAXTON, of Washington, D. C.—*Improvement in Seal Presses*.—Patent dated February 22, 1859.—This process consists in placing a fusible metal or alloy in the fluid state upon the place of the seal, and by a sharp and quick blow causing the metal or alloy to penetrate the parts to be secured while the device is imprinted, and the metal solidified simultaneously.

The inventor says: I *claim*, first, a sealing press, operated by a lever *C*, to which the stamp is attached by an adjustable joint, the whole being adapted to the purpose of sealing with fusible metal or alloy, substantially as described.

Second. The guard for retaining the excess of metal driven off from the seal in the act of making the impression.

No. 23,047.—HENRY C. SPALDING, of Brooklyn, N. Y.—*Improved Curtain Fixture*.—Patent dated February 22, 1859.—When the cord *F* is pulled downward in one direction the roller *B* is forced by the combined action of the cord and flange *c* against the shield or head *E*, which stops the endwise motion of the roller, while the curtain continues to ascend until it is rolled up.

The inventor says: I *claim*, first, the narrow rim *f*, in combination with a roller having end play, as described.

Second. The combination of the roller, flange, and cord, as set forth.

Third. The combination of the two hangers with the roller, the cord, and the rack, constructed substantially as described, and operating in the manner set forth.

No. 23,048.—HENRY C. SPALDING, of Brooklyn, N. Y.—*Improved Treadle Stand*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—A new and improved article of manufacture, a self-sustaining skeleton treadle-frame, composed of sections secured together at right angles, substantially as described, so that the frame is self-braced crosswise and lengthwise with the table *A* which it supports.

No. 23,049.—ROBERT R. TAYLOR, of Reading, Pa.—*Improvement in Apparatus for Ventilating Railroad Cars*.—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The blowing cylinder *G*, hung to one of the trucks of the car, and operated from one of the axles by means of an eccentric *D*, or other equivalent device, in combination with the flexible or self-accommodating inlet and discharge pipes, *I* and *H*, and the distributing pipes *K*, the whole being arranged substantially as and for the purpose set forth.



No. 23,050.—G. H. WALDIN, of Burlington, Iowa.—*Improved Chuck for Watchmaker's Lathes.*—Patent dated February 22, 1859.—The chuck *b* has on its outer extremity a small cylindrical core, or spindle *C*, over which slides the accurately fitting cylindrical thimble *d*. The length of the thimble and spindle can be made greater or less, according to the length of the article intended to be turned. Upon the outer end of this spindle is a conical depression *e*, having its apex in the axis of rotation whenever the lathe is set in motion.

*Claim.*—The use of the cylindrical core, or spindle *C*, in connection with the thimble *d* for containing sealing-wax or its equivalent, the whole constructed and operated as specified.

No. 23,051.—J. L. G. WARD, of Adrian, Mich.—*Improvement in Cementing Roofs.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim, broadly, the use of alkaline silicates, applied as a protection to the walls or other parts of buildings; but I *claim* the covering of roofs of buildings by laying bricks or tiles, or slabs of other material, in a bed of cement consisting of an alkaline silicate, and subsequently treating the surface of said cement with an acid which combines with the alkali thereof, and leaves a surface of pure silica, substantially as described.

No. 23,052.—FRANCIS F. WELLS, of Texana, Texas.—*Improvement in Pessaries.*—Patent dated February 22, 1859.—To permit the introduction or withdrawal of the pessary, the sliding collar *m* is slipped along the main arm and off the stem *d*, and the arm *i* then brought as nearly as possible in line with the standing and sliding supports and pushed up towards the ring which causes the pin of the hinge joint *j* to slide up the slots *k k*, and also causes the sliding support *g* to throw up the back part of the ring *A* till the latter lies close against the three supports.

*Claim.*—The combination with the ring *A* of the hinge-jointed and slotted standing supports *c*, and their stem *d*, the hinged sliding support *g*, the hinged arm *i*, the collar *m*, or its equivalent, and the plate *B*, the whole applied and operating in relation to each other, substantially as set forth.

No. 23,053.—CHARLES WESTON, of Salem, Mass.—*Improvement in Apparatus for handling Hides.*—Patent dated February 22, 1859.—This invention consists of a series of long arms *d d*, having proper feet *e e* for moving the hides, turning upon bearings placed below the point at which the driving power is applied, and being driven so as to receive a forward and backward motion by an arrangement of devices at the top of said arms.

*Claim.*—The apparatus described for keeping hides in motion, while exposed to the action of the tanning liquid, the same consisting of parts constructed and arranged, in relation to each other, as described, so as to operate substantially in the manner and for the purposes set forth.

No. 23,054.—PHILIP P. WEIS and F. SCHUTLE, of Philadelphia, Pa.—*Improved Feeding Mechanism for Sawing Machines.*—Patent dated February 22, 1859.—This invention consists in the combination of an adjustable frame *N* with rollers *h*, a pressure frame *P*, also furnished with rollers *i*, and a feeding screw *M*, the whole being arranged for the purpose of moving the lumber towards the saw, and at the same time retaining it steadily in its position as it is operated on by the saw.

*Claim.*—The adjustable frame *N* with its rollers *h*, the pressure frame *P* with its rollers *i*, and the feeding screws *M*, in combination, the whole being arranged substantially as and for the purpose specified.

No. 23,055.—C. P. WILHELM, of Bridgeport, Pa.—*Improvement in Key-bolts for Attaching Carriage Thills.*—Patent dated February 22, 1859.—When this bolt is used, the key *b* is brought in line with the shank *B*, is passed through the bolt hole, the spiral spring *C* passed on the shank and forced up past the upper end of the slot or mortise, so as to allow the tenon *a* to swing out, when the key *b* is forced with the tenon to a position at right angles with the shank *B*.

*Claim.*—The manner described of fastening shafts and poles to carriages by the arrangement of the bolt *B b*, spiral spring *c*, and clips *c*<sup>1</sup>, arranged and operating as set forth.

No. 23,056.—WALTER A. WOOD, of Hoosick Falls, N. Y.—*Improvement in Harvesters.*—Patent dated February 22, 1859.—The nature of this invention consists in the manner of connecting the finger bar *J* to the main frame *A*, so that whilst the driver in his seat may ease the machine over the greater obstructions, the finger bar by its own elasticity, and the loose connection of it in part to the frame, will raise and lower itself over the lesser inequalities in the ground.

The inventor says: I *claim*, first, connecting the bent bar *J* to the axle, and allowing its other end free vertical motion between guides, substantially in the manner described.

I also claim, in combination with the bent bar *J*, for sustaining the finger and cutter bars, the continuation of the finger bar and its attachment to the main frame, substantially in the manner and for the purpose set forth.



No. 23,057.—WALTER A. WOOD, of Hoosick Falls, N. Y.—*Improvement in Mowing Machines.*—Patent dated February 22, 1859.—This invention has been gotten up with a view of making a grass cutting machine that in price will fall within the reach of every farmer, and in size and weight be capable of being worked by any ordinary team, and yet have the requisite strength and endurance to stand the work it is to perform.

*Claim.*—Connecting the bent bar that carries the finger and cutter bar to the main frame by the spring-plate M and to the axle by the loop *d*, so that the finger bar may rise and fall independently of the wheel or main frame, or the main frame independently of the finger bar, substantially as described.

No. 23,058.—LEWIS S. CHICHESTER, of New York, N. Y., assignor to DAVID L. WINTINGHAM, of Jersey City, N. J.—*Improvement in Machine for Corking Bottles.*—Patent dated February 22, 1859.—In this invention toggles E E are employed, connected with a lever frame G and driving bar F, in connection with an adjustable bottle stand K, so that corks may be driven into bottles, and the same machine rendered capable of corking different sized bottles, and also of driving the corks a greater or less distance into the necks of the bottles.

The inventor says: I *claim* the toggles E E, frame G, and bar F, provided with the plungers *d*, in connection with an adjustable bottle stand K, and bar C, provided with the tubes  $a^1 a^2$ , for the purpose specified.

I further claim the particular manner of adjusting the bottle stand K, to wit: attaching the same to the frame G, by means of the lever I, bar J, arms *k k*, cross-bars *m*, and plates *l*, substantially as shown and described.

No. 23,059.—CHARLES E. CLARK, of Boston, Mass., assignor to Himself and GEORGE W. CLARK, of Boston, aforesaid.—*Improvement in Catamenial Bandages.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The improved manufacture of a menstrual receiver, as made of two inflatable, water-proof crescent-shaped vessels A B, united by a water-proof system, and arranged together, and with the septum C, and provided with means of supplying them with air and discharging it therefrom, substantially as specified.

No. 23,060.—MOSES G. FARMER, of Salem, Mass., assignor to WILLIAM F. CHANNING, of Boston, Mass.—*Improved Electro-Magnetic Fire-Alarm Apparatus.*—Patent dated February 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The combination of two or more key-boards B C D E, or fire-alarm strikers, constructed and operating substantially as described, with one or more electro-telegraphic alarm machines, in the same closed electric circuit, or independent closed electric circuits, by means of a mechanism that will make and break a circuit, as shown and described.

No. 23,061.—JONATHAN GOOD, of Philadelphia, Pa., assignor to Himself and B. L. H. DABBS, of said Philadelphia.—*Improvement in Railroad Car Seats and Couches.*—Patent dated February 22, 1859.—In order to arrange the seats for sleeping couches, every other seat is raised, as seen in fig. 3, by means of the hand-wheel E, the backs are let down to a horizontal position, and the cushions F and G are brought to a horizontal position and fastened by means of the bolt *g*, and secured to the roof of the car by means of the hooks  $h^1 h^1$ . The pillow L is turned up, and the curtains *l* are raised and fastened to the roof by means of the rings *n*.

*Claim.*—The arrangement and combination of the pivoted horizontally and vertically moving plate C, curved ratchet plates J, rack extension D, and pinion C, as and for the purpose shown and described.

No. 23,062.—WILLIAM HINDS, of Little Falls, N. Y.—*Improvement in Straw Cutters.*—Patent dated February 22, 1859.—The nature of this invention consists in the employment of a series of stationary cutters *c c*, arranged with their cutting edges on a level with the cutter *n*, and at right angles to a revolving cylinder B having upon it a series of knuckles *k k* that pass on either side of the cutters, and cuts the straw by carrying and forcing it across the cutting edges.

*Claim.*—The arrangement of the cutters *c c*, in combination with the cutter *n*, fig. 1, constructed substantially as and for the purpose set forth.

No. 23,063.—LYMAN HYDE, of Ellenville, N. Y., assignor to the ELLENVILLE GLASS COMPANY.—*Improvement in Machines for Finishing Carboys.*—Patent dated February 22, 1859.—This invention consists in connecting a treadle F to the ordinary shears C or tool by which the head is formed, and having a furnace B placed in the frame A, and in such relation to the shears that, while the latter are performing their work, the carboy or vessel operated upon will be prevented from suddenly cooling.

*Claim.*—The shears C, treadle F, or equivalent, mandrel *b*, and furnace B, placed within a suitable frame A, and arranged for joint operation, substantially as and for the purpose set forth.



No. 23,064.—A. W. MORSE, of Eaton, N. Y., assignor to Himself and R. V. ROBIE, of said Eaton.—*Improved Bed Bottom*.—Patent dated February 22, 1859.—The rod B is pierced with holes for the lever F, by moving the said lever and thereby rotating the rod B, motion is communicated to the rod B<sup>1</sup> through the gear-wheels A A, the pawl E works into the ratchet roller D, thereby retaining the wires at their proper tension.

*Claim*.—The combination and arrangement of the rods B, the gear-wheels A, the staples G, the pins H, the wires C, or their equivalents, the lever F, the ratchet roller D, the pawl E, for the purpose of giving the proper tension lengthways and sideways simultaneously, substantially as set forth.

No. 23,065.—L. R. ROCKWOOD, of Worcester, Mass., assignor to J. L. CLOUGH, of said Worcester.—*Improvement in Blacking*.—Patent dated February 22, 1859.—The inventor says: The manner of making this blacking is as follows: Dissolve one and a half pounds of the best flake gum tragacanth in flour and a half gallon of soft water, strain and add eight ounces of sulphuric acid, stir frequently for twenty-four hours, then add one gallon of good olive oil, thoroughly incorporate and stir frequently for forty-eight hours. Then to 25 gallons of soft water heated to near the boiling point add 10 pounds of the best extract of logwood, when well dissolved add 10 pounds of gum arabic dissolved in 5 gallons of hot water, cool the mixture to about 125° Fahrenheit, and add 40 pounds of sulphate of iron, which dissolve and cool the whole to about 90 degrees and add the first mixture, mix well and add 28 ounces of sulphuric acid, stir well and add the following, which is to be prepared at the same time as the above: 40 ounces bicromate of potash dissolved in 2 gallons of hot water, then cooled to 125 degrees, and four ounces of sulphuric acid added, after adding this to the former, add to the whole water enough to make 41 gallons, (the one gallon to allow for evaporation in cooling.) It is then put into a wooden vessel and stirred until cool, then allowed to stand thirty days, after which it may be bottled for use.

*Claim*.—Edge blacking, when composed of the mentioned materials in the proportions and manner substantially as set forth and described.

No. 23,066.—ABRAHAM ANDREWS, of Bernville, Pa.—*Improvement in Rotary Engines*.—Patent dated March 1, 1859.—The plungers P are attached to a frame R at each side, and this frame raises and lowers the plungers by means of the rollers S revolving in the eccentric grooves T of the wheels U, which are fastened to and revolve with the shaft B. To reverse the engine, the lever at the grooved hub V, of the cam wheel L, operates the connecting rods K, so that the cam wheel L, will be easily moved in or out.

The inventor says: First, I claim the mortised valve I, and its connection with the rod K, as operated by the cam wheel L, in combination with the said axle or shaft.

Second. I claim the arrangement of the plungers P, with their side rollers S, and cam wheels U, in combination with the axle or shaft B, substantially as described and for the purpose set forth.

No. 23,067.—JOEL W. ANDREWS, of Norristown, Pa.—*Improvement in Brick Moulds*.—Patent dated March 1, 1859.—This invention consists of pivoted handles D D, connected by links H H to longitudinal bars F F, to which the bottoms C C of the moulds are secured in such a manner that when the moulds are inverted the weight of the bottoms of the moulds assist the pivoted handles, &c., in ejecting the bricks from their respective moulds.

*Claim*.—The arrangement of the pivoted handles D D, links H H, and bars F F, connected to movable bottoms C C, all substantially in the manner and for the purpose set forth.

No. 23,068.—JONATHAN M. ALLEN, of Worcester, Mass.—*Improved Invalid's Tables*.—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination in the construction of a table for invalids as set forth, of the revolving table bed or leaf G, with the column made adjustable and capable of being fastened in position substantially as described, the whole constituting a new and useful article of manufacture.

No. 23,069.—JOHN C. BAKER, of Mechanicsburg, Ohio.—*Improvement in Seed Planters*.—Patent dated March 1, 1859.—The seed being placed in the seed compartment, and a fertilizer in the other compartment, and the friction roller *n* being adjusted to the cams *k*, the planter made to move forward the roller *n* rises upon the first elevation of the cam *k*, and the cut-off *e*, by means of the lever L, rod *e*, disk *a*, and rod *u*, is made to vibrate sufficiently to expose the bottom of the seeding tube *p*, the tube *p* being closed by the projection *g* of the cut-off *e*.

*Claim*.—The arrangement of the wheels E and C, cams *k l*, lever L, friction roller *n*, and disk *a*, the whole being constructed as and for the purposes set forth.

No. 23,070.—JOSEPH BATTIN, of Newark, N. J.—*Improved Machine for Cut-Cross Sawing*.—Patent dated March 1, 1859.—This invention consists in a novel way of applying a driving belt to the saw mandrel, whereby the saw as it rotates may be fed to its work and also giggered back, the saw mandrel being under an equal tension of the belt at all points of the movement of the carriage.



*Claim.*—The driving pulley *e* of the saw mandrel, in connection with the pulleys *ff*<sup>1</sup>, one or both, placed in the carriage B, and the driving belt H, the parts being combined and arranged to operate substantially as and for the purpose set forth.

No. 23,071.—J. C. BENTHALL, of Oakland, Texas.—*Improvement in Seed Planters.*—Patent dated March 1, 1859.—This invention consists in the mode of arranging the operating parts of a seed distributing device, whereby it may be attached to the leg of the attendant and operated by his natural movement while walking behind the machine.

*Claim.*—The arrangement of the rock shaft K, connecting rod J, arm *h*, spring *i*, and pendant M, substantially as shown and described, for the purpose of enabling the seed distributing device to be actuated by the leg of the operator.

No. 23,072.—J. S. BRIGGS, of Michigan Bluffs, Cal.—*Improvement in Amalgamating Rifles.*—Patent dated March 1, 1859.—The nature of this invention consists in completely saturating the riffles used in sluice boxes in placer mining with quicksilver, so that the riffles after being once charged will until completely worn out give in an equal and uniform quantity of quicksilver to the gold; also, the quicksilver will be equally distributed over the surface where the water and gold will run.

*Claim.*—The cup punch D E D, as constructed for saturating wood with quicksilver.

No. 23,073.—S. D. BROWN, of Montville, Ohio.—*Improved Harness Attachment for Supporting Driving Lines.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—As a new article of manufacture an attachment or line supporter, to be placed on a horse's rump, by securing it to the harness in the manner shown, or in any equivalent way, said attachment consisting of the adjustable strap A, pin and clasp B and C, cross piece D, adjustable standard F, and arms G G, the whole arranged and combined as described, and for the purpose set forth.

No. 23,074.—THOMAS BROWN, of Kenwood, N. Y.—*Improvement in Tram Staff for Facing Mill Stones.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and combination of the supporting ring A, arranged to rest or lie on the face of the stone with the triangular frame G and adjustable staff M, by which millstones may be faced more accurately and with greater facility, either plain or with suitable concavity or bosom.

No. 23,075.—CHARLES BROWNLICH, of Buffalo, N. Y.—*Improvement in Harvesters.*—Patent dated March 1, 1859.—The pivoted shoe E has length outwardly from the bolt *f*, so to give sufficient lever purchase through the action of the compound levers *g h i*, to raise the finger bar from the ground; *h* lies parallel with the frame, and is connected thereto by means of two journal bearings; *g* is connected to *h* at one end, and *i* at the other end. By lifting *g*, *i* is turned downwards against the end of the shoe, and the bolt *f* serving as a fulcrum or pivoted centre, the finger bar A is raised from the ground.

*Claim.*—The pivoted shoe E, constructed as described, and connected to the rear end of the frame of the machine by means of the bolt *f*, upon which it oscillates, in combination with the levers *g h i*, as arranged for the purpose set forth.

No. 23,076.—J. L. CHAPMAN, of Kinmundy, Illinois.—*Improvement in Corn Harvesters.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination with a corn harvester frame, having V shaped conductors B, of sickle shaped revolving cutters F, partially serrated and partially plain edged stationary cutters E, upper and lower horizontal spring guides C C and D D, and an endless apron J, all arranged and operating substantially as and for the purpose set forth.

Second. The partially serrated and partially plain edged stationary cutters E, of the form described and shown, in combination with the rotary cutters F, substantially as and for the purposes set forth.

No. 23,077.—GEORGE E. CHENOWETH, of Baltimore, Md.—*Improvement in Harvesters.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim a rectangular four-sided step or standard, whether oblong or square, for such has been used before, though without any view to the object sought by my invention.

But I *claim* a polygonal step L, having more than four sides, in combination with a standard or post, the lower of which corresponds in figure with the interior of said step, as and for the purpose described.

No. 23,078.—GEORGE H. CLARKE, of East Washington, N. H.—*Improvement in Bee-*



*Hives.*—Patent dated March 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I do not now claim the hollow bars D, for the same was secured to me by letters patent dated January 8, 1856.

But I *claim* the construction and arrangement of the bars B, the same consisting in making each of them with a salient, angular, or sharp, or nearly sharp, lower edge or surface, extending lengthwise and downward, substantially as described and represented; the several bars being arranged at convenient distances for the bees to pass between them or upward into the chambers A A, as described.

No. 23,079.—WILLIAM CLEMMONS, of Nicholasville, Ky.—*Improvement in Hemming-Guides for Sewing Machines.*—Patent dated March 1, 1859.—The nature of this improvement will be understood by examining the claim and engraving.

The inventor says: I make no claim to the general construction of the hemmer, or any portion of the devices for forming and turning over the hem.

Neither do I claim forming a recess in its under side to relieve the teeth of the feeder, as this has already been done.

I *claim* the combination with the hemming attachment of the spring E placed in the groove under the pressure-pad A, substantially as described, and for the purpose set forth.

No. 23,080.—HENRY L. DE ZENG, of Geneva, N. Y.—*Improved Sausage Stuffer.*—Patent dated March 1, 1859.—When the machine is to be used, the receiver F is shoved over the screw D so as to bring one of the spurs *c* above and the other below the claws *b*, and by turning the receiver F partially around by means of the cars *x* it will be firmly connected to the standard A by the spurs *c* locking under the claws *b*.

*Claim.*—The construction and arrangement of the parts A, D, F, substantially in the manner and for the purpose set forth.

No. 23,081.—L. A. DOLE, of Salem, Ohio.—*Improved Washing Machine.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of two winged rollers with a flexible adjustable apron clothes bed *c*, in the particular manner specified, and for the purpose set forth.

Second. The use of a flexible apron clothes bed, when made adjustable, substantially as and for the purposes set forth.

Third. The use of an adjustable swinging self-opening and self-closing rubber or leather packed valve or partition, in combination with the adjustable flexible apron bed, substantially as and for the purposes set forth.

No. 23,082.—CHARLES R. EDWARDS, of Suspension Bridge, N. Y.—*Improvement in Spice and Coffee Mills.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The burr *hh* provided with the flanch *aa* and handle, cast in one piece, in connection with the concave grinder, having the axle D cast upon the same, arranged and constructed substantially as and for the purposes set forth.

No. 23,083.—CARLOSS EGGELSTON and DARWIN E. EGGELSTON, of Beloit, Wisconsin.—*Improvement in Seeding Machines.*—Patent dated March 1, 1859.—As the machine is drawn over the field the seed in the hopper A is fed continually to the openings *bb* by the revolving pockets D, which are arranged on and rotate with the shaft B, through which openings it passes down through the spouts H and falling upon the convex surface of the distributors *i* is scattered over the surface of the ground. The quantity of seed to be sown while the machine is passing over a given area is regulated by the adjustment of the slide F, which is effected by the shipper G.

The inventors say: We *claim*, first, the arrangement, in the manner and for the purposes described, of the rotating shaft B, in two or more parts, driving-pulleys *d*, pulley encasement E, seed pockets D, stationary perforated bottom piece *a*, adjustable slide F, and cut-off *h*.

Second. In combination with the above we also claim the shipper G and adjustable slide bar or gauge *g*, when the shipper is pivoted to the gauge to operate as specified, and for the purpose described.

No. 23,084.—JONATHAN GRIFFIN, of Harpersfield, N. Y.—*Machine for Blowing Uniform Currents of Air.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, operating the feeders F alternately by means of the cross arms E with the rollers traversing the curvilinear elevating ways G G, substantially as set forth.

Second. Regulating the quantity of air admitted into the air chamber H, according to the quantity required, by means of the check wire *f* and sliding arm or brake *h* operating on the balance-wheel K, arranged substantially as described.



Third. Connecting the top and bottom of the air chamber H by means of India rubber straps or other springs, when used in combination with the mechanism for driving the feeders, as described, to overcome and stop the operation of the motive power when the chamber is full, and thereby steady the current of air, and prevent too great strain on the chamber.

No. 23,085.—ELIAS J. HALE and CHARLES H. CHANDLER, of Foxcroft, Me.—*Improvement in Lamps*.—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* our improved rack wick-holder as constructed and applied to the wick C and the spur wheel, so that the teeth of the latter may pass through the rack and act on both the rack and the wick at one and the same time.

Second. The flange or collar J for the purpose of equalizing the aerial current as it strikes the flame of the wick.

No. 23,086.—BEVERLY HARRIS, of New Orleans, La.—*Improvement in Applications for Restoring the Hair*.—Patent dated March 1, 1859.—The claim explains the nature of this invention.

The inventor says: I do not claim the use of castor oil, bay rum, alcohol, or quinine for hair tonics, as I am aware these ingredients have heretofore been used for this purpose.

But I *claim* the use of bitter apple and gunpowder in combination with the before stated ingredients, when used in substantially the same proportion as set forth and for the purpose of hair tonics, as described.

No. 23,087.—WILLIAM C. HAYNES, of Melrose, Texas.—*Improvement in Revolving Fire-Arms*.—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Combining with a stationary barrel D having several tubes or chambers for shot a rotating cylinder having groups of chambers, each group of chambers being so arranged as to correspond with the chambers or tubes in the barrel, and also so arranged in connection with a single cone, or its equivalent, to each group, that the explosion of the cap, or its equivalent, shall fire the whole group to which the cone upon which it was exploded belongs, the whole being constructed and operating substantially as set forth.

No. 23,088.—WILLIAM W. HUSE, of Brooklyn, N. Y.—*Improvement in Manufacture of Tin Foil*.—Patent dated March 1, 1859.—The claim explains the nature of this invention.

The inventor says: I do not claim to have invented the manufacture of tin foil with a filling of lead.

But I *claim* the production of tin foil having but an outer casing of tin, or its alloy, covering a filling of lead, or its alloy, by the reduction by pressure of a cylindrical bolt of the latter metal or alloy, which has been previously coated by dipping with the former metal or alloy, and the repetition of the dipping at suitable stages of the reducing process, substantially as described.

No. 23,089.—PETER KESSLER, of Bellville, Ill.—*Improvement in Apparatus for Distilling*.—Patent dated March 1, 1859.—In this invention the gaseous liquor is conducted from the still into the hollow cylindrical space, which is partly filled up by a conical vessel of water, so that the impurities contained in the liquor are condensed by coming in contact with the cool sides of the water vessel, and the pure liquor may be drawn off by a pipe leading to a suitable cooler, the water vessels being so arranged in the space surrounding the same that the strength of the liquor may be determined by the quantity of water contained in the vessel, whilst the impurities are sent back to the first still by means of the faucet without pumping.

*Claim*.—The employment of the stills B B, and cooler Q, in combination with the vessels E I K, as described and shown, when said vessels are arranged so as to have a tapering space L, and an intermediate circulating passage G a b J c between them, substantially as and for the purposes set forth.

No. 23,090.—DAVID P. KINYON, of Raritan, N. J.—*Improvement in Harvesters*.—Patent dated March 1, 1859.—By this invention the height of the frame can be regulated, and with it the sickle or cutting device, so that the grass may be cut any desired height from the surface of the ground without interfering with the driving mechanism.

*Claim*.—The arrangement of the frame H, which supports the driving wheel F, so that the adjustment of the relative position of the driving wheel and cutter is effected by the leverage of the inner frame in the manner described, for the purpose as set forth.

No. 23,091.—F. C. KNEELAND, of Hartford, Conn.—*Improvement in Horse Rakes*.—Patent dated March 1, 1859.—A revolving rake is employed in this invention, peculiarly arranged, or applied to a mounted frame.

*Claim*.—The arrangement and combination of the shaft c<sup>1</sup>, pivoted within the frame F,



and provided with the treddle *G*, arms *h*, and bar *i*, with the frame *F*, when the latter is pivoted to the axle *A*, as and for the purpose shown and described.

No. 23,092.—HAZARD KNOWLES, of New York, N. Y.—*Improvement in Fastening Bands on Bales and Packages*.—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The method substantially as described of fastening the ends of a metallic strap *a* or hoop, by passing each end of the strap or hoop through a slot in a metal plate *b*, one edge of which slot is formed with a bent lip on the outer face, bending the end of the strap or hoop over and outside of such lip, and hammering or clenching down both the end of the strap and the lip *e e*, that the strap or hoop may be clasped or held irrespective of the body which is to be strapped or hooped, substantially as described.

No. 23,093.—JOSEPH G. E. LARNED, of Brooklyn, N. Y.—*Improved Boiler for Generating Steam*.—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the substitution for the parallel or concentric sheets of boiler plate ordinarily used to form the fire box of steam boilers, of a continuous row or rows of upright water tubes *1*, set side by side, to connect the steam drum *A*, or water space above the fire with a water bottom below it, in such way as to form by themselves a water jacket; said tubes being inserted in the sheet above and below by means of necks *d e*, or smaller continuations, the diameter of which is so much less than that of the tubes as to leave a sufficient thickness of metal between adjacent perforations of the sheet when the tubes are placed near enough together to answer the purpose of inclosure; expressly disclaiming, however, the use of such necks or smaller continuations, in themselves considered, or for any other purpose, or in any other arrangement than that set forth.

Second. The combination of rows of water tubes, set side by side, to inclose the furnace, with tubes arranged annularly, to give increased surface, without reference to the particular method of inserting the inclosing, or arranging the annular tubes.

Third. The method of inserting the innermost of the tubes when arranged in pairs, one within the other, as described, so that they may be taken out and put back at pleasure, and without injury, by means of a screw or lock nut joint at one end, and a combined screw and expansion joint at the other.

No. 23,094.—EDWIN LAWRENCE and ROBERT SAFLEY, 2d, of Waterford, N. Y.—*Improvement in Pumps*.—Patent dated March 1, 1859.—The nature of this invention consists of a circular reciprocating double acting pump, in which the reciprocating motion is obtained by the movement of the arms or piston *1 2*, upwards and downwards simultaneously on opposite sides of the cylinder through a space less than that of the whole circle, and in which the double action is obtained by the same motion of the arms or piston, in conjunction with valves *3, 4, 5*, fixed to the outer surface of the cylinder, as well as to the partitions inside, in connection with pipes or water ways outside of it.

*Claim*.—A circular reciprocating double acting pump, that will both raise and propel water on both sides of the cylinder at one and the same time, and by the same motion of the arms or piston, substantially as set forth.

No. 23,095.—A. F. LEDBETTER, of Westminster, N. C.—*Improved Apple Cutting and Coring Machine*.—Patent dated March 1, 1859.—This cutter is formed of a tube with radial knives attached, the cutter being secured to the lower end of a vertical frame, or gate, which works directly over a bench in which a circular bed or support, encompassed by an annular opening, is formed, the whole being so arranged that the slices and cores are discharged separately from the machine.

The inventor says: I *claim* the cutter *E*, attached to the reciprocating frame *C*, in connection with the annular opening *i*, in the bench *A*, and with or without the spout *g*, the parts being arranged to operate as and for the purpose set forth.

No. 23,096.—LEWIS W. LEEDS, of New York, N. Y.—*Improvement in Apparatus for Heating Buildings*.—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim, broadly, the use of steam as an agent for heating water.

But I *claim* combining the uses of steam and water for heating buildings, by means of one or more water vessels combined with a separate steam boiler, and applied in such manner that the steam from the said boiler is employed only to heat the water in the said water vessel or vessels, and that the said water vessel or vessels constitute the heater or heaters of the air, as described.

No. 23,097.—HIRAM LITTLEJOHN, of Troy, N. Y.—*Improved Machine for Crozing and*



*Chamfering Barrels.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Crozing and chamfering barrels, kegs, or casks, by turning the bulging cylinders of staves in upon or against suitable rests or supports, and around rotating cutters, which turn in opposite directions, and describe circles of less diameter than the inside of the ends of the cylinders of staves, the cutters and the rests being so arranged together, and one or both of them made movable, that the cylinders of staves can be conveniently applied to and removed from the rests and cutters, substantially as set forth.

No. 23,098.—WILLIAM H. LONG, of Lancaster, Pa.—*Improvement in Horse Rakes.*—Patent dated March 1, 1859.—The regulating screws L enter a nut in the axle beam A, by means of which the hinged tooth beam B is thrown up or out below with its teeth supporters, and the points of the teeth elevated from  $G^1$  to  $G^3$ , above the ground line X. The lever O to dislodge the contents of the rake, by means of the shifting plate M and binding screws Q, is adjusted to any alteration in the tooth beam B by the screws L.

*Claim.*—The arrangement of lever O, shifting lever plate N, and tooth beam B, with axle A, and regulating screw L, the whole being constructed and operated as and for the purpose set forth.

No. 23,099.—HENRY LOWE, of Belleville, N. J.—*Improvement in Paper Made from Reeds.*—Patent dated March 1, 1859.—The claim explains the nature of this invention.

The inventor says: I am aware that reed fibre has been reduced to a sort of pulp; but previous to my invention it has been found impossible, practically, to manufacture paper therefrom.

I do not claim the described process for preparing reed fibre, a patent for the same having been granted me by the United States in 1858.

Nor do I here claim the art of making reed pulp.

I do not limit myself to the described process of making reed paper, or to any other process equivalent thereto.

But I *claim* the use of reed fibre in making paper, said fibre being prepared from the reeds called *Arundinaria*, *Macrosperma* of Michaux, and employed in the manufacture of paper, substantially as set forth.

No. 23,100.—JOHN M. LUNQUEST, of Griffin, Ga.—*Improvement in Pumps.*—Patent dated March 1, 1859.—The water enters the cylinders BB through the apertures *ii* in the piston heads CC as they descend. When the heads ascend the balls *aa* fall into the apertures *ii* and close them, the water in the cylinders being raised and forced through the openings *nn* in the bottom of the air chamber F.

*Claim.*—The arrangement of cylinders B B, piston heads C C, ball valves *aa*, air chamber F, and valves  $a^1 a^1 a^1 a^1$ , said valves being kept in position by proximity to each other and the sides of the chamber F, substantially in the manner and for the purpose specified.

No. 23,101.—SAMUEL MACFERRAN and STRICKLAND KNEASS, of Philadelphia, Pa.—*Improvement in Crossings for Railways.*—Patent dated March 1, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We wish it to be understood that we do not claim broadly the application of inclined surfaces on railroads for receiving the flanges of the car wheels.

But we *claim* the employment of inclined surfaces at the point where two rails intersect each other, when the said surfaces are arranged in respect to the intersecting rails, substantially as and for the purpose set forth.

No. 23,102.—EDWARD MAYNARD, of Brooklyn, N. Y.—*Improvement in Carriage Springs.*—Patent dated March 1, 1859.—This invention consists in the manner of attaching the ends of the heart shaped spring *a* so that they are in contact with each other, and the operation of a weight tends to draw the spring into a smaller compass, and the ends of said spring coiling or bearing against each other are brought into a straight form.

*Claim.*—Attaching the returned ends of the spring directly to each other by means of the shackle *b*, substantially as and for the purpose specified.

No. 23,103.—MORRIS MATTSON, of Boston, Mass.—*Improvement in Treatment of Caoutchouc.*—Patent dated March 1, 1859.—The claim explains the nature of this invention.

The inventor says: I do not claim any invention described in the patent of N. Hayward, dated February 24, 1839; and especially I do not claim the combination of caoutchouc and sulphur broadly.

But I *claim* as my new or improved India rubber composition or manufacture, as made in manner substantially as specified, without any of the oxide of lead, but of caoutchouc, sulphur, and one or more ochres, or an earth or earths, containing one or more finely divided oxides of iron, and employed in a quantity much greater than necessary for simply affording



color to the compound, the quantity being essentially in the proportions as stated, or such as will afford the economical and useful results as explained.

No. 23,104.—JOHN G. MITCHELL, of Collington, Md.—*Improvement in Motive Power.*—Patent dated March 1, 1859.—The nature of this invention consists in the adaptation of weights for the production of mechanical power.

*Claim.*—The application of weights A A<sup>1</sup> and B B<sup>1</sup> in connection with the shaft C and treddle K, so that when disconnected from the treddle K the weights A A<sup>1</sup> and B B<sup>1</sup> are in equilibrium, and subject to be moved by any agency applied to either weight at the end of the lever or arms, so as to produce motion in the machinery at the termination of the machine proper at I, arranged and operating in the manner and for the purpose described.

No. 23,105.—JAMES MONTGOMERY, of New York, N. Y.—*Improvement in the Construction of Steam Vessels.*—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, constructing the hulls of vessels with one or more cavities B in the bottom, commencing at or nearly the stem, increasing in capacity sternwards, substantially as and for the purposes set forth.

Second. Constructing the bottoms of vessels with corrugations extending from stem to stern, as set forth, which give strength to the hull A and a portion of which form the cavity or cavities referred to.

Third. The described combination, an inclined screw propeller with a hull, constructed as set forth.

Fourth. Two or more rudders operating as set forth, in combination with the described longitudinal cavities in a ship's bottom.

No. 23,106.—ROBERT NIVEN, of Gates, N. Y.—*Improvement in Potato Diggers.*—Patent dated March 1, 1859.—The inventor says: On the axle of a pair of truck wheels A, I support a frame B by means of slots C in the side plates D which rests on the axle. These plates are firmly bolted to the sides of the frame and extend forward and downward, terminating in a point at F, where the two are connected by the share or shoe G. A riddle or screen H, consisting of iron rods taking into links of an endless chain at each side, receives the potatoes and earth as they are ploughed up by the shoe G and separates the tubers, delivering them back to the machine.

*Claim.*—The combination and arrangement of the shoe or share G, endless screen H, and pendant or supplementary riddle N, with the frame A and side plates D, sinuous slots C, and slotted levers R, operating conjointly, substantially as and for the purposes set forth.

No. 23,107.—A. H. NORDYKE, of Richmond, Ind.—*Machine for Printing the Address on Newspapers, &c.*—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of an endless conveyor A for feeding the envelopes under the forms to receive the impressions, and delivering the same after printing, in combination with a driving set wheel D, as set forth.

Second. I claim the two inclined tracks K and L, arranged one above the other in such manner that the forms may be carried up the inclined track K and delivered upon the inclined track L, and brought by their own gravity down said track and under the pressure rollers N, and from thence to the point of discharge, as described.

Third. I claim the arrangement and combination of endless band g, catch i, and jointed track K, for taking the forms from the end of said track K and delivering them upon the lower track L, arranged and operating as described.

No. 23,108.—OSCAR S. OAKS, of South Rutland, N. Y.—*Improvement in Roofing Cement.*—Patent dated March 1, 1859.

The inventor says: To make my improved mastic compound, I take 25 gallons of coal tar, 2 of boiled linseed oil, 2 of India rubber solution, 2 of alkaline solution of shellac, 5 pounds of asphaltum, 5 of pulverized soapstone, 5 of litharge, 5 of sulphate of baryta pulverized, and 5 of plaster of Paris. I place the whole in a kettle, or other vessel, over a fire, and boil till thoroughly mixed, stirring from time to time during the boiling process.

*Claim.*—The employment, in combination with the other substances specified, of the alkaline solution of shellac and the sulphate of baryta, the whole being compounded substantially as and in about the proportions set forth.

No. 23,109.—ANSON OLCOTT, of Lakeport, N. Y.—*Improved Rotary Shingle Machine.*—Patent dated March 1, 1859.

The inventor says: This is a rotary shingle machine, with a single knife, against which the bolt is to be fed in the usual manner, and consists in the combination of devices for shifting the position of the bolt so as to cut the butts alternately from opposite ends thereof.

*Claim.*—The combination of guides c, springs d, connected therewith, slide o, reciprocating



cated from the movement of the cutter wheel, and the shingle cutter *k*, the whole constructed, arranged, and operating substantially as described.

No. 23,110.—GEORGE T. PARRY and HAMPTON W. EVANS, of Philadelphia, Pa.—*Improvement in Governors for Steam Engines*.—Patent dated March 1, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—One or more revolving weighted spring levers *KK*, in combination with the sleeve *I*, and the connections described, or their equivalents, between the said sleeve and levers, when the latter are hung to pins placed at such a distance from the centre round which they revolve, that the weights at the ends of the levers shall move in the arc of a circle, contained within or partially within the circle described by the said pins, as set forth and for the purpose specified.

No. 23,111.—ANDREW PATTERSON, of Birmingham, Pennsylvania.—*Improved Churn*.—Patent dated March 1, 1859.—This invention consists in the combination of the adjustable dash wheel *x y*, and adjustable partition *w*, in such manner that the wheel, when it strikes the cream, shall impel or throw a portion of it over the said partition, where it shall be at rest, until displaced by successive portions, so that it shall sink down and pass through or under the bottom of said partition, to be again in its turn operated upon by the wheel.

*Claim*.—The combination of the chamber *a* with the chamber *b*, when said chamber *b* serves the double purpose of a lid or covering for the cream in chamber *a*, and a frame for the dash wheel, driving wheel, and crank, substantially as described and set forth.

No. 23,112.—JOHN K. PETERS, of New York, N. Y.—*Improved Ship's Propeller*.—Patent dated March 1, 1859.—This propeller consists of one or more blades or floats *C*, attached, each at one end or edge, by a flexible joint, to an arm *A*, lever, rod, bar, or frame, which has imparted to it a reciprocating motion, either vertically or in a direction transverse to the length of the vessel, by which motion the blade or float is caused to receive a vibrating motion which causes them to present their opposite faces alternately to the water in a direction oblique to that of the reciprocating motion of the arm to which they are attached and to the length of the vessel, and thereby exert a pressure upon the water in such a way as to propel the vessel.

*Claim*.—The arrangement and combination of stops *c d*, arm *A*, and blade *C*, (more than one blade with the stops being combined with the arm *A*, when desired,) substantially as and for the purpose shown and described.

No. 23,113.—DANIEL POWERS, of Philadelphia, Pa.—*Improved Lock*.—Patent dated March 1, 1859.—This improvement consists in the expanding and contracting guards or fence of two pieces *ff*, jointed on the bolt *b*, between which the tumblers *t* must stand when the bolt *b* is thrown back to unlock it. This arrangement prevents the feeling out the proper position of the tumblers *t*, in attempting to pick the lock.

The inventor says: I *claim* the independent movable expanding and contracting fence, or its equivalent, substantially as set forth.

I also claim the union of the upper and lower halves thereof, as specified.

No. 23,114.—NOAH PRATT, of Nicholson, Pa.—*Improved Centre Board for Vessels*.—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—Applying the centre board *D* and appliances for operating the same in a movable box or curb *C*, which is so fitted into a well hole, or a stationary curb built into the vessel, as to be capable of being lifted out of said well hole or curb with the centre board, and all its appliances, substantially as described.

No. 23,115.—DANIEL RANCK, of Intercourse, Pa.—*Improvement in Harvesters*.—Patent dated March 1, 1859.—The front or sickle side of the platform *A* is at a right angle to the driving wheel *o*, having a side projection for the curved support *C*, upright *T*, post *G*, with its projecting arm for the reception of the spindle or pivot *E*. The sliding head *R* of the rake *D* is slipped over the pivot *E* at its common centre, the outer edge and rim *B* on the platform and the upright *T* being arcs of a smaller circle. The upper edge of the rim *B* corresponds with the side piece *H*, forming an inclined plane, gradually rising forward to a point over the sickle, from whence it tapers into the projecting shoe.

*Claim*.—The combination of the inclined planes *H*, and springs *I*, crank *K*, and connecting rod *L*, spindle or pivot *E*, sliding rake head *R*, and curved supports *B T* and *C*, when these several parts are arranged in the manner described, for the purpose specified.

No. 23,116.—ISAAC RULOFSON, of Penn Yan, N. Y.—*Improvement in Ploughs*.—Patent dated March 1, 1859.—By reference to the claim and drawings, the reader will obtain an idea of this invention.

*Claim*.—The arrangement of beam *A*, standard *B*, landside strip *D*, share *E*, mould board *C*, and piece *H*, the whole being constructed and united as and for the purpose set forth.



No. 23,117.—GEORGE E. SAFFORD, of New York, N. Y.—*Improved Screw Propeller*.—Patent dated March 1, 1859.—This invention consists in hanging the blades C to the shaft by means of a double hub B, made in two parts, with diagonal notches in the boss, in which notches the blades are secured.

*Claim*.—The hub B B, made in two disks, with spiral or inclined slots to receive the floats, when the floats are removably secured to the hub, in the manner described, and the whole being constructed substantially as and for the purpose set forth.

No. 23,118.—EMILIUS N. SCHERR, of Philadelphia, Pa.—*Improved Automatic Bell Ringer*.—Patent dated March 1, 1859.—This invention consists in the employment of a barrel or cylinder A, the periphery of which is provided with any desired number of holes for the reception of steel pins *b b*, placed on parallel lines and secured to their places by nuts on the inside, but easily removable for the purpose of changing their position so as to vary the airs to be played; B is a bar which rests at each end in the frames C, and acts as a fulcrum for the keys D.

*Claim*.—The described manner of automatically producing music from bells by the employment of adjustable pins *b*, in the barrel A, actuated by clock-work or other motive power, and giving motion to the hammers D, in any manner equivalent to that shown and described.

No. 23,119.—D. P. SHAW and F. C. BROWN, of Rochester, N. Y.—*Improvement in Smut Machines*.—Patent dated March 1, 1859.—This invention consists in the employment of a blast spout K L, fan, and scouring device, arranged relatively to each other, so that a very compact and efficient machine is obtained, the grain being subjected to a blast before entering the scourer, while passing through the same, and also after leaving the scourer just previous to leaving the machine.

*Claim*.—The arrangement of the blast spouts K L, with the scouring device inclosed within the cylinder I, and the fan box C, in connection with the tubes J, substantially as shown, whereby the grain is subjected to a continual blast during the whole of its passage through the machine, to wit: prior to its advent into the cylinder I, while acted upon by the scourer, and after it leaves the scourer, substantially as described.

No. 23,120.—WILLIAM N. SLASON, of South Reading, Mass.—*Improved Washing Machine*.—Patent dated March 1, 1859.—In each of the washing chambers D E is a horizontal grated dasher I K, which is suspended from the lever C by a bar *d* and a connection bar *c*, the two being jointed together and connected to the brake so as to admit of the dasher being alternately raised and lowered within the washing chamber while the brake C is moved or worked up and down on its fulcrum. Over each dasher, and extending horizontally and parallel therewith is a set of squeezing gratings L L or boards M M.

The inventor says: I *claim* the arrangement and combination of the squeezing gratings or boards with the reciprocating dasher or washer, or rinsing chamber.

I also claim the application of the separate soap chamber to the wash or rinsing chamber, in the manner and for the purpose set forth.

I also claim the arrangement of the windlass with reference to the box A, and brake C, and for the purpose specified.

No. 23,121.—JACOB STEAR, of Smicksburg, Pa.—*Improvement in Water Wheels*.—Patent dated March 1, 1859.—The wheel consists of a solid disk L, which is cut through near its perimeter in such a manner as to form a series of dished buckets L<sup>1</sup>, which overlap each other on the under side of the wheel, and is arranged and secured in a surrounding rim or cylinder *i* to the face of said disk, said rim is so constructed as to have an annular flange around its upper edge; from the inner side of this flange extend downward a series of inclined ribs *k*, which are equal in width to, and unite with the disk at the spaces *h*, between the buckets L<sup>1</sup>.

*Claim*.—The combination of the cylinder *i*, inclined ribs *k*, and disk L, with its buckets L<sup>1</sup>, the whole constructed and operating essentially as described.

No. 23,122.—ALEXANDER STEPHENS, of Baltimore, Md.—*Improvement in Constructing Wharves*.—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—Brace piles driven at a suitable angle, and having their heads so drawn back as to secure a purchase from the footing of the pile, when combined with vertical piles P and capping logs *u c l*, substantially as described.

No. 23,123.—ROBERT L. STEWART and JOHN CHRISTOPHER, of Ligonier, and ROSS FORWARD, of Somerset, Pa.—*Improved Hearth for Working and Refining Iron*.—Patent dated March 1, 1859.—The pipe D conducts the steam from the boilers at G into the steam chamber C, from which it presses through the perforations into the liquid metal. A hole H is left in one of the side pieces S S for letting out the metal when the process is finished.



*Claim.*—The steam chamber C, and perforated hearth B, as in the specifications and drawings described, for the uses and purposes set forth.

No. 23,124.—G. W. B. STOR, of Carlisle, Pa.—*Improvement in Apparatus for Slaughtering Hogs.*—Patent dated March 1, 1859.—The inventor says: To use my apparatus, I fasten the posts *o o* in the bar D, and apply the top bar P to them, and perforate it for the upper end of the shaft Q to turn in, the lower end of said shaft being coupled to the pivot of the shaft E, so as to be turned by and with the shaft E, and carry the bar R fastened in the shaft Q, which bar R is provided with a pulley in each end, and there is also a pulley S in the upper part of the shaft Q. The rope T is fastened to the long end of the lever G, and passes over each of the above-mentioned pulleys and the end fastened near the operator, who raises the long end of the lever G with one hand, while he places the hook K under the gambrel with the other hand; by pulling the rope T, which hangs below the lever, he can raise the hog from the slaughtering bench and hang it on one of the arms M of the rotating shaft N.

*Claim.*—The arrangement of the vertical shafts E Q, lever G, and bar R, with the vertical rotating shaft N, and the rectangular frame B C D and O P, the whole being constructed as and for the purpose set forth.

No. 23,125.—N. G. THORN, of Dayton, Ohio.—*Improvement in Mashing.*—Patent dated March 1, 1859.—The nature of this invention consists in introducing, by means of pipes *e e e*, and hollow shafts *d d d<sup>1</sup>*, water, steam, and air at different times, as may be required in the *mash tub* during the process of mashing.

The inventor says: I *claim*, first, the perforations in the pipes *e e e*, &c., attached to the hollow arms *d d d<sup>1</sup>*, or any analogous device, by which water, steam, or air is admitted into the *mash tub* in such manner as to distribute it equally, or nearly so, to all parts of the mash.

Second. The spiral agitators *fff*, when attached to any revolving machinery for the purpose set forth.

Third. The surface agitators *g g*, of whatever form when attached to revolving tubes for the purpose set forth.

Fourth. The use of a self-packing joint *h*, applied to *mash tubs* when used for the purpose set forth in whatever form it may be constructed.

Fifth. The combination of the surface agitators, with a stationary or revolving blast.

No. 23,126.—AMOS G. THOMPSON and ANDREW J. THOMPSON, of Belleville, Ohio.—*Improvement in Corn Planters.*—Patent dated March 1, 1859.—In the engraving B B are plungers passing down behind the seed hoppers C C, which plungers are passed downwards by the operator pressing on the cross-bar E, by means of which motion the seed is separated from the bulk of seed in the hopper and passed through the aperture through the plungers into the seed chambers F F, which cross-bar and plungers are thrown back to their proper position by the spiral springs *a a*, and held in position by means of said springs and straps *o o*.

*Claim.*—The arrangement of spiral springs *a a*, in combination with cross-bar E, and straps *o o* for regulating the movement of the plungers B B, substantially as specified.

No. 23,127.—JOSEPH N. TREADWELL, of Reading, Conn.—*Improvement in Machines for Scouring and Hulling Grain.*—Patent dated March 1, 1859.—The grain to be operated upon is fed in at the eye *f*, and as it is slowly carried towards the skirt of the runner F is scoured and hulled, and dropping off said skirt falls into the curb B.

*Claim.*—In combination with a bed-stone and runner for scouring and hulling grain, the grooves *c*, and rasping plates H I skirting said grooves, said parts being arranged and operating together substantially as and for the purpose set forth.

No. 23,128.—A. VAN TRUMP, of Lancaster, Ohio.—*Improvement in Sugar-Cane Mills.*—Patent dated March 1, 1859.—The nature of this invention consists in the combination, in a sugar-cane mill, of two or more intermediate small feed rollers C C, with four or more large crushing rollers B B<sup>1</sup>, the small feed rollers being arranged between the large crushing rollers at such a point that their peripheries work in concert on the same line as do the peripheries of the large crushing rollers, and thus form a support and act as a feed motion at the centre of the machine to the ends of the cane-stalks as soon as they emerge from between the first pair of crushing rollers, and until they pass in between the second pair of crushing rollers.

*Claim.*—The combination in a sugar-cane mill of two or more intermediate small feed rollers C C with four or more large crushing rollers B B, B<sup>1</sup> B<sup>1</sup>, substantially as and for the purposes set forth.

No. 23,129.—MATTHIAS VANDENBURG, of Newark, N. J., assignor to FRANKLIN BERRY, of Owego, N. Y.—*Improvement in Skates.*—Patent dated March 1, 1859.—The nature of this invention consists in confining the skate firmly to the foot, by substituting for the ordinary method an elastic covering A to the front of the foot, and in constructing the foot-board of the skate in sections E.

The inventor says: I *claim*, first, an elastic front to confine the foot to the skate.



Second. Rendering the foot-board adjustable to feet of various widths by constructing it in sections.

No. 23,130.—GEORGE VOGT, of Philadelphia, Pa.—*Improvement in Pianofortes*.—Patent dated March 1, 1859.—This invention consists in the employment of an improved rest, consisting of a combination of ivory, wood, and metal, and through which the strings *ff* pass in a manner avoiding the side bearing produced by receiving them against the side of a pin *L*, and which allows the strings a free undisturbed vibration in equal directions.

*Claim*.—The employment of the described rest and bridge, either separately or combined, when the same are constructed and operate substantially in manner and for the purpose set forth.

No. 23,131.—ALEXEY W. VON SCHMIDT, of San Francisco, Cal.—*Improved Water Metre*.—Patent dated March 1, 1859.—In the drawings *A* is a portion of the current water pipe, within which is a propeller *B* mounted upon an axis *b*, the bearings of which are in the cross pieces *a a*. The propeller is of a screw or scroll form, and the pitch of the screw is  $3\frac{3}{4}$  inches for a pipe 2 inches in diameter, and the hub or axis *b* of this propeller is of hollow metal, so as to give buoyancy, by which means the pressure and friction are taken off from its bearings to a great extent.

*Claim*.—Combining with the propeller *B* the radial partitions or feathers *k k*, and the reacting shuttes *m m*, said feathers and shuttes being arranged and operating as set forth.

No. 23,132.—RUSSELL WARNER of Brattleboro, Vt.—*Improvement in Harvesters*.—Patent dated March 1, 1859.—This invention consists in a peculiar construction and arrangement of the cutting device, whereby it is made to act very efficiently, and with but a moderate application of power; also in a peculiar arrangement of the pole, whereby the machine can be turned with much greater ease than usual.

The inventor says: I *claim*, first, the circular cutters *q* attached to bars *r* at the lower ends of rotating shafts *k*, and having an independent rotating motion given them by means of the gearing *s a*.

Second. The combination of the cutters *x*, plates *u p*, and shafts *k*, with or without the sharpeners *a* or *c*, arranged as shown to operate as and for the purpose set forth.

No. 23,133.—WILLIAM H. WHITE, of Garrattsville, N. Y.—*Improvement in Horse Rakes*.—Patent dated March 1, 1859.—The nature of this invention consists in the employment of two levers *A C*, which are crossed diagonally and pivoted together at *d*, in combination with the turning rake and with the frame *C* and seat of the carriage; when one of the levers is arranged to be depressed by the weight of the driver on the seat *B B<sup>1</sup>* of the carriage, and thus made to serve for holding the rake *D* down to the ground, and the other arranged to be operated by hand, and to serve for throwing up the rake, and thus freeing it of its load.

*Claim*.—The employment of the two levers *A C* when crossed diagonally and pivoted together at *d*, in combination with the turning rake-head *D*, frame *C*, and seat *B B<sup>1</sup>*, substantially as and for the purposes set forth.

No. 23,134.—JOHN M. WHITNEY, of Bolton, Mass.—*Improvement in Ploughs*.—Patent dated March 1, 1859.—As the plough is started to form the furrow, the wheel *H*, with its frame *C D* on the land side, and sufficiently heavy to control the other parts of the apparatus, travels upon the ground and governs the rim of the plough by controlling the angle at which the mould board *I* works.

*Claim*.—The arrangement of the hinged arms *C D*, adjustable brace *E*, and standard *A*, with the wheel *H* and plough beam *G*, the whole being constructed for operating substantially as and for the purpose described.

No. 23,135.—JOHN M. WHITNEY, of Bolton, Mass.—*Improvement in Cultivators*.—Patent dated March 1, 1859.—The thills *J* are placed one side of the centre of the apparatus, in order that the horse may travel one side of the row of stalks to be cultivated; the thills *J*, by being attached to the frame *H*, which is swiveled to the cultivator frames *A B* by means of the connecting frame *L*, allows the horse also to travel unevenly, while the cultivator frame *A B* may be kept by the operator always at right angles to the frame *H*, and in proper course.

*Claim*.—The arrangement of the teeth *a*, adjustable mould-boards *D*, frames *A A<sup>1</sup>*, and cross-beam *B*, with the branched swivel bar *L*, and frame *H*, the whole being constructed as and for the purpose described.

No. 23,136.—JOHN E. WOOTTEN, of Philadelphia, Pa.—*Improved Gauge Cock*.—Patent dated March 1, 1859.—The nature of this invention consists in providing a tube *A a*, the arm *a* of which should be fixed as near at a right angle with tube *A* as may be desired, and of such length as that when swung upward or downward it may reach the highest or lowest level of water which should be contained within the boiler. At the upper end of arm *a* is



seated a valve E, which is actuated by rod F, by means of cam C; tube A passes through stuffing-box B, and revolves free therein.

*Claim.*—The arrangement of the tube A a, in combination with the cam c, rod F, and valve E, for the purpose and in the manner set forth.

No. 23,137.—ALBERT A. WOOD, of New York, N. Y.—*Improvement in Valve Gears.*—Patent dated March 1, 1859.—This invention consists in the combination of two links D and E E<sup>1</sup>, placed within the strap, said links being operated by an eccentric B to give motion to the valves, and made adjustable to regulate the admission of steam to the cylinder.

*Claim.*—The combination of the links D and E E<sup>1</sup>, attached to the eccentric rod, and arranged with adjusting gear, as described, or in a manner equivalent.

No. 23,138.—JOEL R. BASSETT, of Cincinnati, Ohio, assignor to Himself, and A. E. BATEMAN, of said Cincinnati.—*Improvement in making Bolts and Rivets.*—Patent dated March 1, 1859.

The inventor says: The operation is as follows: Upon a suitable iron frame is arranged a rotary stock. A portion of this stock being formed of a diameter somewhat greater than the other part, is called the die-stock, and the remaining portion is called header-stock. To the face of the periphery of the die-stock, at suitable intervals, are hinged clamps. These clamps are made to fit and lie closely upon the face of the die-stock. Dovetailed cavities are formed across the face of the die-stock, and also across the corresponding face of the clamps. The die pieces are inserted into these cavities in such manner that when the clamp lies closely upon the die-stock the die pieces will be fitted exactly to each other, so as to form the die ready for the reception of the rod as the die rotates. The rod to be worked is fed to the die; after which, the loose end of the clamp is caught by a compressing roller attached to the frame and compressed so as to be held firmly against the die-stock. The blank now being grasped tightly within the die, is severed from the rod, by means of a cutter attached to the same.

*Claim.*—The die A A<sup>1</sup>, a a, i i, g<sup>1</sup> g<sup>1</sup>, f f, and k k, substantially as described, for the purposes set forth.

No. 23,139.—FRANZ ANTON LOHAGE, of Unna, Prussia, assignor to EDMUND LEOPOLD BENZON, of Boston, Mass.—*Improvement in the Manufacture of Steel.*—Patent dated March 1, 1859.—The claim will explain the nature of this invention.

*Claim.*—The new or improved art of manufacturing steel of any desired temper, or hardened according to the various purposes or uses for which the steel may be required, by arresting the decarbonization of the mass of metal in the furnace at certain points or stages thereof, ascertained and recognized by means of certain phenomena, or external indications manifested by the material, substantially as described.

No. 23,140.—PHILEMON STEWART, of New Lebanon, N. Y., assignor to AUCHAMPAUGH BROTHERS, of said New Lebanon.—*Improved Cast-iron Fence Post.*—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—As a new article of manufacture, a cast-iron fence post, constructed with flanges h m, to protect the ends of the fence rails against being split, as well as against moisture, substantially in the manner described.

No. 23,141.—DAVID E. PAYNTER, of Philadelphia, Pa., assignor to Himself and ISRAEL M. BISSELL, of said Philadelphia.—*Improvement in the Manufacture of Precipitated Sulphur.*—Patent dated March 1, 1859.—This invention consists in boiling water mixed with the ashes resulting from the combustion of gypsum and coal-dust, until a yellow solution is obtained; in adding to the boiling solution a quantity of ordinary brimstone; and finally in precipitating the sulphur by an excess of muriatic acid.

*Claim.*—Manufacturing precipitated sulphur from the ashes resulting from the combustion of gypsum and coal-dust, in the manner described and for the purpose specified.

No. 23,142.—JAMES JENKINSON, of Williamsburgh, N. Y., assignor to Himself and EMANUEL MANDEL, of said Williamsburgh.—*Improvement in Tempering Steel Springs.*—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—Arranging the wires c c in such a manner that by tying one end of each of the same to one of the arms of the wheel A, on which the coil is formed, and by extending the ends so tied down to the hub of the wheel, the loose ends of the wire serve to fasten the several rings of the coil, substantially as described.

No. 23,143.—W. W. HOLLMAN, of Eddyville, Ky.—*Improved Measuring Faucet.*—Patent dated March 1, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I claim, first, in combination with a faucet piece having an induction and eduction pipe, a receiving and variable chamber, so constructed and arranged that by



partially rotating it within the said faucet-piece the liquid will be alternately received and discharged through a port or ports, substantially as described.

Second. Making the rod B polygonal, when used in combination with the variable measuring chamber and its piston, substantially as described and for the purpose set forth.

NO. 23,144.—ABRAHAM ANDREWS, of Bernville, Pa.—*Improved Water-Wheel*.—Patent dated March 8, 1859.—In the engravings A is a square block having a spiral chamber B curving upwards through which the water flows; the water entering at the opening C and passing up and over the wheel which is above the spiral chamber B. D is the wheel with buckets E curving downwards, so that the water strikes the concavity of the buckets and passes off between the buckets above.

*Claim*.—The curved concave buckets in combination with the spiral chamber beneath, substantially as described.

NO. 23,145.—J. B. ATWATER, of Berlin, Wis.—*Improvement in Car-Couplers*.—Patent dated March 8, 1859.—In the engravings C is a gate, secured to the body of the coupler A A, back of the front piece F. The projection *n* is secured to the bottom of the gate C. E is the pin attached at its upper end to the top of the gate by means of a hook *e*. *a* is a door which is loosely hinged on the bottom piece of the body of the coupler. This door is turned over at its top and is provided on its side with an inclined projection *o*. D is a lever, one end of which is secured to the pin E.

*Claim*.—The arrangement of the falling gate C, provided with projection *n*, loosely-hinged door *a*, turned over at its top, and provided with inclined projection *o*, adjustable piece *i*, pin E, lever D, and catch *m*, the several parts being combined and operated substantially in the manner and for the purpose specified.

NO. 23,146.—STEBEN T. BACON, of Boston, Mass.—*Improved Register for Sheets of Paper*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—Punching or cutting holes in sheets of paper, for the purpose of securing a more perfect and rapid register in printing and paper folding machines, substantially as described.

NO. 23,147.—THEODORE BAILEY, of Friendship, Va.—*Improvement in Dumping-Wagons*.—Patent dated March 8, 1859.—The body is hung at the centre of its length, and is arranged to slide over the hind axle until its axis passes the centre of gravity, at which point the body tilts and dumps its load. A spring catch H locks the body when the team is moving forward.

The inventor says: I *claim*, first, a wagon which dumps itself by the approximation of the wheels, as set forth.

Second. The combination of a spring catch H with the divided reach, substantially as and for the purposes set forth.

NO. 23,148.—DAVID BEARD, of Shippensburg, Pa.—*Improvement in Connecting Hubs and Axles of Vehicles*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the peculiar manner of effecting a combination of the hub A, short auxiliary axles B, and intermediate stationary axle, whereby internal auxiliary bearings for the short axle and an external main bearing for the hub are provided, substantially as and for the purposes set forth.

Second. Making the end of the main axle C convex, and the main bearing in the inner end of the hub concave, substantially as and for the purposes set forth.

NO. 23,149.—WILLIAM BEERS, of Milan, Ohio.—*Improved Yokes of Ships' Rudder-Posts*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I am aware that India rubber has been employed in various ways for producing tight joints and for protecting parts of machines liable to injury from friction or concussion; therefore, I do not claim the use of rubber as a new device.

But I *claim* the construction of a divided yoke A B for rudder-posts, in combination with the employment of a guard of India rubber C, or other elastic packing, between the yoke and the post, in order to prevent injury to the rudder-post, and also to facilitate the repair of damages produced by the common yoke, substantially as set forth.

NO. 23,150.—WILLIAM BEERS, of Milan, Ohio.—*Improved Ships' Steering Apparatus*.—Patent dated March 8, 1859.—This invention consists in a peculiar construction and arrangement of arms I upon the rudder-post K, and also an arrangement of rollers L, collars S, and guards P, for preventing friction and concussions.

The inventor says: I *claim*, first, the slotted arm or arms, constructed, arranged, and employed in the manner and for the purposes substantially as set forth.

Second. I claim the elastic friction collar or collars S and the elastic guard or guards P, in combination with the above-described steering machine, for preventing concussion and friction, substantially as described.



Third. I claim the friction rollers L in combination with the screw nut G, for preventing the nut from binding upon the screw, substantially as set forth.

No. 23,151.—HENRY WILLIAM BEINS, of New York, N. Y.—*Improvement in the Treatment of Vulcanized Rubber.*—Patent dated March 8, 1859.—The nature of this invention consists in covering the surface of the article to be reheated with a layer of unvulcanized India rubber composition, by which it is secured against the injurious action experienced in exposing the same surface more than once to the vulcanizing process.

*Claim.*—The process described of cementing vulcanized India rubber to and covering it with a new layer of unvulcanized India rubber composition, in the manner and for the purposes set forth.

No. 23,152.—I. B. BLAIR, of Philadelphia, Pa.—*Improved Attachment to Ruling Machines.*—Patent dated March 8, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The application of one or more magnets (electro-magnets) to any ruling machine for ruling paper, in such manner that the magnets shall, either directly or indirectly, be made to control the operations of the pens, through the agency of the paper in breaking, closing, or changing the circuit of electricity.

No. 23,153.—J. L. BOOTH, of New York, N. Y.—*Improvement in Grain Separators.*—Patent dated March 8, 1859.—Foreign substances are, in this invention, separated from the grain, and one kind of grain is separated from another by impelling it by suitable machinery, and with the proper velocity, against the air, so that the difference in the specific gravity of the parts to be separated, aided by their form and shape, will effect the desired end.

*Claim.*—As an improved article of manufacture, a grain separator, composed of a box A, belt B, plates *d*, hopper C, pulleys *b b*, and otherwise constructed, substantially as shown and described for the purpose specified.

No. 23,154.—DANIEL BOWMAN, of Tampico, Tennessee.—*Improvement in Fish-traps.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* making the dams incline towards each other and up stream, so as to shelve over and make a dark recess, to induce the fish to run towards the shute and trap when the water is clear as well as when it is muddy.

I also claim the cover of the shute E for the purpose of shading the water and making it dark, so that the fish will be induced to enter the shute and trap.

No. 23,155.—ISAIAH C. BURGET, of Davenport Centre, N. Y.—*Improvement in Horse Rakes.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, The arrangement of the treddles J J, hung to the frame, in combination with the rake-bar and yoke, for raising one end of the rake without disturbing the other, substantially as set forth.

Second. The combinations of the springs *g* with the arm E, and catch plate I, for holding the rake-bar in position, and at the same time to allow it to yield bodily to any obstruction there may be upon the ground, substantially as set forth.

No. 23,156.—HENRY CLIFTON, of Buffalo, N. Y.—*Improvement in Trunks.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—In combination with a trunk A, made up of a series of drawers D D, such as described, the hinged plates E E for holding and locking said drawers to the frame of the trunk through the intervention of the lid B and its lock, substantially as described and represented.

No. 23, 157.—JOHN H. COOPER, of Philadelphia, Pa.—*Improvement in Sewing Machines.*—Patent dated March 8, 1859.—This invention consists in operating the shuttle N of a sewing machine by attaching its holder *n* to an arm or carrier M, operated by a rotating crank K, and guided by a vibrating arm L, or its equivalent.

*Claim.*—The combination of the shuttle-holder *n*, arm L, crank K, and arm M, or its equivalent, when the said holder *n* is attached to, or forms a part of the arm L, when the latter is carried by the crank K, and when the whole of the parts are arranged for joint action, substantially as and for the purpose set forth.

No. 23,158.—ALLAN CUMMINGS, of New York, N. Y.—*Improvement in Ash Sifters.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The combination of the pyramidal or conical-formed distributor B interposed between the entrance and the sieve, the latter being of similar form inverted, these being arranged in relation to each other and to the diaphragm and receptacles, substantially as and for the purpose explained.



No. 23,159.—C. H. DAWSON, of Jacksonville, Ill.—*Improvement in Cultivators*.—Patent dated March 8, 1859.—A series of ploughs G I are attached to an adjustable frame, which is connected to an axle A, and so arranged that they may be placed higher or lower as desired, and the device is capable of being used as a gang or subsoil plough. In connection with the ploughs a roller O is placed, that crushes and rolls down weeds before them.

*Claim*.—The plough-beams D D<sup>1</sup> arranged as shown in connection with the roller O applied to the machine, substantially as and for the purpose set forth.

No. 23,160.—MICHAEL A. DEITZ, of Brooklyn, N. Y.—*Improvement in Lamps*.—Patent dated March 8, 1859; ante-dated September 8, 1858.—This invention consists in forming the lower part of the top into an air-chamber *d*, near the bottom of which a series of holes *z* are pierced for the admission of fresh air, and at the upper part of which a narrow aperture is left on each side of the wick-tube for the passage upward of the air from the air-chamber beneath, by means of which a continuous current is established, running up along the wick-tube.

*Claim*.—The arrangement of an air-chamber *d* in the top of a lamp having a flat wick, when said lamp is provided with a cone or deflector B for feeding air to the flame, and the air-chamber *d*, with a series of holes *z* for the admission of fresh air, and openings *f* for its passage upwards along the sides of the wick-tube, or their or either of their equivalents, in the manner and for the purposes substantially as set forth.

No. 23,161.—A. F. ENDRISS, of New York, N. Y.—*Improvement in Machines for Folding and Registering Paper*.—Patent dated March 8, 1859.—This invention consists in making the required bend into a sheet of paper by means of folding knives F F<sup>1</sup> F<sup>2</sup>, which are placed over a gap made in the top of horizontal tables, and in such relation to two rollers H H<sup>1</sup> H<sup>2</sup>, which revolve in opposite directions, under the table, that a sheet of paper on the table is depressed by the knives between the rollers, when it is caught and folded over by being drawn through between these rollers. An apparatus is also attached which registers the number of sheets folded.

The inventor says: I *claim* the arrangement of a series of folding knives F F<sup>1</sup> F<sup>2</sup> at right angles to one another in the same sliding-frame B, which is constructed and operated substantially as set forth.

I also claim arranging the sliding-frame B in such a manner that it operates a registering apparatus K by means of a lever *o*, substantially as and for the purpose specified.

No. 23,162.—JAMES L. FAGAN, of Anaqua, Texas.—*Improved Rotary Pump*.—Patent dated March 8, 1859.—The object of this invention is to obtain a submerged pump of simple construction, one to which the motive power may be readily applied, and that will be efficient in its operation, and not liable to get out of repair. A rotating cylinder A is employed, provided with a valve or piston H, and used in connection with a stationary stop or cut-off I, placed within the cylinder, the latter being attached to a tubular shaft B.

*Claim*.—The combination of the rotating hollow shaft B, provided with a valve *b*, the cylinder A attached to said shaft perforated at *a*, and having the adjustable or hinged valve or piston H secured within A, and the stationary stop or cut-off I attached to the bed-plate C and fitted within the cylinder A, the whole being arranged and applied for joint operation substantially as and for the purpose set forth.

No. 23,163.—JAMES P. GAGE, of New York, N. Y.—*Improvement in Balloons*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I am aware that the idea of producing an advance or lateral motion of balloons by pressure upon the air of flat surfaces, fans, or wings, has been before entertained. I do not, therefore, claim that as my discovery and invention.

But I *claim* operating upon the air by the instrumentality of the balloon itself, constructed in a diamond or lozenge-shaped figure C, or any other substantially similar figure presenting a flat surface to the air, arranged and adjusted with the car *d*, suspended from the lowest central point of the balloon by a rod *d*<sup>1</sup>, with link-joints or their equivalents, and operated by the fore-and-aft and side halyards *a b*, in the manner and for the purposes described.

I also claim the manner of arranging and adjusting a diamond-shaped flat frame or surface (or any similar shape) to a spherical balloon, with the car suspended underneath, as shown, operating in the manner and for the purposes described.

No. 23,164.—CHARLES C. GARRETT, of Spring Hill, Ala.—*Improvement in Cotton Seed Planters*.—Patent dated March 8, 1859.—In this invention a rotating toothed wheel J is employed in connection with stationary stripping brushes *j j*, the wheels and brushes being placed in the bottom of a seed box, which is provided with adjustable plates *k k*, the parts being arranged to operate, so that cotton seed may be planted in the same state that they are discharged from the gin, and the discharge of seed regulated as may be desired.

*Claim*.—In combination with the wheel J and brushes *j j*, the adjustable plates *k k* arranged substantially as and for the purpose specified.



No. 23,165.—SAMUEL GATY and AMOS HOWE, of St. Louis, Mo.—*Improved Method of Operating Puppet Valves of Steam Engines.*—Patent dated March 8, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We *claim*, first, the steam lifters J J<sup>1</sup>, exhaust lifters K K<sup>1</sup>, and puppet heads B B<sup>1</sup>, with their respective faces, as described, for the purpose of operating steam and exhaust valves and puppet valve steam engines.

Second. The lifter J, in combination with the jointed lifting piece T, puppet head B, and graduated cut-off ring or sector M, for the purpose of producing a variable expansion motion, self-regulating or otherwise, substantially as described.

Third. The relative adjustment of the cut-off ring M M<sup>1</sup>, for the purpose of admitting steam in equal quantities in each end of the steam cylinder, in the manner described.

No. 23,166.—W. Y. GILL, of Henderson, Ky.—*Improved Steam Gauge.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* constructing a steam gauge, in which a piston acts in opposition to a spring, in such a manner that the lower portion of the same acts as an alarm by means of openings *c*, and so that the indication may be marked on one or more sides of the upper portion E of the stem, substantially as specified.

Second. Constructing the portion *c* of the piston of a smaller diameter than the lower and upper portion E B, and arranging the spring F, on the portion C, above the lower packed portion B, and below the indicating portion E, substantially as and for the purposes set forth.

No. 23,167.—JONATHAN GRIFFIN, of Stanford, N. Y.—*Improvement in Burning Fluids.*—Patent dated March 8, 1859.—This invention is an improvement in the means of producing light and heat, and is composed of certain chemical ingredients, a description of which is too long for a place in this report.

*Claim.*—The burning fluids A C and D, formed in the manner and of the materials substantially and for the purposes set forth.

No. 23,168.—JOHN GRIFFIN, of Louisville, Ky.—*Improvement in Cotton Harvesters.*—Patent dated March 8, 1859.—The inventor connects a flexible tube *b*, with a cylinder C, provided with a perforated plate *a*, and connected with a steam boiler A, so that a vacuum may be produced within the cylinder, and the cotton picked from the bolls on the standing stalks by atmospheric pressure, the tubes being presented to the cotton by suitable attendants.

*Claim.*—The cylinder C, one or more, provided with a perforated plate *a*, flexible tube or tubes *d*, and made to communicate with the steam boiler A, by means of the tubes *f g D*, substantially as and for the purpose set forth.

No. 23,169.—A. J. HAMILTON, of Kewanee, Ill.—*Improved Method of Operating Farm Gates by Approaching Vehicles.*—Patent dated March 8, 1859.—This invention relates to the construction of automatic gates for farm or other fences, and consists in certain improvements in the mechanism for operating the gate automatically or by the passage of a vehicle.

The inventor says: I *claim*, first, in combination with the two road levers D D<sup>1</sup>, constructed as described, the rigid actuating rods K and *m*, crank levers *h*, latch rod *g*, swivel bar *b*, and latches *e* and *d*, substantially as described, for the purpose set forth.

Second. In combination with the road levers D D<sup>1</sup>, the elevations or hedges E and E<sup>1</sup>, as described, for the purpose set forth.

No. 23,170.—THEODORE HEERMANS, of Sumner, Tenn.—*Improvement in Cultivators.*—Patent dated March 8, 1859.—This invention consists in making the hindmost teeth A A much smaller or of less width than the front tooth B, and intermediate teeth C C, and arranging the same so that they stand out beyond the side edges of the front tooth, and in beyond the inner side edges of the intermediate teeth.

The inventor says: I *claim*, first, the screw tapped shoulder or flange *c*, and screw shank *b*, of the cultivator teeth A B C, in combination with the screw nut *d*, having a series of auxiliary screws *f*, in the manner and for the purpose described.

Second. In combination with the above the specified arrangement of large and small cultivator teeth A B C, for the purposes described.

No. 23,171.—JOHN HENDERSON, of Bluff Springs, Miss.—*Improvement in Cotton Scrapers.*—Patent dated March 8, 1859.—The inventor says: The double winged cotton scraper is drawn by one horse, and scrapes both sides of the row at the same time and by the same movement, thus doing with one horse and hand the work of two horses and two hands, and at the same time dispensing with the usual mode of burring off.

*Claim.*—The forked bar F, and brace bar C, in combination with the beam B, and wings A, of a double winged cotton scraper, when constructed and arranged in the manner set forth.



No. 23,172.—RICHARD M. HOE, of New York, N. Y.—*Machine for Printing Railroad and other Tickets.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the peculiar mechanism, or its equivalent, for moving the registering disks on their axis at the proper times, by which means the tickets are numbered consecutively, substantially as described.

Second. I claim giving such a movement to the registering disks as will cause said disks to approach, press against, and travel with the impression cylinder, thus giving an impression to the roll of paper, then recede to change the figures of the disks, and allow the inking roller  $c^{31}$  to perform, and then again to approach the impression cylinder, and so on as before, substantially as described.

Third. I claim the adjustment of any derangement of the registering disks caused by slip, jar of the machine, or other cause, by means of the plates  $c^{32}$  and  $c^{33}$ , or any other means, substantially the same.

Fourth. I claim inking in a different color the registering figures, by means of a separate inking apparatus, substantially as described.

Fifth. I claim the printing the numbers on the tickets, while the said tickets are continuously advancing in the manner substantially described.

Sixth. I claim the guide  $c^{39}$ , placed between the impression cylinder and the cutter Y, or its equivalent, for retaining the strip of continually advancing paper, in its proper direction, while its lower end is stopped by the action of the cutter when separating a ticket from the roll.

Seventh. I claim the combination of the parts by which the tickets are deposited (after being cut) in a vertical position, in contradistinction to flatwise, in the trough  $c^{43}$ , destined to receive them.

Eighth. I claim the combination of the slide  $c^{46}$ , the spring catches  $c^{44}$   $c^{44}$ , and the sliding block  $c^{45}$ , by which the accumulating tickets are kept in a vertical position.

No. 23,173.—FRANCIS L. KIDDER, of Williamsburg, N. Y.—*Improvement in Attaching Carriage Thills to Axles.*—Patent dated March 8, 1859.—In this invention pins or rods are fitted between projecting ears that are attached to clips which encompass the front axle, one near each end, having metal hooks D, or clasps encompassing the pins of the clips, and are secured on the clips by keys  $d$ , in connection with hinged pressure plates.

*Claim.*—The arrangement and combination of the pivoted spring plate E, thill C, spring  $f$ , hook D, and self-adjusting key  $d$ , as and for the purpose shown and described.

No. 23,174.—JOSEPH H. KITE, of Conrad's Store, Va.—*Improvement in Corn Harvesters.*—Patent dated March 8, 1859.—The nature of this invention consists of the combination in a corn harvester of the horizontally revolving cutters  $i i$ , on the lower end of the reel shaft G, the vertical bevel wheels K K, with peripheries which serve for the horizontal cutters to act against, and the apron V V, which revolves at intervals by means of a peculiar spring clutch.

*Claim.*—The combination and arrangement of the horizontally revolving cutters  $i i$ , vertically revolving bevel-wheels K K, having plain peripheries, endless apron V V V, axle G, hollow shaft H, and peculiar spring clutch arrangement N N, P S<sup>1</sup>,  $g r$ , substantially as and for the purposes set forth.

No. 23,175.—DANIEL H. KRAUSER, of Pottsville, Pa.—*Improved Machine for Turning Irregular Forms.*—Patent dated March 8, 1859.—The nature of this invention consists of so arranging and combining the parts of the machine as that the cutters are made to approach or recede from the axis of the article to be shaped, whilst it is caused to traverse over said cutters, and is turned upon its axis at the proper time, so as to present a new face to the action of the cutters.

The inventor says: I *claim*, first, the manner of causing the carriage L, which supports the work, to traverse over the cutters by means of the pulleys E F,  $e$ , and G, belts  $c$  and K, endless chain  $m$ , crank-arms I, and connecting-rods K, arranged and operating as before described, in combination with the means described for turning the work on its axis through the plates M, bent levers N, pawl  $s$ , and ratchet-wheel  $o$ , substantially as set forth.

I do not claim the reverse pattern wheel W, in itself, as new; but I claim, secondly, the arrangement of the pulley Q, belt  $v$ , spindle R, in frame S, with the reverse pattern-wheel W, arranged and operating as set forth and described.

No. 23,176.—EDWARD L. LAMB and SAMUEL WOOD, of Keokuk, Iowa.—*Improvement in Moulding Female Screws.*—Patent dated March 8, 1859.—The claim and engravings will explain the nature of the invention.

*Claim.*—The match-plate  $a a^1$ , having both the exterior and interior of the pattern formed on it, when the same is divided vertically on a centre line, adapted to a suitable flask, and resting guides, on which the two halves of the plate can be withdrawn laterally in opposite directions from the core, substantially as described, for the purpose of moulding female



screws, or other articles which do not admit of having the pattern removed vertically from the core.

No. 23,177.—THOMAS LAVENDER, of Philadelphia, Pa.—*Improved Metallic Lining for Water Coolers.*—Patent dated March 8, 1859.—The pure tin is first hardened, cast into ingots, and then rolled to the required thinness. The plate of tin alloy thus formed is fitted to the interior of the vessel to be lined, and there fastened by soldering it.

*Claim.*—The lining or casing of an ordinary metallic vessel, with tin prepared and applied in the manner and for the purpose substantially as described.

No. 23,178.—LUCIUS LEAVENWORTH, of Trumansburgh, N. Y.—*Improved Clothes Fastener.*—Patent dated March 8, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—A clothes fastener made of a single piece or block A, and having an open, angular, or curved groove B C therein to receive and hold the line and clothes upon it, by diverging or kinking said line, substantially as described, and thus simplifying and cheapening the clasp, by dispensing with the button heretofore used.

No. 23,179.—JOSEPH LEEDS, of Philadelphia, Pa.—*Improvement in Chimneys.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—In combination with an outer chimney or casing A, and an inner passage B, two or more ducts or passages between the two for heat, ventilation or draft, when said inner passages or flues are made by setting on top of each other iron sections with flanges 1 2 3 4 upon them, substantially as described.

No. 23,180.—NATHANIEL I. LILLY, of Selma, Ala.—*Improvement in Cotton Presses.*—Patent dated March 8, 1859.—As the follower F moves into a box B, the catch *d* will slip along the ratchet, and at any stoppage hold the follower. By a movement of the lever *l*, shaft C is turned, releasing the ratchet from the catch, and bringing the other ratchet within the action of said catch, which being held against it by the weight *w*, acts in the same manner as the rack is moved in the other direction, on a bale compressed in the other box.

*Claim.*—The combination of the boxes B B<sup>1</sup>, bar A, and followers F F<sup>1</sup>, with the shaft C, having the opposite ratchets thereon, and the swinging weighted catch *d*, hung in the bar A, together with the rack R, and pinion P; the whole operating as set forth.

No. 23,181.—JAMES LITTLE, of Evansville, Ind.—*Improved Machine for Cutting Staves from the Block.*—Patent dated March 8, 1859.—This invention consists in the employment of a revolving hollow cylinder E, provided with knives *h h*, and gauges K, and having a stationary bed-plate B and feeding device H H fitted within it.

*Claim.*—The hollow cylinder E, provided with the knives *h h* and gauge-strips K, in connection with the bed B and the feeding belts H H, or their equivalents, the parts being arranged to operate substantially as and for the purpose set forth.

No. 23,182.—DANIEL MARKHAM, A. S. MARKHAM, and DAVID ELDRED, of Monmouth, Ill.—*Improvement in Cultivators.*—Patent dated March 8, 1859.—The object of this invention is to obtain a cultivator with which corn and other *hoed* crops may be cultivated until they attain a considerable height, without being thrust down or at all injured by the cultivator, and the parts of the implement so arranged that it may be readily manipulated.

*Claim.*—The frame A, formed of two parts *a a*, connected by the traverse bars *b*, and provided with the sliding or adjustable frames C C, with the bars E and ploughs F attached, substantially as and for the purpose set forth.

No. 23,183.—DANIEL MARKHAM, A. S. MARKHAM, and DAVID ELDRED, of Monmouth, Ill.—*Improvement in Seeding Machines.*—Patent dated March 8, 1859.—The furrows which receive the seed are, by this invention, formed of an improved manner, so that all roots, weeds, the remains of previous crops, and such rubbish, are prevented from interfering with the proper forming of the furrows, and the ground, when planted, is left in a proper state for the early use of the cultivator or other implement used in subsequent cultivation.

*Claim.*—The adjustable standards H<sup>1</sup> M, knife L, share K, wings or mould-boards J J, with or without the tube I, arranged for joint operation, substantially as and for the purpose set forth.

No. 23,184.—H. L. McAVOY, of Baltimore, Md.—*Improved Refrigerator.*—Patent dated March 8, 1859.—This invention consists in the combination of a dumb-waiter with a refrigerator. The dumb-waiter shelves rise through the top of the refrigerator, and expose the articles on them to view. The elevation is effected by cords and pulleys.

*Claim.*—The combination of rising and falling shelf-frame with a non-conducting refrigerator casing, substantially as and for the purposes set forth.



No. 23,185.—JOSIAH V. MEIGS, of Nashville, Tenn.—*Improvement in Cooking Stoves.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The arrangement of the bottom plate G of the oven in the same plane as the top plate M of the fire-pot E, in connection with the arrangement of the flues F F leading from the side of the fire-pot directly beneath the bottom of the oven and around it, substantially as described and for the purpose set forth.

No. 23,186.—JEREMIAH MITCHELL, of Gosport, N. Y.—*Improved Churn.*—Patent dated March 8, 1859.—The nature of this invention consists in the employment of a revolving box *a* partially surrounded by a warm or cold water jacket *d*, into which the cream is introduced and butter made without the use of paddles or dashers.

*Claim.*—The revolving box or churn when constructed and operated substantially in the manner and for the purpose set forth.

No. 23,187.—WILLIAM F. MORGAN, of Rochester, N. Y.—*Improvement in Machines for Shearing Sheep.*—Patent dated March 8, 1859.—This invention consists in applying a spring *f* through certain mechanism to a cutting device *s* to act as a motor, the whole being arranged whereby a very simple and efficient implement is obtained for shearing sheep.

The inventor says: I *claim* the arrangement of the cutting device, scroll-spring *f*, and necessary gearing, substantially as described and for the purpose set forth.

I further claim the pressure lever *t*, substantially as and for the purpose described.

No. 23,188.—JAMES MONTGOMERY, of New York, N. Y.—*Improvement in Iron Pavement.*—Patent dated March 8, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, a metallic pavement, consisting of a series of ribs or laminae in planes, parallel, or nearly so, connected at alternate or varying levels by webs of metal, substantially as and for the purpose set forth.

Second. Constructing metallic paving plates with ribs or arches of greater vertical depth in their intervening portion than at or near their sustained edges.

Third. The described combination of a concave or other suitably formed rail E, with the projecting edge *a*<sup>1</sup>, and the paving plate A, and the underlying edges of the plates A and A<sup>1</sup>, for the purposes set forth.

Fourth. The described construction and application of the buttress-plate B, in connection with the plate A, and curb stones C, for the purpose explained.

Fifth. Connecting the edges of ribbed or arched paving plates by tongue and grooved joints, as shown in figs. 9 to 13, or in any mechanically equivalent form.

No. 23,189.—JAMES MONTGOMERY, of New York, N. Y.—*Improvement in Iron Pavement.*—Patent dated March 8, 1859.—A is a metallic plate, which is rolled or cast in the ribbed or corrugated form, the vertical ribs having imparted to them a series of horizontal sinuosities. The sides of said ribs may be either vertical or inclined.

*Claim.*—A street paving, presenting on its upper surface a series of ribs corrugated or winding in a horizontal plane, substantially as and for the purposes set forth.

No. 23,190.—JAMES WILLARD PATTERSON and LEVI HANFORD COLBORN, of Baltimore, Md.—*Improvement in Harvesters.*—Patent dated March 8, 1859.—The inner angles of the cutting knife *b* extend to the rear of the projections *o* upon the guards *i*, forming with the rear edge of said projections a cutting or shearing apparatus, which clears the machine from any obstructions arising from grass or straws insinuating themselves between the knife and the guards.

*Claim.*—The combination of the cutting knife *b*, the bar *e*, and projections *o*, upon the guards *i*, arranged substantially in the manner and for the purposes described.

No. 23,191.—RICHARD PETERSON, of Philadelphia, Pa.—*Improvement in Cooking Stoves.*—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim, broadly, introducing jets of air at the rear of the fire in cooking stoves, various devices for accomplishing this end having been heretofore used, but I *claim* the protecting plate H, with its perforations *m*, when arranged in respect to the oven, the fire-place A, and the flues D D of an elevated oven cooking stove, in the manner herein set forth, so that the products of combustion, after passing from the body of the fuel, and at the point where they impinge against and are dispersed by the said protecting plate, prior to passing some over and others under the oven B, may be met by and intermixed with jets of heated air for the purpose specified.

No. 23,192.—WILLIAM POWERS, of Youngstown, Ohio.—*Improvement in Bee-Hives.*—Patent dated March 8, 1859.—The object of this invention is to construct a bee-hive in such a man-



ner that it may be perfectly exposed and still an even temperature maintained within it, thereby avoiding the use of bee-houses or apiaries.

*Claim.*—The cap or cover C of double walls, the inner one perforated as shown at *e e*, and the space between filled with charcoal, in the manner and for the purpose specified.

No. 23,193.—ANDREW RALSTON, of West Middletown, Pa.—*Improvement in Cleaning Castings.*—Patent dated March 8, 1859.—The casting is placed on the leaf *h*, and by proper movement of lever *k*, in connection with the various movements of the leaves *f g* and *h*, the casting may be adjusted and brought in contact with the pickers or cleaner *c* on drum *b*, and by the reciprocating alternate or oscillating movement of the drum the sand and other matter are removed from the casting.

*Claim.*—The combination of flexible pickers, brooms, or brushes, having a reciprocating, alternate, or oscillating movement, with an elevating and depressing table, the whole being arranged, combined and operated as described and for the purpose set forth.

No. 23,194.—ANDREW RALSTON, of West Middletown, Pa.—*Improvement in Harvesters.*—Patent dated March 8, 1859.—The nature of this invention consists in attaching to harvesters an arrangement for raking, gathering, and binding grain in sheaves, and also an arrangement for depositing the sheaves in shocks.

The inventor says: I *claim*, first, the arrangement of the receiving apron *d*, sheaf-trough *e*, compressing hook *u*, and levers *h*, *i*, and *j*, when used in connection with the horizontal and inclined gathering aprons *w*<sup>1</sup>, as described and for the purpose set forth.

Second. The use of the shocking carriage *o*, furnished with a shock-chamber, having a movable bottom in two parts *p* and *q*, as described and for the purpose set forth.

No. 23,195.—JOHN L. ROWE, of New York, N. Y.—*Improved Pen Wiper and Paper Weight.*—Patent dated March 8, 1859.—To any of the ordinary paper weights a cup or receptacle *j*, in which a sponge K or suitable absorbent is placed, is attached, and a frame in which the arbor of an absorbent pressure-pad *i* is placed and fitted.

*Claim.*—The base or weight A, with cup *j* attached, provided with the sponge K, in connection with the pressure pad or sponge *i*, connected with the base by means of the frame B, and arranged as shown and described, or in an equivalent way, for the purpose set forth.

No. 23,196.—ARCHIBALD G. SHAVER, of Hartford, Conn.—*Improved Eraser and Pencil Sharpener.*—Patent dated March 8, 1859.—The blade A is made of steel, with a flat shank B fastened into the handle *c* in a proper manner between the blade and the shank; on each end are circular indents D D with keen edges to form the cutters to sharpen pencils; on the face of the shank *c* is an acute triangular groove E with teeth, this groove is to finish sharpening the pencil by rubbing it up to a fine needle point.

*Claim.*—The curved blade eraser with the circular edge pencil sharpener, and the groove for finishing the pencil point, in combination, in the manner and for the purposes, substantially as set forth and described.

No. 23,197.—GEORGE SMITH, of Brooklyn, N. Y.—*Improved Cradle Wagon.*—Patent dated March 8, 1859.—A child's wagon is by this invention made to serve the extra purpose of a cradle, merely taking off the wheels and draft-pole and turning out the four wings, which are jointed to the ends of the rockers that are attached to the bottom of the wagon, the wings forming a part of the rocker when turned out, and giving the cradle increased stability.

*Claim.*—A cradle and wagon combined, when the several parts are constructed and operated substantially in the manner described.

No. 23,198. HORACE W. SMITH, of Hartford, Conn.—*Improvement in Cocks for Water Basins.*—Patent dated March 8, 1859.—The nozzle A is attached to the spindle B, which passes down through the spindle guide C, through the stuffing box D, and is connected with the intermediate spindle E by means of the male and female lefthand screw F F, and the intermediate spindle E connects with the vertical valve H by means of the righthand male and female screw G G.

*Claim.*—The intermediate spindle E, in combination with the vertical valve H, in the manner and for the purpose substantially as set forth.

No. 23,199.—SIMON P. SNYDER and GEORGE W. COOK, of Minneapolis, Minn.—*Improved Propeller.*—Patent dated March 8, 1859.—The propeller shaft *o* inclines towards the bow *s* of the boat, and also inclines from the side of the boat, and has one bearing at *w* near the edge of the deck, and another bearing in the frame *r q r*, which extends from the deck upward. The paddles *b* are conically arranged around the shaft *o*, so that the lines of the paddles if prolonged would meet in a point in the mathematical axis of the shaft *o* some distance below the lower bearing *w* of said shaft.

*Claim.*—The arrangement and construction of a propeller, substantially as shown and described, also inclining the shaft of a propeller in relation to the boat in two directions as



set forth. Also, the combination of a screw thread on the propeller shaft, with a screw thread in the brace plates forming the hub of the propeller, and with keys for the purpose of adjusting and fastening the wheel on the shaft, the whole being arranged as set forth.

No. 23,200.—JAMES H. STIMPSON, of Baltimore, Md.—*Improved Ice Pitcher*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—A double or treble walled ice pitcher, having its inside wall or shell B composed of iron or other metal lined or coated internally with porcelain *a a*, as described, the same constituting a new article of manufacture.

No. 23,201.—URIAH T. STUART and CALVIN E. STEWART, of Fayette county, Tenn.—*Improvement in Cotton Presses*.—Patent dated March 8, 1859.—The rope *a*, windlass, rack bar, and pinion *b*, are attached to the shaft B, and the shaft is turned by levers. The pinion *b* works in a rack *c*, which is fastened to the driver, and the driver moves the plungers E back and forth. The press is a horizontal framework, and the boxes D<sup>1</sup> in which the cotton is packed stand on the edge, and the bale when finished stands on end.

*Claim*.—The combination of the rack and pinion with the rope and windlass for operating a press with two pressing boxes constructed substantially as described.

No. 23,202.—CHARLES B. TATHAM, of Brooklyn, N. Y.—*Improvement in Manufacture of Shot*.—Patent dated March 8, 1859.—This invention consists in connecting the set pan or perforated cullender *k* with the melting pot *a*, by means of a conductor *d*, governed by a valve *f*, so that the molten metal shall run directly into the set pan, the valve enabling the workman to control and regulate the flow thereof.

*Claim*.—The combination of the netting pot, the regulating valve, the conductor, and the set pan, substantially as described, for dropping shot, as set forth.

No. 23,203.—LEOPOLD THOMAS and JOSEPH THOMAS, of Brooklyn, N. Y.—*Improvement in Lamp Lighters*.—Patent dated March 8, 1859.—This invention consists in feeding a band, which winds on a roller D underneath the lamp, (and which is prepared so that it takes fire by friction), up through a channel, and in such a position before the wick of the lamp that a short piece of this fuse, striking out over the top of the channel, is lighted by means of a serrated sector K, which is moved by the same trigger I which serves to operate the feed wheel G, and that by so lighting this fuse light is imparted to the lamp.

The inventors say: We *claim* the arrangement of a trigger I, or its equivalent, in such a relation to a serrated sector K, and to a ratchet wheel G, that by the motion of the trigger a piece of fuse from a roller D is fed up and lighted, substantially in the manner and for the purpose specified.

And we also claim the arrangement of a continuous fuse in combination with the lamp, substantially as and for the purpose set forth.

No. 23,204.—JOHN VAN RISWICK, of Washington, D. C.—*Improvement in Brick Machines*.—Patent dated March 8, 1859.—This invention relates to an improvement in the double cam revolving brick machine, and consists in the arrangement of the hopper C, in such relation to the mould disk A, as to permit the employment of plungers D having direct vertical reciprocating movement immediately above the moulds thereof.

*Claim*.—The combination and arrangement of the curved or angular hopper C, with the mould disk A, and vertically reciprocating plungers D, whereby the upper plungers are caused to pass the hopper without lateral movement, in the manner and for the purposes specified.

No. 23,205.—HUGH WALLACE and WILLIAM MELLON, of North Sewickly, Pa.—*Improvement in Grain Cleaning Machines*.—Patent dated March 8, 1859.—D is the wind duct, which is divided into two distinct ducts D<sup>1</sup> D<sup>2</sup>, by a partition *a*; *b* a valve having its fulcrum at *b*<sup>1</sup> *b*<sup>2</sup> at the end of the partition *a*; *c* a rod attached to the valve. By means of this rod, which is provided with a number of holes, the angle piece *d* on the outside of the frame A and the pin *e*, the valve may be secured in any desired position or angle.

*Claim*.—The arrangement of the valve *b*, ducts D<sup>1</sup> and D<sup>2</sup>, and sieves *w* and *r*, substantially as described and for the purpose set forth.

No. 23,206.—GEORGE WATT, of Richmond, Va.—*Improvement in Seed Planters*.—Patent dated March 8, 1859.—The operation of this machine is as follows: The rollers R R<sup>1</sup> form the furrows by pressing upon the soil, the fertilizer and grain are deposited as in other seed planters, and the coverers I removing the earth from the sides of the angular furrows, complete the operation by covering the seed.

*Claim*.—The series of angular faced rollers, arranged relatively to their shaft E, as described, for opening the furrows, in combination with the seed tubes D D, and covers, substantially as specified.



No. 23,207.—CHARLES WELLS, of Monroeton, and WILLIAM DOUGLASS, of Bradford county, Pa.—*Improvement in Water Wheels*.—Patent dated March 8, 1859.—As each jet or head passes in through its respective passage or entrance between the scrolls H, it strikes the vertical bucket F, upon which it acts directly, and after spending its momentum upon said vertical bucket, the body of water descends into the lower bucket G, upon which a reaction is produced by the weight of the column of water which acts on the double inclination of said lower bucket in an increasing proportion, until it discharges itself at the bottom of the periphery of the wheel.

*Claim*.—The combination of the scrolls H, vertical buckets E, and lower buckets G, the whole constructed and arranged as described and for the purpose set forth.

No. 23,208.—LOREN J. WICKS, of Racine, Wis.—*Improved Churn*.—Patent dated March 8, 1859.—By turning the crank S motion is given to the shaft B and wheel E, thus communicating a rotary motion to the shaft G and its attachments, in a direction which will keep the mouths of the funnels *k k* constantly receding from the cream, as the funnels recede from the cream a vacuum is produced in the tubes *j j*, and the external air rushes in at the tops of the tubes and is conveyed through them to the bottom of the churn, where it escapes and rises through the cream to the top of the churn again.

*Claim*.—The arrangement in a square churn A, which is provided with a ventilating top, of the shaft G, inclined arms *j j j j*, cross pieces *i i*, and funnels *k k k k*, the same being combined and operated in the manner and for the purpose specified.

No. 23,209.—C. S. WHEELER, of Flowerfield, Mich.—*Improvement in Apparatus for Evaporating Fluids*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* combining the evaporating pan A, with the steam boilers *a a a*, in such a manner as to cause the upper sides of said boilers to form highly efficient heating surfaces within said evaporating pan, substantially as set forth.

I also claim conducting the steam from the boilers *a a a* to the engine, which may be combined therewith through the medium of a series of pipes *b b b*, C, *d d d*, and *e*, which are so located that their peripheries form portions of the heating surface of the evaporating pan, but this I only claim when the said evaporating pan is combined with a series of steam boilers, substantially as set forth.

I also claim combining the spaces between the double bottoms of the clarifying pans *h h h*, with the steam boilers *a a a*, when the said pans and boilers are arranged with each other and with the evaporating pan A, substantially as set forth.

I also claim the passing of the fluid to be reduced through a coil of pipe *l*, located within the chimney or flue space, before discharging the same into the clarifying pans; but this I only claim when the said clarifying pans are arranged with the evaporating pan A, and the series of steam boilers *a a a*, substantially as set forth.

No. 23,210.—WILLIAM WILBER, of New York, N. Y.—*Improvement in Burning Fluids*.—Patent dated March 8, 1859.—The claim will explain the nature of this invention.

*Claim*.—A fluid compound for burning in lamps, &c., made of coal tar, camphene, and alcohol, substantially in the proportions and manner set forth.

No. 23,211.—SOLOMON WILLIAMS, Jr., of Hume, N. Y.—*Improvement in Ploughs*.—Patent dated March 8, 1859.—The object of this invention is to render the draft of the plough as light as possible, by diminishing the friction attending the passage of the land side D and mould-board through the soil, and also by the same means regulating the plough, so that it will form furrows of greater or less depth, as may be required.

*Claim*.—The arrangement of the adjustable wheel G with the land side D of the plough, substantially as shown and described, for the purposes set forth.

No. 23,212.—CHAUNCEY D. WOODRUFF, of Toledo, Ohio.—*Improved Firemen's Protector*.—Patent dated March 8, 1859.—This invention is a fire proof house D<sup>1</sup> on wheels B B, provided in front with a hole *d* in a sliding plate *e*, through which the butt *g* can be placed and the water directed to any spot. This can be placed close to the fire, and the occupant will be protected from the heat and flames.

*Claim*.—The double walled sheet or plate metal house D<sup>1</sup>, and mounted on wheels B B, and provided with look-out holes *d* and an adjustable plate *e* to receive the nozzle or butt *g*, the house being placed on rollers *i* in the platform, and secured by buttons *j*, or their equivalents, the whole being arranged substantially as and for the purpose set forth.

No. 23,213.—E. O. BAXTER, of Forreston, Ill., assignor to Himself, E. H. RILEY, and W. T. SWEET, of said Forreston.—*Improvement in Seeding Machines*.—Patent dated March 8, 1859.—The object of this invention is to prevent, by a very simple means, the operation of the seed slides as the machine is backed. The invention also has for its object the arrangement of seed slide levers in such a manner that they may be placed under the com-



plete control of the driver, and any irregularity as regards the dropping of the seed which might ensue on account of the irregularities of the ground prevented.

The inventor says: I *claim*, first, the cam *n*, one or more, attached to wheel *c*, in combination with the jointed pendant *F*, attached to the lever *E*, substantially as and for the purpose set forth.

Second. The levers *E E*, connected together and arranged respectively with each other and the driver's seat *I*, substantially as and for the purpose specified.

No. 23,214.—W. H. BURNAP and JOHN A. BRADSHAW, of Lowell, Mass., assignor to W. H. BURNAP, aforesaid.—*Improvement in Electro-Magnetic Machines*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—Applying the oscillating balance wheel *D* with its shaft *j*, in line with, but detached from, a rock shaft *g*, or its equivalent, carrying an arm *f*, which derives a positive oscillating movement from the train of gearing, driving the magnetic-electro machine, and connecting the spring *k*, which is attached to said balance wheel, with the so arranged moving arm, substantially as and for the purpose specified.

No. 23,215.—ROBERT M. CAMPBELL, of East Cambridge, Mass., assignor to WILLIAM G. CROMBIE, of Boston, Mass.—*Improved Burglar's Alarm*.—Patent dated March 8, 1859.—The fastener *G* is applied to a bar or plate *H*, affixed to the rear side of the case *A*, or arranged thereon, the bar being made to extend through an opening *d* made through the fastener *G*, such fastener being secured in the plate *H* by a hinge pin *e*, which passes downward through the fastener and in rear of the part *H*, so as to enable the fastener not only to be slid or moved on the said part *H*, but of being either turned down parallel to the case *A*, or at right angles thereto.

*Claim*.—The application of the spring fastener *G* to the alarm or its case, so as to be capable of sliding and turning with reference to the same, substantially in the manner as specified.

No. 23,216.—Cancelled.

No. 23,217.—MOSES G. FARMER, of Salem, and WILLIAM F. CHANNING, of Boston, Mass.—*Improved Electro-Magnetic Fire-Alarm Apparatus*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventors say: We *claim* the independent keys *D E F*, with their pins *d e f*, in combination with the rack *A*, and a means of liberating the rack, for the purpose set forth.

Second. We also claim the arrangement of the segments on the circuit wheel, in combination with the springs, or their equivalents, for throwing the electric current successively on to different circuits.

Third. We claim the double circuit wheel, or its equivalent, for the purpose of completing and interrupting an electric circuit at both ends, essentially as set forth.

No. 23,218.—R. GLEASON, Jr., of Dorchester, Mass., assignor to R. GLEASON & SONS, of said Dorchester.—*Improvement in Table Casters*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim, separately, any of the parts shown and described, when separately considered, but I *claim*, as a new and useful article of manufacture, a caster, egg-stand, and table-bell, arranged and combined as shown and described.

No. 23,219.—THOMAS GRAY, of Philadelphia, Pa., assignor to Himself and JAMES M. SANKEY, of said Philadelphia.—*Improved Extension Table*.—Patent dated March 8, 1859.—This improvement consists in the manner of connecting together the two central cross bars *H H<sup>1</sup>*, which form a part of the extension device, and also in a screw *I*, blocks *G*, and bars *E F*, in combination with the two ends of the table, the whole being arranged for joint action.

The inventor says: I *claim*, first, the method of constructing and of connecting together the two cross bars *H* and *H<sup>1</sup>*—that is to say, constructing one bar *H* in two parts, and connecting the two parts together by the two plates *e* and *e<sup>1</sup>*, which admit the bar *H<sup>1</sup>*, and afford a means of joining it to the bar *H<sup>1</sup>*, as set forth.

Second. The combination of the screw *I*, block *G*, bars *E* and *F*, and cross bars *H* and *H<sup>1</sup>*, with the two ends of the table, the whole being arranged for joint action, substantially as and for the purpose set forth.

No. 23,220.—GEORGE W. MILES, of Michigan City, Ind., and PHILANDER P. LANE, of Cincinnati, Ohio.—*Improved Machine for Hewing out Hubs*.—Patent dated March 8, 1859.—A block is pressed down upon the rotary disk *J*, its most overhanging end downward. The carriage *E* is then advanced until the largest *practicable circle* of the block is tangential with the sweep of the axis, while the block, being slowly rotated by the crank *N*, is reduced to the form of a rough cylinder suitable for *chucking* in the lathe.



The inventors say: We *claim*, first, the described arrangement and combination of the axles C C<sup>1</sup>, stud shaft I, and rotating rest J, for hewing out cylindrical forms, in the manner set forth.

Second. In combination with the above, the ways D D, carriage E, feed arm F, pawls G, and rack H, arranged and operating together, substantially as and for the purposes explained.

No. 23,221.—JOHN NORTH, of Middletown, Conn., assignor to Himself and D. Appleton & Co., of New York, N. Y.—*Improved Register for Sheets of Paper*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* first, The attaching to the feed table B of the printing press of two or more register points in addition to those commonly used for printing, so as to make register point holes in the sheet to be printed at the exact points required for the purpose of feeding the sheet in register to the folding machine to be folded.

Second. I claim the application for that purpose of the described mechanism, or other suitable mechanism of the same general description, attached to the feed table, frame, and carriage D of printing press, and which will produce the intended effect.

No. 23,222.—SAMUEL McQUERNS, of the District of Abbeville, South Carolina, and WILLIAM LYON, administrator of BENJAMIN M. LYON, deceased, late of said district.—*Improved Bedstead*.—Patent dated March 8, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The use of the hinges in the middle of both the cross and longitudinal rails, in combination with the hinges between the rails and posts, substantially as and for the purposes specified.

No. 23,223.—GEORGE E. BALDWIN, of East Meriden, Conn.—*Improvement in Adjustable Wormers for Ramrods*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—A wormer G that can be run out of or into a ferule B on the end of a ramrod A, so that the ramrod can be practically shortened or lengthened at pleasure, as represented.

No. 23,224.—JOSEPH BARBER and P. C. REINFRIED, of Bridesburgh, Pa.—*Improvement in Breech-loading Fire-Arms*.—Patent dated March 15, 1859.—This invention relates to fire-arms which have a chambered breech hinged to the stock. It consists of a sliding bolt connected with a toggle *k k* below the stock, with an elastic spring trigger-guard E acting in combination with a beveled catch in the breech, to lock the latter in line with the barrel for discharging, and also to unlock it for loading. A spring is also arranged below the breech to raise it to the position for loading when it is unlocked.

*Claim*.—The arrangement and combination of the spring trigger-guard E, pin *g*, toggles *k k*, sliding bolt *j*, and catch, substantially as and for the purpose shown and described.

No. 23,225.—ZEBULON B. BELLOWS, of Cortlandville, N. Y.—*Improved Chair Bottoms*.—Patent dated March 15, 1859.

The inventor says: I take the boards and saw them to the required length for a single seat. I then boil or steam them, then put them into a mould, and apply the power of a press sufficient to form them in a concave form and of the desired shape.

*Claim*.—The application to chairs of a bent, stamped, or pressed board for a seat.

No. 23,226.—PAUL BOYNTON, of Canton, N. Y.—*Improvement in Magazine Fire-Arms*.—Patent dated March 15, 1859.—This invention consists in providing for the loading at the movable breech with loose powder from a magazine within the stock, and with balls from a magazine under the barrel, whereby the operations of loading and firing are executed with great rapidity. By the act of cocking the hammer, a contrivance combined with the breech furnishes the priming for every charge.

The inventor says: I *claim*, first, Combining the powder magazine in the stock with the barrel of a fire-arm by means of the faucet like chambered breech, applied and operating as described to measure its own charge.

Second. Combining the bullet loading slide H with the faucet like chambered breech by means of the ears on the slide and the horns *m n* attached to the breech, so that the slide may be operated in combination with the breech in the manner specified.

Third. The combination of the faucet like breech of the priming-box J and its perforated collar *q*, operated by a connection with the hammer, substantially as described.

No. 23,227.—GEORGE A. BROWN, of Newfane, N. Y.—*Improved Machine for Bending Wood for Felloes*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The arrangement of the platform E, screws *d* and *i*, and spring *c* with the mould-block, the several parts being constructed and operating substantially in the manner and for the purpose specified.



No. 23,228.—SAMUEL S. CAMPBELL, of Montreal, Canada.—*Improved Machine for Grinding and Polishing Saws.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, The specified arrangement of the longitudinal carriage-ways D on supports E G, so that they, with the carriage D<sup>1</sup> and all attachments, may be inclined laterally, and caused to stand obliquely to the horizon, or the circumference of the lap or grinding stone, for the purposes set forth.

Second. Arranging one of the supports of the machine on a pivot e, and the other on a truck H, which reciprocates on a circular railway, so that the carriage-ways and carriage, with all attachments thereof, may be adjusted in the path of a circle, so as to stand oblique to the shaft of the lap or grindstone, substantially as and for the purposes set forth.

Third. Providing the longitudinal reciprocating carriage with a stationary stop R, and a capping or holding-down plate L, which is adjustable up and down, but stationary longitudinally, substantially as and for the purposes set forth.

No. 23,229.—I. L. COLMAN, of Vincennes, Ind.—*Improved Apparatus for Regulating the Supply of Water to Steam Boilers.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim the float in boiler, or the cranks, levers, water-chest, valve, or detector.

But I *claim* the combined arrangement of these to effect the object desired, to regulate the water in a steam boiler at any desired point, from which it cannot materially change.

No. 23,230.—SAMUEL COLT, of Hartford, Conn.—*Improvement in Packing Cartridges.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not wish to limit my invention to the use of the string, though I have shown it, and found it to work well in practice, for a wire or other equivalent might be made to answer the purpose; neither do I confine myself to the exact arrangement shown of the string, or its equivalent, in the package.

But I *claim* the application of a string B, wire, or other equivalent, to a cartridge package or box, by which the package or box may be opened.

No. 23,231.—ALEXANDER DEAN, of Jerusalem, N. Y.—*Improvement in Grinding Apples.*—Patent dated March 15, 1859.—The nature of this invention consists in a new mode of crushing apples, corn, or other seeds, when it is not desirable to flour the same, such as crushing barley or other grains for malt, and corn and other grains for hogs and cattle.

The inventor says: I *claim*, first, the crushing lever H, and horizontal wheel I, constructed as described, and for the purpose set forth.

Second. I claim the eccentric wheel B, and carriage D, in combination with the cutter H and wheel I, when constructed and operated in the manner and for the purposes before described.

No. 23,232.—ABRAHAM DEHUFF, of York, Pa.—*Improvement for preventing Collisions on Railroads.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The spring carrier A, hung on two inclined staples B B, beneath the car or truck, to hug or embrace the wheels, cross-bar C, long-bar E, lever F, rod G, lever H, rod I, levers J J, and levers K, when arranged for joint operation with each other, substantially as and for the purpose described.

No. 23,233.—SAMUEL F. DEXTER, of Paris, N. Y.—*Improvement in Hanging Well Buckets.*—Patent dated March 15, 1859.—The nature of this invention relates to the manner or mode of attaching the buckets to the chain B, so that the water may be emptied out without being taken hold of by the person operating the crank, by which the chain is made to revolve.

The inventor says: I *claim*, first, the iron strap C, with the levers D, and notch E, to receive the spring stretcher E<sup>1</sup>, in combination with the chain B, Fig. 1, and the manner of detaching the same by coming in contact with the rod J.

Second. I claim the springs G G, Fig. 3, and G, Fig. 4, when operated as described, or in any equivalent manner.

Third. I claim hanging the buckets at or below the bottom, as described, in combination with the spring or springs or springs and levers, as above described, or in any equivalent manner.

No. 23,234.—RANDOLPH D. M. EDWARDS, of Franklin, Mich.—*Improvement in Machines for Folding Wool.*—Patent dated March 15, 1859.—A detailed description of this invention would take up too much space to be given here.

*Claim.*—The above described machine for folding wool, consisting of the table-rim D, the folding lids Q R S T, operated by catches, levers, and springs, riser H, and platform Z,



the whole arranged, constructed, and operating substantially as and for the purposes set forth.

No. 23,235.—STEPHEN ELLIOTT, of Washington, Ind.—*Improvement in Corn Planters.*—Patent dated March 15, 1859.—This invention consists in the manner of combining and arranging the wheel F, the plough or cover H, rod E, indicator G, block B, rod D, spiral spring C, and box A.

*Claim.*—The arrangement of the wheel F, and pins L and K, the spiral springs C C, the boxes A A, blocks B B, the rod E, indicator G, and levelling plough K, the whole being arranged, constructed, and operated as above described, and for the purpose set forth.

No. 23,236.—WILLIAM H. ELLIOT, of Plattsburgh, N. Y.—*Improved mode of obtaining Curved Printing Surfaces.*—Patent dated March 15, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim casting stereotypes by immersion, in moulds formed upon and adhering to metallic plates. Nor do I claim a compound flexible matrix for casting stereotypes, as that is the subject of an English patent granted to Brunel in 1820.

But I *claim*, first, the combination of screws *k* with the concave cylindrical form *a*, when these devices are used for bringing the compound flexible matrix, or impression sheet, to the required shape, or for holding it there while metal is deposited or cast upon it, for the purpose of constructing electrotypes, or stereotypes, as specified.

Second. The employment of bars *d*, in combination with the flexible sheet *c*, for holding the matrix in a cylindrical form, when said bars are so applied to the ends of said sheet that they shall prevent its being displaced or springing up from the concave face of the outer shell *a*, as set forth, whether said bars are attached to or rest against the edge of said sheet.

Third. The grooves *m m*, in the inner shell *b*, for casting upon the back of cylindrical type-plates, lugs or flanges, by which said plates may be fastened upon a cylinder, as and for the purpose set forth.

No. 23,237.—RALPH EMERSON, jr., of Rockford, Ill.—*Improvement in Sugar Mills.*—Patent dated March 15, 1859.—This invention consists in the combination of rollers C D E F G, between which the cane, as it passes through, (entering at *a* and issuing at *z*,) receives several successive pressures. The pan to receive the expressed juices is divided into two separate receptacles, L and N, the former located beneath the roller D, to receive the product of the lighter pressure, and the latter beneath the roller F, to receive the product of the heaviest pressure.

The inventor says: I *claim* the combination of parts in the machine in such manner as to subject the cane first to a lighter pressure, and afterwards to a heavier pressure, and to deliver the respective juices expressed by said lighter and heavier pressures into separate receptacles, for the purposes specified.

I also claim the combination of the gauge fillets with the pressure rolls, whereby any unskilled operator is enabled to adjust and work the machine, substantially as set forth.

No. 23,238.—RALPH EMERSON, jr., of Rockford, Ill.—*Improvement of the process for Extracting and Assorting Vegetable Juices by Pressure.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: As I have procured a separate patent for the said mill, I refer to that patent for a more full description of it. In this patent I do not mean to limit myself to any special means for the extraction and separation of the pith and rind juices.

But I *claim*, first, the process of expressing and collecting the juice of the pith separately from that of the rind, for the purpose set forth.

I also claim, as one of the methods, (and the best to me known,) whereby the process of extracting the juices separately may be beneficially carried into effect, the subjection of the cane to a light pressure, to express the juice of the pith previously to the employment of a heavier pressure to express the juice of the rind, whether the said pressures be successively performed in the same or in different machines.

No. 23,239.—HENRY EPSTEIN, of New York, N. Y.—*Improvement in Watch Chains, &c.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—Constructing a watch chain, which may be made stiff or inflexible at pleasure, by the turning of a part of the tubular casing, to which an interior chain is attached, substantially in the manner and for the purpose described.

No. 23,240.—BENAIAM FITTS, of Worcester, Mass.—*Improved Method of Operating Feed Rollers for Planing Machines.*—Patent dated March 15, 1859.—By revolving the cylinder B motion is given to pulley G and eccentric S, causing gear H to move round a point a short distance from the centre of gear D, this motion causes the gears to mesh in and move round



similar to other gears, there being one tooth less in gear H than in I it gives a motion of only one tooth, and as H is made fast I must move forward one tooth.

*Claim.*—The arrangement of the gears H and I, in combination with the eccentric S, when constructed and operating in the manner and for the purposes set forth

No. 23,241.—G. W. B. GEDNEY, of New York, N. Y.—*Improvement in Self-Priming Fire-Arms.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the pivoted chamber *c*, or magazine, within a recess in the hammer head *a*, substantially as set forth, and operated by a link *h*, pivoted to the lock plate *i*, or some other stationary part of the pistol or other arm.

I also claim cutting off the priming of the edge of the hammer face, as specified, and carrying the same into the proper position for exploding upon the nipple or cone, as described.

No. 23,242.—ELIAS B. GLEASON, of Boston, Mass.—*Improved Combined Letter and Envelope.*—Patent dated March 15, 1859.—The object of this invention is to combine a letter and its envelope in one sheet of paper, in order that the envelope may be permanently fixed to the letter, and retain the address and post office mark after it may have passed through the mail.

*Claim.*—The combination therewith (that is, the letter sheet) of the envelope B, composed of the superscription and post mark portion *d*, and the single flap *e*, or the same and the two flaps *c* and *f*, arranged together and with respect to the letter or billet portion A, as described.

No. 23,243.—WILLIAM H. GLASSGOW, of New York, N. Y.—*Improvement in Barrel Packer.*—Patent dated March 15, 1859.—This invention consists in giving the barrel while being filled a rotary motion, and subjecting it to a lateral and vertical jarring movement, either or both, simultaneously with the rotary movement, which shakes the contained powder into a compact state.

The inventor says: I *claim*, first, the rotary cam C, with barrel J, attached in connection with the vibrating hammer H, arranged to operate as described.

Second. The plate E, having a rotary and a vertical reciprocating movement for the purpose specified.

Third. The cam C, plate E, and hammer H, arranged for joint operation, substantially as and for the purpose set forth.

No. 23,244.—JACOB GUHMANN, of Rochester, N. Y.—*Improved Apparatus for Heating and Purifying the Feed Water of Steam Boilers.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The combination and arrangement of the bent siphon shaped tube D, constructed as described, having the induction and eduction openings at the highest parts thereof, with low receiving portion D<sup>1</sup>, whereby the water is made to pass a considerable space of vertical pipe the more effectually to deposit its impurities in D<sup>1</sup>, both while descending and ascending, together with the waste cock G and conjoint cocks I H, lever K, and connecting rods and cranks, as described, for simultaneously opening and closing the same, the whole constructed and operating substantially as and for the purposes set forth.

No. 23,245.—HORATIO GUILD and LUTHER HALL, of Boston, Mass.—*Improvement in Machines for Dressing the Heels of Boots and Shoes.*—Patent dated March 15, 1859.—The nature of this invention consists in the combination of adjustable heel jaws F G, and a pattern with a curved supporting rack E, and a self-adjusting knife or knife frame I. This machine is intended for holding or clamping a boot or shoe while on a last, and for giving proper shape or form to the edge of the heel with reference to the contour of the heel part of the upper leather of the said boot or shoe.

*Claim.*—Combination of the adjustable hub jaws and pattern thereof, with their curved supporting rack and the self-adjusting knife, or knife frame, applied together and to a bed or table, or the equivalent thereof, and made to operate substantially as specified.

No. 23,246.—ALBERT W. HALE, of New Britain, Conn.—*Improved Meat Mincer.*—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—A cutting or mincing machine, operating by means of a cylinder or cylinders, having tapering grooves extending from end to end, in combination with, and revolving in, fluted or ribbed cases A and B, and acting against a stationary knife or knives, placed in a plane, parallel with the axis of the cylinders, the whole arranged substantially as and for the purposes set forth.

No. 23,247.—ENOCH HIDDEN, of New York, N. Y.—*Improved Ship's Lights.*—Patent dated March 15, 1859.—The nature of this invention consists in the construction of ship's lights, whereby the frame *b* containing the glass may be removed at pleasure, and in constructing the fastening of a button *e* with an inclined face, having its bearing above the frame and pro-



vided with a swivel handle or lever *f*, capable of being brought into use when desired, and then susceptible of being removed out of the range of the light.

The inventor says: I *claim*, first, the swivel wrench of the button, and supporting the shaft or spindle thereof by the brace piece *o*, above the frame, substantially as and for the purpose set forth.

Second. The inclined surfaced button *e*, as described, with swivel wrench, in combination with the slotted lug of the main frame, as set forth.

Third. In combination with the aforesaid construction, the attachment of the light frame *b* to the main frame *a*, by means of the hook and pin, as described.

No. 23,248.—JOHN HOBRECKER, of Quincy, Ill.—*Improvement in Compositions for Roofing*.—Patent dated March 15, 1859.—The inventor says: I provide a suitable covered vessel of iron, in which I place, first, two parts of unslaked lime, then one part of pulverized cannel coal, one part of pulverized asphaltum, and one part of coal tar. The cover of the vessel is then bolted down, and a small quantity of water introduced through a hole which is left in the cover, the hole being then stopped with a plug.

*Claim*.—The process described of preparing plastic material of the composition stated without the aid of external heat, for the purposes set forth.

No. 23,249.—P. C. INGERSOLL, of Green Point, N. Y.—*Improvement in Hoop Locks for Securing the Ends of Metallic Bands*.—Patent dated March 15, 1859.—A metal loop *A* is employed in this invention, in connection with a metal key *B*, so formed within the loop as to securely lock the ends of the hoop in the loop when properly adjusted.

*Claim*.—The loop *A* and key *B*, fitted together and applied to the hoop, substantially as and for the purpose set forth.

No. 23,250.—H. C. INGRAHAM, of Guilford, and H. S. INGRAHAM, of Granger, Ohio.—*Improved Rotary Planing Machine*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventors say: We *claim* the arrangement of the cylinder *F*, with the two upper feed rollers and the matching burrs, in combination with the vertical sliding frame *I*, for the purpose of preserving the same thickness of timber between the face of the board and the tongue and groove, as set forth.

We further claim the sliding gripe *V*, in combination with the ways *W W*<sup>1</sup>, lever *X*, and ratchet *X*<sup>1</sup>, all arranged and operating in the manner and for the purpose set forth.

No. 23,251.—DOUGLAS B. JORDAN, of Woonsocket, R. I.—*Improvement in the Mode of Oiling Journals*.—Patent dated March 15, 1859.—The tube *F* is filled to the desired point with oil. The oil is forced or discharged through the hole *8* in the disk *G*, and from thence through the hole in the valve *H* into the main spout *6*, when it falls by its gravity through the branch spouts *I* into the holes *10* through the box *11* on to the shaft *C*.

*Claim*.—The combination and arrangement of the shafts *C* and *2*, the disk *G*, the sliding valve *H*, and the spout marked *6*, constructed and operating substantially as and for the purpose described.

No. 23,252.—JAMES KENISTON, of Cincinnati, Ohio.—*Improved Spark Extinguisher*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—A tank *B* arranged beneath the boilers of furnaces *A* in such manner as to receive the sparks and cinders therefrom and extinguish and discharge them, by means of a current of water passing through the tank, substantially as described and for the purposes set forth.

No. 23,253.—W. M. KIMBALL and K. HARTMANN, of Cleveland, Ohio.—*Improvement in Lanterns*.—Patent dated March 15, 1859.—In putting the parts *A* and *B* together, the hooks *L L*<sup>1</sup> with the lower section of the mounting *B* pass down inside of the bottom *A* until the hooks *L L*<sup>1</sup> are even with the ends of the segments *DE*. The part *B* is then rotated towards the right until the hook *L* passes behind the arm *H*, which is again pressed against the segment, and the hooks are thus prevented from moving backward, at the same time, the angles *F* preventing them from moving in the opposite direction.

*Claim*.—The segments *D* and *E*, the spring *G*, and arm *H*, or their mechanical equivalents, in combination with the hooks *L* and *L*<sup>1</sup>, arranged and operating in the manner and for the purpose specified.

No. 23,254.—WILLIAM S. KIRKHAM, of Branford, Conn.—*Improvement in Locks and Latches*.—Patent dated March 15, 1859.—This invention consists in so arranging the bolts of the latch or lock, and also the *nosing* or keeper, whereby the lock is capable of being applied in proper position to a right or left hand door, as may be desired.

*Claim*.—The combination of the nosing *D*, provided with the double inclined flanch *E*,



with the bolt or latch C, having its outer end rounded and levelled in a vertical plane, to operate in and for the purpose set forth.

No. 23,255.—JOHN C. KUHN, of Boonville, Ark.—*Improvement in Peach Cutting and Stoning Apparatus*.—Patent dated March 15, 1859.—For preserving and drying, the stones have to be extracted from the peaches, and this invention is designed to cut them in pieces and remove the stones at one operation. It consists of two curved knives E E, which cross each other and are attached to elastic bars D D used in connection with a tube B placed vertically within a box, and a pressing lever F.

The inventor says: I *claim* the knives E E, curved and crossing each other, as shown, and attached to the elastic bars D D, in combination with the lever F provided with the pin *i*.

I further claim the above parts when placed on the box A, provided with a tube B, and the several parts arranged relatively to each other, so that the stones H will be separated from the pulp or flesh, substantially as described.

No. 23,256.—SHIELDS LIGGETT, of Staunton, Va.—*Improvement in Railroad Gates*.—Patent dated March 15, 1859—A stud upon the car coming in contact with the upper edge of lever G forces the lever G G<sup>1</sup> with the bars I I<sup>1</sup> into the position shown in the drawings and by reason of connections force the gate open. The said stud pressing upon the bar I during the transit of the car holds the bars in position.

*Claim*.—The opposite sliding sectional gate, in combination with the levers F F<sup>1</sup>, rods g g<sup>1</sup> and h h<sup>1</sup> levers G G<sup>1</sup>, sliding bars I I<sup>1</sup> and springs i i<sup>1</sup>, arranged and operating as set forth.

No. 23,257.—WILLIAM LOYD, of Philadelphia, Pa.—*Improvement in Stereoscopes*.—Patent dated March 15, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* a stereoscopic instrument having eye glasses at opposite sides and double reflectors, in combination with a revolving picture holder, arranged substantially as described.

I also claim the grooves c e on opposite sides of the frames b for the purpose of holding two pictures in contact with each frame, as specified:

No. 23,258.—WILLIS E. MOORE, of Crawfordsville, Ind.—*Improvement in Loading Ordnance*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the combination with a cannon A, or other piece of ordnance, of a system of mechanism which will receive the charge, carry it opposite the bore of the cannon, force the same to the breech of the cannon, and then be capable of being moved out of line with the bore of the same, substantially as and for the purpose set forth.

Second. In combining with the above system of mechanism a needle, I, for pricking the cartridge after it has been forced up to the breech, said needle coming into action simultaneously with the retreat out of line with the bore of the cannon, of the mechanism employed for introducing the charge, and then retreated out of the way, ready for the application and explosion of the cap, substantially as and for the purposes set forth.

Third. The combination of a cap-charger and exploding hammer with the first and second systems of mechanism above claimed, whereby, simultaneously with the retreat of the needle, a cap is brought over the touch-hole and exploded, substantially as and for the purposes set forth.

Fourth. A cartridge-box, which has a yielding spring stop, in combination with the first system of mechanism above-mentioned, substantially as and for the purposes set forth.

No. 23,259.—WILLIS E. MOORE, of Crawfordsville, Ind.—*Improvement in Car Brakes*.—Patent dated March 15, 1859.—The nature of this invention will be understood by reference to the claim and engravings.

The inventor says: I *claim*, first, making the windlass chain shaft in two parts F K, and uniting said parts by a universal joint L, and arranging the main friction roller J on one section of the shaft F K, and the windlass drum on the other, substantially as and for the purposes set forth.

Second. The employment of an auxiliary friction roller O, in combination with main roller J, and locomotive driving wheel B, when said auxiliary roller O is arranged to rise between the main friction roller J and the locomotive wheel B, through the peculiar scale-beam or weighing arrangement G G<sup>1</sup>, N, i s k d e F, substantially as and for the purposes set forth.

Third. The employment of a pivoted pawl H, in combination with a ratchet drum G<sup>2</sup>, having two circles of reverse set teeth f f<sup>1</sup>, which incline on their deepest faces toward the centre of the drum, substantially as and for the purposes set forth.

No. 23,260.—GEORGE W. MORGAN, of Prattsburgh, N. Y.—*Improvement in the Mode of applying Springs as a Motive Power*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim the use of wheels and pinions, operated by springs, nor



two or more shafts, nor the duplication of wheels, nor the application of springs on both sides of the motor wheels, for all these are known devices.

But I do *claim* the arrangement of the springs B B, &c., wheels D D, &c., with lugs *a a a*, pinions E E, &c., concentrating the power on the pinions H H, on each side of the wheel I, and the pinions N N, and shafts R R, for winding up at the same time all the springs on either side of the wheel I, when the whole are constructed and operated, for joint action, as described.

No. 23,261.—DAVID S. NEAL, of Lynn, Mass.—*Improved Speaking Tubes for Ships*.—Patent dated March 15, 1859.—D D is a gutta percha or rubber tube; A A mouth-piece at each end, to be used when unscrewed near keg B, which is used as a float to carry the tube attached on shore; *c* a brass coupling to screw the tube together, and lengthening to any requisite distance.

*Claim*.—The arrangement of the speaking tube with a cask, or equivalent float, substantially as and for the purpose specified.

No. 23,262.—JOHN G. PERRY, of Kingston, R. I.—*Improved Meat Cutter*.—Patent dated March 15, 1859.—The meat or other substance to be cut is placed in hopper J, and the crank turned, when the studs D D, as fast as the projections F between the plates come in contact with the sides of the recesses E, will assume the spiral form and drive the meat around against the knives G, and, as it is cut, towards the other end of the case.

The inventor says: I *claim*, first, placing the knives on or across the shaft B, and holding them by their ends, to prevent them from turning, substantially as described.

Second. I claim the manner of constructing the shaft and stud-plates, substantially as and for the purpose set forth.

No. 23,263.—HENRY W. PUTNAM, of Cleveland, Ohio.—*Improvement in Bottle Stoppers for Fastenings*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The bottle stopper fastening formed of two pieces of wire, the same being united by means of the points B B, passing through the loops E E, constructed and having the wire A adapted to them, as herein described; thus forming a hinge, and securing the same to the neck of the bottle, by looping together the ends of the wire D; the several parts being constructed in the manner and operating as set forth.

No. 23,264.—E. L. ROBERTS, of Brooklyn, N. Y.—*Improved Fastening for Folding Doors*.—Patent dated March 15, 1859.—The object of this invention is to supersede the vertical slide bolts, as they have hitherto been applied to one pair of folding doors, by combining the bolts with a horizontal slide bolt, so arranged in relation to the lock on the other door of the pair, that both doors cannot be closed and locked without first moving the vertical bolts and locking the door to which they are applied, thereby answering the purpose of fastening and securing both doors.

*Claim*.—The combination of the sliding bolts D D and H, applied to folding doors, to operate substantially as and for the purpose set forth.

No. 23,265.—GEORGE W. ROBINSON, of Boston, Mass.—*Improved Steering Apparatus*.—Patent dated March 15, 1859.—As the wheel I is turned, it gives motion through the shaft G and pinion F to the wheel E, on the vertical shaft *e*; this shaft carries the pinion D, which is thus revolved and traverses the cogged face of the segment M, moving the tiller C toward one side or the other of the vessel as required.

*Claim*.—The segment M, having teeth on the interior vertical face of the curve, in combination with the gears D E and F, and shaft G, connected with the tiller and moving therewith, and arranged and operating in the manner substantially as set forth.

No. 23,266.—ARCHELAUS S. ROLLINS, of Albany, N. Y.—*Improvement in preparing Hop Liquor for Distillers and Brewers*.—Patent dated March 15, 1859.—This process consists in boiling or steeping hops within a closed vessel, and condensing the vapors evolved, so as to prevent such pressure from the interior as to cause the escape of volatile matters.

*Claim*.—The preparation of hop liquor, for the purposes of distilling and brewing by the process set forth.

No. 23,267.—P. H. ROOTS, of Connorsville, Ind.—*Improved Water Wheel*.—Patent dated March 15, 1859.—This invention consists in using, in connection with a horizontal wheel A provided with radial buckets, a rotating breast or abutment E, and a concave or apron D so arranged that the water is made to act in a very direct and efficient manner on the wheel.

*Claim*.—The wheel A, and rotating breast or abutment E, moving with different degrees of velocity, in combination with the apron or concave D, the whole being arranged to operate as and for the purpose set forth.



No. 23,268.—JAMES L. ROWLEY, of Angola, Ind.—*Improved Washing Machine*.—Patent dated March 15, 1859. The claim and engraving will explain the nature of this invention.

*Claim*.—Constructing the bottom of the box with three sides of an octagon, the two outer sides to have ribs of an octagonal shape, set at an angle of  $45^{\circ}$  with the sides of the box and bottom to be horizontal, with two rows of rubbing pins or knuckles set alternately with the valleys between the ribs D D, in combination with the vibrating rubber, having the rubbing surface octagonal, and the rubbing knuckles set so as to work alternately, with the spaces between the pins in the bottom of the box, and diagonally with the ribs on outer sides of the bottom B B, in the manner and for the purposes set forth.

No. 23,269.—JAMES E. RUSSELL, of Brooklyn, N. Y.—*Improvement in Cast-Iron Rails for Railways*.—Patent dated March 15, 1859.—These cast-iron rails are constructed with their necks corrugated vertically, by which form of the neck the necessary support for the head is not only obtained with less metal than would be requisite in a straight neck, but the liability of the rails to be fractured by their contraction in cooling is obviated in a great degree.

*Claim*.—As an improved article of manufacture, a cast-iron railroad rail, having its neck vertically corrugated, as shown and described.

No. 23,270.—JAMES SMART, of Mansfield, Ohio.—*Improvement in Apparatus for Evaporating Sugar Juices*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, in the construction of pans, the combination of the inclined bottom A, with the inclined zigzag partition C D, substantially as and for the purposes set forth.

Second. The combination of two pans B B<sup>1</sup>, and two flame chambers G G<sup>1</sup>, of the peculiar construction described, substantially as and for the purposes set forth.

Third. Supporting the pans at or near the centre of their length by pivots *a a*, and at their ends by spiral springs *b b*, substantially as and for the purposes set forth.

No. 23,271.—STEPHEN WILLIAM SMITH, of Brooklyn, N. Y.—*Improvement in Machines for Freezing Cream, &c.*—Patent dated March 15, 1859.—This invention consists in the employment and use of cylinders D E provided with refrigerating material, and working each other to dechrysalize the cream by its passage between the cylinders, and combining therewith scrapers H H to remove the cream from the cylinders and allow it to drop into the reservoir below.

The inventor says: I *claim*, first, the cylinders D E, in combination with the scrapers H H and reservoir K, constructed in the manner substantially as described and for the purpose specified.

Second. Combining with the cylinders a perforated distributing reservoir I, for the purpose of furnishing the material in the desired quantities to the cylinders, and operating in the manner substantially as set forth.

No. 23,272.—HEINRICH SOLTSMANN, of New York, N. Y.—*Improved Electro-Magnetic Medical Apparatus*.—Patent dated March 15, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I do not claim the vibrating armature, neither do I claim the glass cylinder, in itself, as a regulator of electrical currents, but I *claim* the arrangement of the vibrating spring armature and the connections therefrom, in combination with the key S, arranged and acting as specified, to throw the shock off the person, or repeat the same, as set forth.

I also claim the regulating cylinder *t*, constructed as specified, in combination with the medical electrical machine, fitted and acting in the manner and for the purposes set forth.

No. 23,273.—FREDERICK STAMM, of Lampeter, Pa.—*Improvement in Lever Jacks*.—Patent dated March 15, 1859.—On the inside of the rod C are angular shaped link seats G, in which the link F rests when the lever is to be used for raising carriages. The block E is placed under the axle of a carriage, and the lower end of the lever A rests upon the ground. By pressing the lever A towards the link-rod C the carriage is raised.

*Claim*.—The combination and arrangement of the lever and link-rod, hinged together, with the block and link seats, as described and for the purposes set forth.

No. 23,274.—GEORGE STARKWEATHER, of Hartford, Conn.—*Improved Rotary Stave Machine*.—Patent dated March 15, 1859.—Power being applied to the pulleys E and F, motion is given to the revolving cutting rims D C. The staves are introduced into the machine through the feed-boxes X, and thus passing through between the cutters G in the rims D C, and as soon as they pass through the cutting surface they are caught by the feed arrangement, and are thus fed through the machine.

The inventor says: I *claim* the horizontal revolving cutting rims D C, for dressing staves on the two opposite sides at the same time, arranged and operating substantially as described.



Second. The arrangement of one or more feed-boxes X upon the plate *u* over the cutters G with the feeder, produced from the worm *a*, for the purpose described.

No. 23,275.—DANIEL E. TEAL, of Norwich, N. Y.—*Improvement in Devices for Raising Water*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The arrangement of the means recited, the same consisting of the rope or chains, the hooks K, bail F of the cast-iron box A; adjustable flanges, collars on the windlass, and the windlass D, whereby the bucket can be lowered, filled with water, raised, and emptied by merely turning the windlass, as described.

No. 23,276.—GEORGE W. TOLHURST, of Liverpool, Ohio.—*Improved Washing Machine*.—Patent dated March 15, 1859.—C is a semi-circular rubber, which is formed by screwing slats to the outer periphery of two solid heads C<sup>1</sup> C<sup>1</sup>; near the centre of the rubber is secured a handle D, connected to the rubber by means of the cross-piece E; F is a small shaft which forms bearings for the rubber C; to each end of the rubber is secured a wedge G G; as the rubber is oscillated, the wedges G come in contact with the side-blocks H H, which cause the rubber to be moved sideways or endways at the same time it is oscillating.

*Claim*.—The shaft F, blocks H H, and wedges G G, or their equivalents, in combination with the oscillating rubber C, slatted bottom B, dirt chamber A<sup>1</sup>, and box A, the whole being arranged and operating in the manner and for the purpose as set forth.

No. 23,277.—WILLIAM THOMAS, of Benton county, Arkansas.—*Improvement in Sail Wagons*. Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not claim the application of sails and steering apparatus to vehicles for transportation by land; neither do I claim the splayed spokes and suspension rods used in the strengthening of the wheel; they are well known.

But I *claim*, first, The combination of the spars and cargo-box on the rocking shaft *a*, thus lowering the centre of gravity and increasing the stability of the fabric, not only in this way, but by also, and as another effect thereof, allowing the sails to yield to violent gusts of thwart wind, receiving their force gradually, and spilling it more and more as they decline.

Second. I claim the invention of the hollow wheel-hub, which I have called the barrel-hub, to be used for the purposes of freight, thereby relieving the axle, avoiding friction, and adding to the power of the vehicle to stand up safely against strong cross-winds, the various parts being arranged in the manner and for the purposes set forth and described.

No. 23,278.—WILLIAM R. THOMAS, of Catasauqua, Pa.—*Improvement in Locomotive Fire-Boxes*.—Patent dated March 15, 1859.—This invention consists in a certain construction of a hollow lining B for the fire-box of a locomotive or other boiler, and mode of combining the same with the water-spaces *a a* of the fire-box and body of the boiler, whereby provision is made for a free supply of water to the said lining, and for the exit of steam generated therein, and also for the removal of the lining for repairs, or its replacement by a new one when burnt out.

*Claim*.—The removable lining B fitting with the shell and under the permanent water-spaces *a a* of the fire-box, having inwardly projecting inclined sides, and combined with the water-spaces of the boiler by means of two rows of vertical tubes *c c* entering the crown sheet, and a pipe *e* connecting with the body of the boiler, substantially as described.

No. 23,279.—PHILIP UMHOLTZ, of Tremont, Pa.—*Improvement in Railroad Car Journal Boxes*.—Patent dated March 15, 1859.—The nature of this invention consists in the spring yoke bolt *c* and sliding clamp, for pressing the rubber disks closely around the journal, and operating in a mortise D.

*Claim*.—The spring yoke bolt *c*, in combination with the follower *b*, and packing *g*, operating in mortise D, of box A, in the manner described and for the purposes set forth.

No. 23,280.—JAMES S. UPTON, of Battle Creek, Mich.—*Improvement in Horse Power*.—Patent dated March 15, 1859.—The wheel G being revolved by the levers, gives motion (through the intervention of the pinions E E), to the spur wheels F F; these spur wheels gearing internally with the annular wheel O, causes that wheel to revolve, and one of its faces being toothed to match the beveled pinion P, revolves the horizontal coupling shaft S.

*Claim*.—The arrangement of driving wheel G, with the pinions E E E, and wheels F F F, in combination with the annular wheel O, with toothed gear on its internal edge and on one of its faces, for the purpose and in the manner substantially as set forth.

No. 23,281.—CHAPMAN WARNER, of New York, N. Y.—*Improvement in Clasps for the Ends of Bands of Iron*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The construction of a clasp of any material or dimensions substantially of the form



described, and illustrated by the accompanying drawings, with two wedged shaped projecting tongues *b b*, placed in the position, fitted with sleeves, and protected by sides, as mentioned.

No. 23,282.—NOAH H. WENTWORTH and MARTIN L. AMES, of Somersworth, N. H.—*Improvement in Railroad Car Couplings*.—Patent dated March 15, 1859.—This coupling is made up of a frame or case *a*, having a catch *b*, a lever *c*, a shaft *d*, to which is affixed the latch and the lever, a crank arm *e*, for operating the shaft *f*, and two cams *g g*<sup>1</sup>—*g* being under the latch, and *g*<sup>1</sup> under the lever—and a spring *h* for forcing the latch downwards and holding it in position when the parts are coupled.

*Claim*.—Combining with each latch, or catch, a lever, as described, and providing the latch and lever, when thus combined with the cams and their shafts and crank arms, for actuating them, as and for the purposes set forth.

No. 23,283.—WILLIAM K. WYCKOFF, of Ripon, Wis.—*Improved Bread Making Table*.—Patent dated March 15, 1859.—The flour chest A is designed to contain flour and meal, the moulding board or table top B, to mould or knead the dough upon. The tray C is designed for mixing the flour into dough, and has a cover to prevent the accumulation of dirt.

*Claim*.—The combination and arrangement of the flour chest A, the table or moulding board B, the mixing tray C, and the closet D, substantially as described and for the purpose specified.

No. 23,284.—C. F. E. BLAICH and PETER A. BISHOP, of Elyria, Ohio, assignors to PETER A. BISHOP, aforesaid.—*Improved Steering Wheel*.—Patent dated March 15, 1859.—D represents a sliding dog, secured in suitable brackets, and is forced between the projections *a* by means of a spiral spring *b*, thus securing the wheel A firmly in its position. The sliding dog is provided at the lower end with a foot piece which projects forward through the post by which the wheel is supported.

*Claim*.—The vertically sliding dog secured in suitable brackets, and provided with a foot piece, pawl, and joint, as described, in combination with the spiral spring and ratchet, the whole being constructed and operated as set forth.

No. 23,285.—EDWARD S. BOYNTON, of New York, N. Y., assignor to PETER R. ROACH, of Elizabeth City, N. J.—*Improvement in Sewing Machines*.—Patent dated March 15, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The use of the adjustable fulcra for controlling the feed of the needle, in combination with an annular or ring shaped shanked wire needle G, as attached directly to the crank shaft, without the intervention of a needle box, substantially as set forth.

No. 23,286.—ADDISON CROSBY, of Fredonia, N. Y., assignor to H. S. STEVENS, of said Fredonia.—*Improved Method of Hanging Reciprocating Saws*.—Patent dated March 15, 1859.—The ends of the saw in this invention are grasped each by two jaws B B, so connected and arranged within an adjustable swinging frame C, that a universal joint connection is obtained and the saw at all times subjected to an equal strain, and rendered capable of being set in line with its work.

*Claim*.—The two jaws or plates B B, applied to the saw A, connected together and suspended within the swinging or pivoted adjustable frame C, which is attached to the plates *g g*, the whole being arranged as and for the purpose set forth.

No. 23,287.—THOMAS E. HUNT, of Indianapolis, Ind., assignor to Himself and NATHAN T. HUNT, of said Indianapolis.—*Improvement in Sugar Mills*.—Patent dated March 15, 1859.—The roller frame B revolves upon the bolt G, which extends up through the top of the cone D, and is held by the nut H. In the top of the roller frame B is the groove or oil cup *s s*, in which the flange upon the washer M operates. Between the washers M and I, and surrounding the bolt G, is the gum spring J, which gives elasticity to the pressure or force effected by the bolt G and nut H upon the rollers C C C C. The flange K operates in the oil cup L.

The inventor says: I *claim*, first, the combination and arrangement of the frame B, rollers C C C C, and gearing E E E E, with the cone D, gearing F, bolt G, and spring J, when constructed and operated substantially as and for the purposes set forth.

Second. The trough N, with aperture O, when constructed as and for the purposes set forth.

No. 23,288.—S. B. BATCHELOR, of Lowville, N. Y.—*Improvement in Scythe Snaths*.—Patent dated March 22, 1859.—This invention consists in securing the scythe to a stationary plate B by means of two united hooks D D and a headed screw E, the plate being firmly secured to the but of the snath A, so that the scythe may be firmly fastened to the snath and set to any desired angle required by the operator.

*Claim*.—The arrangement of the hooks D D, screw E, ring C, and plate B, with slot F and sliding block G, the whole being constructed for joint operation in the manner set forth and described.



No. 23,289.—WILLIAM BRAY, of Folkstone, England.—*Improvement in the Wheels of Traction Engines.*—Patented in England December 31, 1856; patent dated March 22, 1859.—

The inventor says: I construct the wheels with teeth or blades K K, which enter the ground and obtain a firm hold. These teeth are made to slide or move in and out by an eccentric O, or other mechanical means, so that they clear themselves of the soil and are again ready to enter the ground.

*Claim.*—Constructing traction engines with driving wheels with blades or teeth which are capable of being protruded and withdrawn, substantially as described.

No. 23,290.—FRANCIS J. BRIDGES, of New York, N. Y.—*Improved Submarine Telegraph Cable.*—Patent dated March 22, 1859.—The conductor *n* is covered with a suitable electric *e*, (gutta percha,) and this is overlaid with a braided coat *a* of hemp, flax, cotton, or wire, after the manner of a whip or curtain cord.

*Claim.*—The braided or plaited coat, covering, or layer for conductors, cords, or cables for electric telegraphic purposes, as set forth.

No. 23,291.—GEORGE BRODIE, of Little Rock, Ark.—*Improvement in Metallic Bands for Baling.*—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* preparing the hoops or bands for tying before they are passed around the bale by bending one or both ends of the hoops or bands and placing in the inside of each band a suitably prepared metallic pin similar to those I have already described, around which pins the bent end of the hoops are securely pressed, for the purpose of keeping the pins in place, and also making the ends of the hoops wider or thicker as the shape of the connecting links used may require.

I also claim forming the connecting links like those shown.

I also claim bending one or both ends of the hoop or band, as shown in Figs. 11 and 12, around the outer ends of the connecting link, thereby strengthening the ends of the link and preventing it turning or getting out of place and the tie from untying.

I also claim making metallic hoops for bending bales with a tie on each side of the bale, for the uses and purposes expressed.

I also claim using strips of cloth, paper, or other suitable material, under the metallic hoops, as shown, for the purpose described, substantially as set forth.

No. 23,292.—BARNES CLAYTON, of Philadelphia, Pa.—*Improved Fastening for Shirt Studs, &c.*—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—A stud fastening, consisting of the stem *e* rigidly fixed to the piece *d* of the back part B, the vertically moving lever plate *f*, and the screw stem *h* fixed to the front or ornamental part A, the same being constructed and arranged to operate together as set forth, and for the purpose of fastening the stud in place, so that it cannot be pulled out or removed therefrom without first rotating the screw *h* as described.

No. 23,293.—ELIJAH H. DANFORTH, of Jamestown, N. Y.—*Improvement in Adjustable Dental Swages.*—Patent dated March 22, 1859.—The adjusting swage is constructed of two outer side plates A of wrought iron, steel, or other metal, supported apart by and fastened by two end bars B of the same metal by means of screws or rivets *a a*. The space between them is filled with a number of movable pieces of metal or hard wood C C. There is also enclosed between the plates and fastened to one of them by screws or rivets *b b* a stop describing the segment of a greater or lesser circle E and F F.

*Claim.*—Forming the labial and the lingual curve of dental plates for the inferior maxillary alveolar ridge by swaging it into form with the compound die and malleable plates in the curve of the plate, as set forth.

No. 23,294.—BRUTUS DE VILLEROI, of Philadelphia, Pa.—*Improved Instrument for ascertaining the Distance between itself and the Target without Chaining.*—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The addition by means of a screw of a tube containing the lens and divided throughout its whole length by a vertical partition or diaphragm. At the extremity of this tube next the eye piece is placed a ring containing a bisect lens D E G K, the two halves of which are equally inclined on opposite sides of the vertical plane perpendicular to the axis of the telescope.

No. 23,295.—HERMAN A. DOSTER, of Bethlehem, Pa.—*Improvement in Corn-Huskers.*—Patent dated March 22, 1859.—This invention consists in the use of a guard-board C attached to the machine, and arranged relatively with the rollers A<sup>1</sup>, so that the ears of corn may be fed to the machine with great facility and as rapidly as the machine can husk them.

*Claim.*—The arrangement and combination of the lever D with the adjustable roller A<sup>1</sup>, so



that when the roller  $A^1$  is adjusted, the distance between the cam  $i$  and the fulcrum of the lever  $D$  will be correspondingly changed, as and for the purpose shown and described.

No. 23,296.—JOHN L. FABER, sen., of South Hadley, Mass.—*Improvement in Weather Strips*.—Patent dated March 22, 1859.—As the door closes the end  $r$  of the bottom strip  $F$  comes in contact with the inner side of the door frame and is gradually forced downward towards and closely upon the sill  $A^1$ , while at the same time the rear top corner of the holder  $E$  comes in contact with the lower end of bar  $G$ . After the bars  $F$  and  $G$  have commenced moving, and before they have ceased, the beveled ends, bars  $D$  and  $I$ , come respectively against the corner of frame  $A$  and inclined edge of stop  $H$  and are forced into their desired positions.

The inventor says: I *claim*, first, the bar  $G$  in combination with the parallel vibrating links  $aa$ , when said bar is so arranged as to fall by its own weight and be forced against the door by the closing of the latter, as set forth.

Second. The combined arrangement of the several strips and their attachments to close up the frame sides of the door, as described.

No. 23,297.—JOHN FITCH, of Seneca Falls, N. Y.—*Improvement in Filters*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim the ordinary cask or tub filters, with a pot or reservoir filled with charcoal or other filtering material, the same having been known and used.

But I *claim* the combination of the cylinder  $B$ , constructed and partly filled, as described, with the outside case  $A$ , having the perforated plates and the filtering material disposed and arranged as described, by means of which the fluid to be filtered is made to pass through the filtering material for a greater distance, and a more perfect purification is effected. I also obtain, by the same combination, a convenient mode of cooling the fluid, and also of cleansing the filter, without deranging its parts, by means of reversing its action in the manner described, the whole constructed and operating in the manner and for the purposes mentioned.

No. 23,298.—R. B. FITTS, of Philadelphia, Pa.—*Improvement in Coffee Mills*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I am aware that a single crushing cylinder has been employed before, in combination with a horizontal grinding cylinder, fitted with an adjustable shell or concave, the said crushing cylinder rotating at a slower speed than the grinding cylinder, for the purpose of crushing or grinding coffee. Therefore I do not claim such a combination.

But I *claim* the cylinders  $B$  and  $B$ , in combination with the grooved cylinder  $C$ , and its adjustable concave  $D$ , the whole being constructed and arranged together beneath the hopper  $A$ , so as to operate in the manner and for the purpose set forth and described.

No. 23,299.—JACOB GEYSER, of Allegheny, Pa.—*Improvement in Fly-Wheels for Rolling Mill Machinery*.—Patent dated March 22, 1859.—The nature of this invention will be explained by reference to the claim and engraving.

The inventor says: I do not claim any particular shape, or form, or material for the construction of the rim of a fly-wheel, as great variations can be made in this respect.

But I *claim* constructing the rim of a fly-wheel hollow, with partitions, in such a manner that when the heavy materials are piled in, laid in concrete, it may be held stiff and steady, as described.

I claim using any heavy and hard material, along with suitable cement, to fill up such a rim, when constructed and operating as and for the purpose described.

No. 23,300.—EMANUEL HARMAN, of Washington, D. C.—*Improvement in Letter Envelopes*.—Patent dated March 22, 1859.—The surfaces  $a$   $a^1$  of the former, and bed plate, are ribbed and grooved,  $b$   $c$ , making a die and counter die. By this means the face of the envelope is embossed with lines parallel to its sides, during the operation of forming it.

*Claim*.—The method or process of preparing letter envelopes, ready ruled in the process of manufacture, substantially in the manner and for the purpose set forth.

No. 23,301.—JOHN HECKER and WILLIAM HÖTINE, of New York, N. Y.—*Improved Dough Rolling Machine*.—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

The inventors say: We *claim* the combination of an inclined endless apron  $l$ , for receiving and returning the dough, substantially as described, in combination with the cylinders  $a$   $b$   $c$ , for rolling the dough, substantially as described.

We also claim, in the above combination, the curving in of the apron around the upper roller  $j$ , or the equivalent thereof, substantially as described, for the purpose of returning the dough to the feed table  $h$ , substantially as described, in combination with the cylinders for rolling the dough, as described.

And we also claim the rotating screen  $r$ , as described, in combination with the arrange-



ment of cylinders for rolling and working the dough, substantially as and for the purpose described.

And, finally, we claim, in combination with the rotating screen, as described, the hopper  $z$ , and apparatus therein, for insuring a regular supply of flour, as set forth.

No. 23,302.—A. JAMINET, of St. Louis, Mo.—*Improvement in Filters*.—Patent dated March 22, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I *claim*, first, circulating the water to be filtered through tiers or courses of pipes, arranged within a drum, having a current of waste steam passing through it, and then passing said water into separators for further circulation, and for depriving it of mud and other foreign matters.

Second. Arranging the separators  $C^{12345}$  within the steam drum B.

Third. Making the apparatus self-cleansing, at intervals, by operating the valves at the bottom of the separators and filters, by levers, acted on by toothed disks, ratchet wheel, and pawl, or their equivalents, actuated by the automatic movement of the clear water trough in tipping or tilting, to discharge, essentially as set forth.

Fourth. Controlling the automatic discharging action of the clear water trough, by means of a flutterer, or float, arranged therein, and serving, by connection with an unlocking lever, a stop piece, and catch or hook, to hold the trough from prematurely tilting.

No. 23,303.—JAMES LANCELOTT, of Cranston, R. I.—*Improvement in making Ornamental Chains*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The method described of weaving a chain from sheet metal, by forming the base of each link into a geometrical figure, and by bending each arm, longitudinally, at the same angle as one of the outer angles of the base, so that a cross-bar on the extremity of the next preceding link shall, when bent down, bear against the angular side of two of the arms of the next succeeding link, and thereby enable the chain to withstand a strain nearly equal to the cohesive strength of the metal of which the links are formed.

No. 23,304.—THOMAS MACKENZIE and ALBERT TROCHSLER, of Boston, Mass.—*Improved Mode of Marking and Ornamenting Paper*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—As an improved article of manufacture, paper for writing, printing, and other purposes, having indelible marks or designs stamped thereon, by condensing the fibres thereof by pressure, as shown and described.

No. 23,305.—CHARLES MANS, of Danville, Pa.—*Improvement in Motive Power*.—Patent dated March 22, 1859.—In this machine the power is obtained by the descent of weights, and it consists in the subdivision of the weights W, in order to lessen the power necessary for their elevation.

*Claim*.—The arrangement of the drums D and  $c$ , wheels E and  $c$ , pinions P and  $c$ , fly-wheel R, and sectional weights W, when the whole are combined and operated as described.

No. 23,306.—JAMES H. MERRILL, of Baltimore, Md.—*Improvement in Breech Loading Cannons*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the breech piece C and frame B, so that the former may move back and forth, and have its bore raised up and lowered on the latter automatically, and fastened or locked, substantially as described.

I also claim, in combination with the screw D, for running the breech piece forward and backward, the mechanism for lowering and raising the rear of said breech piece, substantially as described.

No. 23,307.—EZRA MILLER, of Janesville, Wisconsin.—*Improved Post Office Hammer Stamp*. Patent dated March 22, 1859.—A is a cross-head, secured to a handle B. The upper end of the cross-head is provided with a socket C, to receive the types D. The type is secured by the thumb-screw  $a$ . E is a screw tenon at the lower end of the cross-head, to which is secured the marker F. The types and figures G G are secured to their place in the marker F by the thumb-screw  $b$ .

*Claim*.—A post office marking stamp, which has its handle running parallel, or nearly so, with its marking face or faces, substantially as and for the purposes set forth.

No. 23,308.—J. J. PARKER, of Marietta, Ohio.—*Improved Device for Equalizing the Tension of Watch Springs*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Making and constructing a barrelled cog-wheel, or drum, for time pieces, or for



other purposes, so as to equalize and regulate the power of a spring S, in the manner and form substantially as set forth.

No. 23,309.—S. E. PETTEE, of Philadelphia, Pa., assignor to the NORTH AMERICAN PAPER BAG AND ENVELOPE MANUFACTURING COMPANY, of said Philadelphia.—*Improved Envelope*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I am aware that an envelope has been made, with a narrow fold at the side; but in that case the fold is carried down the sides of the back and flap, as well as of the body of the envelope, and the fold of the back is pasted to that of the body, having a stiff projecting piece in the interior of the envelope, very inconvenient and objectionable, totally useless and unnecessary. Such a form I distinctly disclaim.

But I do *claim* the form of the envelope blank described and represented, whether cut from a continuous roll of paper, or from separate sheets.

No. 23,310.—JAMES POWELL, of Cincinnati, Ohio.—*Improvement in Faucets*.—Patent dated March 22, 1859.—The longitudinal motion necessary to open and close the valve is imparted to the valve-stem H, through the medium of two flanges J and J<sup>1</sup>, on its head I playing on each side with the cam F. K K are spurs or projections on the valve-stem H, which serve to confine it to a central position within the chamber A, and guide the valve to its seat in the act of closing.

*Claim*.—The described arrangement of the cam F, flanges J and J<sup>1</sup>, longitudinal slot *i*, and spurs K, combined and operating in the manner and for the purposes set forth.

No. 23,311.—TREAT T. PROSSER, of Fond-du-Lac, Wis.—*Improved Rotary Engine*.—Patent dated March 22, 1859.—The nature of this invention consists in constructing a spiral passage C from the centre of a wheel to the periphery or outside, in such a manner that a current or force, in passing from the centre to the circumference in said spiral passage, will communicate its force to the wheel, and cause it to revolve until it escapes.

*Claim*.—A wheel with a spiral passage, diminishing in size from the centre to the periphery, for the purpose substantially as described.

No. 23,312.—JOSEPH READ, of Philadelphia, Pa.—*Improvement in Heels for Boots and Shoes*.—Patent dated March 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A composition heel for boots and shoes, consisting of the composition A, moulded into the form of a heel, with the concavity *m*, in the upper side of the same, as described, and the leather lift, or bottom piece B or B<sup>1</sup>, in combination with the leather edge piece C, applied and secured thereto, substantially as set forth, the said heel being adapted for subsequent application to a boot or shoe, as described, and for the purposes specified.

No. 23,313.—HORACE P. RUSS, of San Francisco, Cal.—*Improved Amalgamator*.—Patent dated March 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Portable or movable cups or cones of copper, galvanized, or amalgamated with quicksilver inside, or manufactured of other materials, such as wood, cast-iron, &c., to be placed in holes in sluice-boxes or other apparatus used in mining the precious metals, substantially as and for the purposes specified.

No. 23,314.—L. B. SCHAFER, of Baltimore, Md.—*Improvement in Pumps*.—Patent dated March 22, 1859.—This improvement relates to that class of pumps which are used on board of ships in case of accidents, and consists in the arrangement and combination of levers C, which cause the piston B to travel a greater distance at every stroke of the hand-lever E, as in common pumps, without increasing the circumference of the same.

*Claim*.—The arrangement for operating together the pump barrel A, shear C, link D, hand-brake E, and piston-rod I, substantially as and for the purpose set forth.

No. 23,315.—JOHN F. SCHUFFENECKER, of Keokuk, Iowa.—*Improvement in Brick Machines*.—Patent dated March 22, 1859.—The quadrant C, turning on its axle *q*, rises at the proper time to allow the clay to pass into the moulds, when it is brought back again, and its inferior surface is pressed down upon the mortar sufficiently to fill the moulds. The apertures D D allow the superfluous mortar to pass out, and to be deposited in the empty moulds in the rear of those which are thus filled. The shutter B is held in place by a forked brace R, which is sustained in position by the coiled spring S<sup>1</sup>. This brace stands vertically upon this shutter, and no upward pressure will open the shutter while the brace remains in that position. When the shutter B is to be raised, a shoulder upon the scraper A strikes the end of the lever L, by which means the brace R is pressed backward so as to allow the shutter to open.

The inventor says: I *claim*, first, the safety openings D, in combination with the quadrant C, arranged and operating in the manner and for the purpose specified.



Second. I claim the shutter B, operated by the fork R, spring S<sup>1</sup>, and bar L, in the manner represented.

Third. I claim the manner of levelling the mortar in the moulds by means of the two scrapers A and A A, as shown in the specification.

NO. 23,316.—DAVID SHIVE, of Philadelphia, Pa.—*Improved Instrument for Enlarging Photographs*.—Patent dated March 22, 1859.—The illuminating lens F consists of a convex, or plane convex lens as large in its diameter as can be adapted to the size of the swivelling instrument, which is fixed across at the sun end thereof, so as to converge the direct rays of the sun upon the translucent picture placed in the box A, through the slot 2, from which the required photograph is to be produced upon the paper, which has been fixed upon the holder C.

*Claim*.—The arrangement of the illuminating lens F, in the usual open end of a photographic camera, supported, in connection with the adjustable paper holder C, upon a stand D, substantially as described, so as to operate in the manner and for the purposes specified.

NO. 23,317.—WILLIAM H. SMITH, of Philadelphia, Pa.—*Improvement in Casting and Annealing Articles made of Scoria*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not confine myself to the precise details described and represented, as various modifications can be made in the process and apparatus without affecting, substantially, the principle of my invention. Nor do I claim any of the processes and apparatus, separately, except as stated below.

I *claim*, first, the construction and use of the horizontally revolving casting wheel B, for facilitating the casting of slag and similar mineral products.

Second. The construction of an annealing chamber C, having various modes of retaining and regulating the heat therein, viz: by a series of dampers, by the construction of grooves and troughs in the walls, in connection with the flanges and dippers of the bed D, with or without the use of sand, by the devices at the ends of the wagons, and by the uses of the ante-chambers, substantially as described.

Third. The use and combination of a series of rollers R R<sup>1</sup> with a traversing bed, substantially as described, for imprinting an entire pattern of different colored figures.

Fourth. The construction and employment of segmental sliding moulds, as shown, or of similar character, and the mode of arranging and working the same, substantially as described.

NO. 23,318.—JAMES SPEAR, of Philadelphia, Pa.—*Improvement in Gas Burning Stoves*.—Patent dated March 22, 1859.—The nature of this invention consists in the burning of gas arising from coal in heating stoves, by introducing jets of heated air over the fire, which jets of air, mingling with the gas arising from the coal, aid the combustion of the same.

*Claim*.—The combination of the sled E, in the door frame F, with the ring M and the cylinder B and the body of the stove A, as constructed, in the manner and for the purpose set forth.

NO. 23,319.—CHARLES F. SPENCER, of Rochester, N. Y.—*Improved Carpet Fastener*.—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—A carpet fastener made of a single piece of plate metal, of triangular or three-pointed form, one point *b*, serving as the shank, to be driven into the floor; another point *d*, as the hook for receiving the carpet, and the third point *a*, as a head so shaped as to enable the fastener to be driven with facility into the floor, all substantially as specified.

NO. 23,320.—A. M. SPRAGUE, of Mobile, Ala.—*Improved Apparatus for Skimming the Surface of the Water in Steam Boilers*.—Patent dated March 22, 1859.—The operation is as follows: The sediment passing through the openings *i* into the skimmer B, is, by the pressure of the steam, forced into the discharge pipe F and out of its mouth *w*.

*Claim*.—The surface skimmer B, constructed, arranged, and operating substantially as described, and for the purpose of removing the sedimentary water from the upper water surface of steam boilers.

NO. 23,321.—CHARLES E. STEVENS, of New York, N. Y.—*Improvement in Car Couplers*.—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The combination of the yielding support within the mouth of the aperture of railway car boxes, with one or more blocks *i* inside, and the annular flange outside the said boxes, when said parts are arranged in relation to each other, substantially as described, to effect the coupling of the boxes, automatically, by the action of straight links and locking bolts, in the manner specified, and for the purposes set forth.

NO. 23,322.—EDWIN L. SWARTWOUT, of Utica, N. Y.—*Improved Mode of Fastening Sheets*



*of Paper Together.*—Patent dated March 22, 1859.—The nature of this invention consists in providing a metallic clasp A with teeth *b b*, and a perforated metal plate, the holes of which correspond with the teeth of the clasp to which they are secured.

*Claim.*—The new and improved article of manufacture, the metallic clasp A, in combination with the perforated metal plate B, for fastening together legal and other documents, constructed as described, in the manner and for the purpose substantially as specified.

No. 23,323.—CHARLES TAYLOR, of Little Falls, N. Y.—*Improvement in Cheese Presses.*—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, attaching one end of the press bar *l* to the bottom of the box K, and the other end to the crank pin on the wheel L, as set forth, whereby I am enabled to shorten the movements of the follower, and have an eccentrically operating press, completely arranged, as described.

Second. I claim the spring bed piece *q*, and the spring P P, acting upon the wheel L, on the extreme upward movement of the follower, and thus holding up the follower, as described.

No. 23,324.—NATHAN THOMPSON, of Bridgeport, Conn.—*Improved Paddle Wheel.*—Patent dated March 22, 1859.—This improvement in paddle wheels consists in making the floats D of the form of a triangular prism, by which many advantages are obtained over common flat floats.

*Claim.*—The arrangement and combination, in the manner shown and described, of the triangular floats D, with the arms C, to prevent the formation of the vacuum, the lifting of back water, &c., as set forth.

No. 23,325.—LOUIS TILLIERS, of West Morrisiana, N. Y.—*Improved Filter.*—Patent dated March 22, 1859.—The water to be clarified is introduced into the chamber G, passes through the strainer of wire cloth, the sponge, and the cast-iron strainer *a*, into the compartment H, passes through the layers of sand, pulverized charcoal, and sand L M N, and thence into the inner chamber, and is then drawn off by means of the faucet F.

*Claim.*—A hygienic purifier, constructed in the manner described, operated as described, and for the purpose set forth.

No. 23,326.—WILLIAM TUCKER, of Blackstone, Mass.—*Improved Method of Securing Bits in the Stock.*—Patent dated March 22, 1859.—By turning the screw *d* the button *g* will enter the notch *h*, and be drawn upward, so as to act against the upper part of the notch, and draw the bit or tool close up into the socket *c*, and there hold it until the screw is turned backward, so as to carry the button out of the notch.

*Claim.*—The application or arrangement of the screws *d e*, and the segmental button *g*, with respect to the bit, or boring tool socket, and to operate with or on the tool, substantially as specified.

No. 23,327.—WILLIAM P. VALENTINE, of Fond-du-Lac, Wis.—*Improved Shingle Machine.*—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not intend to limit myself to the special mechanical devices employed in my machine, as these may be somewhat varied, and yet accomplish the same result. I am aware that small chissels have been placed upon the convex side of a thick saw flange for the purpose of cutting away splinters, to prevent the latter from catching behind the spreader.

I am also aware that shingle machines have been fed by hand at a varying rate of feed.

I *claim*, first, varying the rate of feed, by the mechanical means set forth, so as to feed the lumber to the saw more rapidly during the first half of a cut, when the saw has the highest velocity, and slower during the latter half of a cut, in order to keep the saw constantly at a uniform velocity.

Second. I claim the use of the two carriages P and P<sup>1</sup>, operating in the particular manner described, for the purpose of cutting alternately on both sides of the saw, thus keeping the saw constantly at work, and preventing the loss of time, or power, whilst the lumber is returning with the carriage to be ready for the next cut.

Third. I do not claim the concavo-convex saw, or the planes upon its surface, as separate mechanical devices, but I claim the concave saw and the planes, in combination with the saw carriage, for giving rake to the saw, and for sawing and planing shingles at a single operation, substantially as described.

Fourth. I claim the arrangement of springs S S and S<sup>1</sup> S<sup>1</sup>, the head blocks R R and R<sup>1</sup> R<sup>1</sup>, and the spreaders C C and C<sup>1</sup> C<sup>1</sup>, for alternately holding and dropping the shingle block, substantially as set forth.



No. 23,328.—BENJAMIN C. VANDUZEN, of Cincinnati, Ohio.—*Improved Machine for Heading Bolts*.—Patent dated March 22, 1859.—In this invention a peculiar heading device and clamp are so arranged that the blank while being headed may be firmly clamped, the clamps or dies being rendered capable of adjustment so as to render a perfect contact with a requisite degree of pressure at all times, and the heading device so arranged that it may be adjusted to form heads of different thickness and a requisite length of the blank of which the head is made, and commensurate with the size of the required head, allowed to pass with the recess or chamber of the die where the head is formed.

*Claim*.—The arrangement and combination of the adjustable spring fork rod G, lever H, upper lever b, and heading die F, substantially as shown and described, for the purpose of regulating the movements of the lever H and die F, and controlling the size given to the head of the bolt.

No. 23,329.—HASKELL WALKER, of Hartford, Vt., assignor to Himself and BENJAMIN P. DRIGGS, of Fairlee, Vt.—*Improved Odometer*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The peculiar arrangement of the parts thereof, by which an actuating tooth upon the hub of one of the wheels of a carriage will cause each revolution of said wheel to unerringly impart a small portion of a revolution to the shaft K of the odometer, whilst the spring l, by its action against the faces of the angular portion of said shaft, will accurately govern and control the movements thereof, substantially as set forth.

No. 23,330.—WILLIAM A. WILSON, of Berlin Falls, N. H.—*Improved Construction of Saw Teeth*.—Patent dated March 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Combining the planing tooth B with the sawing tooth A, so that the cutting edge of the former shall be in the rear of, and at about right angles to, the back of the latter, having the throat C between, as set forth and shown.

No. 23,331.—WILLIAM WOOD, of Hartford, Conn.—*Improvement in Brick Machines*.—Patent dated March 22, 1859.—The nature of this invention consists in the application of slides A A and rotating arms B B, to throw forward the brick moulds M when filled.

*Claim*.—The arms B B, in combination with the slides A A, provided with the lever C and tappet c, for operating the moulds M, as described.

No. 23,332.—LEWIS E. CLOW, of Albany, N. Y., assignor to S. H. RANSOM & Co., of said Albany.—*Improvement in Pot Hole Covers for Cooking Stoves*.—Patent dated March 22, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A cover, or division plate e e, constructed of two perforated plates d d, and the unperforated rim, or ring A A, as set forth.

No. 23,333.—JOSEPH DAVENPORT, of Masillon, Ohio, assignor to Himself and C. M. RUSSELL, of said Masillon.—*Improvement in Iron Railroad Cars*.—Patent dated March 22, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The combination with the platform or bottom of a railroad car of a laterally and longitudinally supporting truss brace, when said brace consists of a four sided frame s s t t, a series of transverse ties B, and transverse diagonal braces C C, a central longitudinal skeleton, or diagonally braced girder A e d b b, and bearing plates or shoes D D g g, substantially as and for the purposes set forth.

No. 23,334.—W. P. GOOLMAN, of Dublin, Ind., assignor to Himself, SAMUEL B. MORRIS, and W. HOLLINGSWORTH, of said Dublin.—*Improvement in Mole Ploughs*.—Patent dated March 22, 1859.—The operation is as follows: The mole R is first introduced to a proper depth into the ground, and the nut n<sup>1</sup> elevated on its rod N, so as to allow the plough to rise sufficiently to pass over slight inequalities in the ground without elevating the mole. The beam P is then adjusted by means of the screw rod N to a horizontal position, or to accord with any inclination desired in the drain, and so maintained while the plough is drawn forward.

*Claim*.—The arrangement substantially as set forth, of devices for producing or preventing lateral curves in a drain by adjusting the presentation of the mole independently of the point of draft.

No. 23,335.—DARIUS WELLINGTON, of Boston, Mass., assignor to CHARLES A. WELLINGTON, of said Boston.—*Improved Water Closet*.—Patent dated March 22, 1859.—The object of this invention is to dispense with the mechanism hitherto employed below the basin, and substitute a simple and efficient device for allowing the excrement to escape freely, and also to retain the cleansing water at a suitable height in the basin, so that the soil pipe cannot become choked or any effluvia escape from it through the basin into the room in which the closet may be.



*Claim.*—The arrangement and combination of the hollow valve rod *F*, perforated at *d d*, cap *G*, basin *B*, pipe *H*, tube *H*<sup>1</sup>, and reservoir *I*, as and for the purpose shown and described.

No. 23,336.—T. F. ALLEN, of Dyersville, Iowa.—*Improvement in Railroad Car Trucks.*—Patent dated March 29, 1859.—The nature of this invention consists in a car truck sustaining the weight of the car body upon the centre in a manner to perfectly balance or keep it in equilibrium and free from contact with the side timbers of the truck frame, whatever may be the motion imparted to it, and yet provide but the one common central axis or bearing for it to turn upon.

*Claim.*—A car truck, sustaining the weight of the car body upon the centre, in a manner to balance or keep it in equilibrium and free from contact with the side timbers of the truck frame, whatever be the motion imparted to it, and yet provide but the one common axis or bearing for it to turn upon, substantially as described and for the purposes set forth.

No. 23,337.—LUTHER ATWOOD, of Brooklyn, N. Y.—*Improvement in Apparatus for Destructive Distillation.*—Patent dated March 29, 1859.—The nature of this invention consists in combining a vertical distilling tower, or chamber *A*, arranged so as to receive both the fuel and the substance operated on with a condenser *h*, and a means of controlling or regulating the draft by which the products of combustion of the fuel are circulated through the mass acted on, so that the process of decomposition can be carried on below a temperature that would effect combustion before the liquid and volatile products have been driven off by the heat.

*Claim.*—The combination of the vertical distilling tower *A*, and appurtenances, with the condenser *h*, and the adjustable draft passage *c*, or their substantial equivalents in combination, when arranged and combined substantially as described, so as to use the current of heated products of combustion in its upward or natural direction.

No. 23,338.—THOMAS D. AYLSWORTH, of Ilion, N. Y.—*Improvement in Hop Frames.*—Patent dated March 29, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* so hanging the main wire *B* upon the supports *F*, as that said supports will prevent the wire from slipping through them, should it accidentally become loose or broken, substantially as described.

And I also claim, in combination with the main wire, suspended as represented, the uniting thereto of the training wires *a* by spring hooks, substantially as described and shown.

No. 23,339.—GEORGE W. BAKER, of Neponset, Ill.—*Improved Farm Gate.*—Patent dated March 29, 1859.—The wheel of the vehicle coming in contact with the lever *C* depresses it, and by reason of the connections draws the slide piece *D* half its length. The rollers in the jaws of rods *f* following slots *m m*, the two sections of the gate separate and the vehicle passes through.

*Claim.*—The slide *D*, and levers *C C*, in combination with the rods *ff*, levers *ll*, rods *cc*, and bars *bb*, arranged for joint operation, in connection with the gate sections, substantially as set forth.

No. 23,340.—ABRAHAM BASSFORD, of New York, N. Y.—*Improved Cushion for Billiard Tables.*—Patent dated March 29, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—Constructing the cushion of a billiard table of a metal plate *B*, the edge of which is protected by a thin strip of India rubber, or other suitable substance, substantially as and for the purposes set forth.

No. 23,341.—ABRAHAM BASSFORD, of New York, N. Y.—*Improved Cushion Rail for Billiard Tables.*—Patent dated March 29, 1859.—This invention consists in supporting the rail by means of romb shaped studs *C*, which leave room enough in their centre for bolts *a* to pass through, while they are beveled down towards both ends, so that an open space is left between the bed and the rail nearly all the way around, it also consists in forming the pocket bows of the same pieces which form the rail, joining the same in the middle of the bows, and giving them a bevel underneath.

The inventor says: I *claim*, first, the arrangement of the cushion rail of a billiard table, in such a manner that a space is left between the bed and the rail, by securing the same to the bed by means of studs *C* and bolts *a*, substantially as and for the purpose specified.

Second. The arrangement of the pocket bows *D*, which are made of one piece with the rail, and secured together by a lap joint *f*, and which are beveled down at their lower edge, substantially as and for the purpose set forth.

No. 23,342.—ALEN BECKERS, of New York, N. Y.—*Improved Hinge for the Reflectors of Stereoscopes, &c.*—Patent dated March 29, 1859.—This invention consists in arranging two



ears *a a*, one on each side of the reflector, and made of thin elastic sheet metal, which ears are rigidly attached to the sides of the case, and each ear is provided with a hole through which a screw *b b* passes freely, which screws into the side of the reflector or other part which is to be adjusted.

*Claim.*—The arrangement of the ears *a a*, one on each side of the reflector of a stereoscopic case, or attached in a corresponding manner and for the same purpose to any like part of another similar instrument, in combination with the screw *c*, substantially as and for the purpose described.

No. 23,343.—HUBBARD BEEBE, of New Haven, Conn.—*Improved Mode of Preparing and Mounting Slates.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of a metallic band or rim and vulcanized India rubber frame or mounting, with or without a lining of cloth, to the school slate, whether of stone, slated paper, or wood, substantially in the manner and for the purposes specified and set forth.

I also claim as my invention, the application of the vulcanized India rubber or gutta percha frame or mounting, substantially in the manner described, without the metallic rim, to slates of stone or other material of sufficient strength and stiffness to warrant its disuse in any case; but I deem it preferable in all cases to combine the two where durability, as well as noiselessness, are deemed important.

No. 23,344.—EDWARD BEHR, of New York, N. Y.—*Improved Mode of Fastening Skates.*—Patent dated March 29, 1859.—This invention consists in fastening the skates by means of screws *a* and *b*, which are attached to a toe cap B, and to a heel strap C, in such a manner that the strain of the cap and of the strap can be adjusted by turning the screws, and that the foot can be cramped in the toe strap.

*Claim.*—The arrangement of the screws *b*, and the screws *i*, or their equivalent, in combination with the toe cap B, and with the heel strap C, substantially as and for the purpose described.

No. 23,345.—FREDERIC B. BETTS, of Brownhelm, Ohio.—*Improved Method of Opening and Closing Gates by the Weight of the Vehicle.*—Patent dated March 29, 1859.—The nature of this invention consists in constructing an apparatus for the purpose of opening and closing gates by the action of carriage or other wheels upon levers, which are so constructed and arranged that by their operation they shift the position of the lower hinge and thus alternately change the centre of gravity, and thereby cause the gate to swing either out or in as the case may be.

*Claim.*—The combination of the roller B, and its appurtenances, with the levers F F', and connecting rods D, and with the gate, for the purpose specified and substantially as set forth.

No. 23,346.—LYMAN W. BLANCHARD, of Whittingham, Vt.—*Improved Construction of Mallets.*—Patent dated March 29, 1859.—The inventor says: I construct the body of the mallet A of iron of about three and a fourth inches in length on the front side where the flanges go on, about three and a half inches in length on the back or opposite side, about two and three fourth inches in width and two and a half inches in thickness. I have the centre of this mallet concave on the middle of the three sides, and near the ends convex; the front side I have straight, with a spur I I on each side of the centre hole that receives the handle E at B.

*Claim.*—The mode of constructing mallets with wooden head blocks and iron flanges, and a tapering screw, arranged substantially in the manner and for the purpose set forth.

No. 23,347.—PARDON BOYDEN, of Sandy Creek, N. Y.—*Improvement in Carriage Tops.*—Patent dated March 29, 1859.—When the top B is raised, the jointed bars D D retain it in such a position, or prevent it from casually falling or descending. When the top is down it is back of the seat A, the bars D D being sufficiently long to permit such position.

*Claim.*—The arrangement and combination of the bows E, bars D D, bars H H, and seat rail *a*\*, substantially as and for the purpose shown and described.

No. 23,348.—JOEL CARRINGTON, of Avoca, N. Y.—*Improvement in Mole Ploughs.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination and arrangement of a replaceable pointed coulter, with a continuous plate or solid standard carrying the mole, and a brace in the rear, connecting the said mole to the beam, and also to the handles, in the manner substantially as described.

No. 23,349.—JOHN CHARLTON, of Newark, N. J.—*Improved Mode of Fastening Skates.*—Patent dated March 29, 1859.—This invention consists in arranging at the front part of the skate a cap D, which adjusts itself by means of slides to the size of different feet, and which is drawn up to the toes by means of the straps F F', which serve to fasten the skates to the feet.



*Claim.*—The arrangement of the self-adjusting toe cap D, which is attached to the stock of a skate, substantially as and for the purpose specified.

No. 23,350.—HUGH W. COLLENDER, of New York, N. Y.—*Improvement in Billiard Table Cushions.*—Patent dated March 29, 1859.—The claim explains the nature of this invention.

*Claim.*—Making cushions for billiard tables of what is known as the soft compound of vulcanizable India rubber, faced with what is known as the hard compound of vulcanizable India rubber, or allied gum, united in the green or plastic state, and together subjected to the heating process for vulcanization, substantially as described.

No. 23,351.—JAMES M. CONNEL, of Newark, Ohio.—*Improved Submarine Telegraph Cable.*—Patent dated March 29, 1859.—In the drawing, *a* is the central core of gutta-percha or other flexible material. Around this core the conducting wire *b* is wound spirally. Upon this is placed a covering *c* of oiled silk or other suitable material which will prevent the wire *b* from becoming imbedded in the insulating covering *d* with which it is wrapped.

*Claim.*—The introduction of the smooth surfaced wrapping between the coil and the insulating covering, and the employment of this last covering as a core for other wires, substantially as described.

No. 23,352.—SAMUEL COPE, of Enterprise, Ohio.—*Improvement in Cheese Presses.*—Patent dated March 29, 1859.—The water placed in the reservoir F is conveyed down through the tube T and enters the bottom of the bellows B. A stop-cock S is placed in the connecting pipe P, by which the water is kept back until it is requisite to let on the pressure.

The inventor says: I do not claim a hydrostatic press, as that has been used for many purposes.

But I *claim* graduating the force of a hydrostatic cheese press by drawing the water slowly through the stop-cock S, as described, for the purpose set forth.

No. 23,353.—JOSEPH CORDUAN, of Brooklyn, N. Y.—*Improved Apparatus for Sounding House Bells, &c.*—Patent dated March 29, 1859.—The inner tube in which the escape bolt G and spring attached is held, is drawn back by means of the curved spring K pressing down the escape end of the bolt to lock on the edge of tube I until it comes in contact with the stud L in bottom of the cylinder, thereby extending both the inner and outer springs sufficiently to perform the individual action required of each.

*Claim.*—The arrangement of the three separate springs, in combination with the two tubes and escapement bolt, as described.

No. 23,354.—WALDO P. CRAIG, of Newport, Ky.—*Improvement in Pile Drivers.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the described application and arrangement of the guides K and K<sup>1</sup>, attached to their upper ends by universal joints, to the frame, and at their lower ends sliding in apertures *l* and *l*<sup>1</sup> in a collar L adapted to fit over the end of a pile and follow the same in its descent.

Second. In combination with the above the turn-table J, constructed and operating substantially as and for the purpose set forth.

No. 23,355.—WILLIAM H. CRITTENDEN, of Grafton, Ohio.—*Improved Sawing Machine.*—Patent dated March 29, 1859.—This invention will be explained by reference to the claim and engraving.

*Claim.*—The manner of arranging the compensating levers K K and rods N N in combination with the straining levers H H, straining rod I, adjustable slotted holder P, saw J, the whole being arranged and operating in the manner and for the purpose as set forth.

No. 23,356.—A. H. CROZIER and CYRUS CARRIER, of Oswego, N. Y.—*Improved Chopping Block for Stave Machines.*—Patent dated March 29, 1859.—The operation of the machine is as follows: Motion being given by means of the hand, the bolt of timber to be cut is placed on the bed plate O, and when the knife is at the highest point the lower edge of the bolt is placed against the gauge M. The knife then descends and cuts off a stave, which is forced up and held between the knife stock K and springs N. As each successive stave is cut it forces out the preceding one, which falls into any proper receptacle.

*Claim.*—The grooved metallic chopping block, constructed and operating as described.

No. 23,357.—F. M. DAVIS, of Footville, Wis.—*Improvement in Seeding Machines.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I am aware that reciprocating seed slides J have been previously used, and also that slides *k* with oblique slots *l* have been used for operating seed slides, I therefore do not claim the reciprocating seed slides, nor the slides *k*.

But I *claim* the arrangement and combination of the caster wheel C, lever D, spring rack bar E, pinion bar F, pinion G, rod H, slide *k*, and share L, as shown and described, so that



when the bar F is thrown back and lever D is depressed, the bar F will carry the pinion out of gear with the wheel M, and thus render the seed slides *k* inoperative, while the front part of the machine will be lifted on the caster wheel and the share L raised out of the ground, all as set forth.

No. 23,358.—JAMES E. EMERSON, of Sacramento, Cal.—*Improved Pick Handle*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The iron heading of a handle fitted to the under side of the pick or other instrument, by means of a pin and hole on corresponding plane surfaces, or a swelling and hollow, corresponding to each other, and securely fastened thereto by means of a stirrup extending over the pick or other instrument, and secured to the handle by means of a key and wedge, which will, by such combination, form a durable and permanent mode of fastening handles on picks or other instruments, without eyes therein.

No. 23,359.—ELISHA E. EVERITT, of Philadelphia, Pa.—*Improved Bedstead Fastening*.—Patent dated March 29, 1859.—The nature of this invention consists in a peculiar manner of constructing the inclination of the dovetail, or coupling part of the fastening for bedsteads, and in making both the rail and post parts of the said fastening, in the *plug* form A and A<sup>1</sup>, with fins *e* attached thereto.

*Claim*.—A plug fastening, consisting of the two plug pieces A and A<sup>1</sup>, constructed as set forth and described, the same being applied and arranged in combination with the post and rail of a bedstead, in the manner and for the purposes specified.

No. 23,360.—THOMAS T. FURGUSSON, of New York, N. Y.—*Improvement in Tanning Hides and Skins*.—Patent dated March 29, 1859; patented in France August 10, 1858.—This invention consists in impregnating hides and skins with a suitable liquid, by a filtration of the liquid through the same, while subjected to a sustained and regulated hydraulic pressure in a vacuum chamber previously exhausted. The apparatus consists of a vacuum chamber A, to receive the articles to be acted upon, a receptacle or vat H for the liquid, and of pumps P, by which the vacuum chamber is exhausted of air and charged with the liquid.

*Claim*.—The method described of impregnating hides or skins with the required liquid, by subjecting them to the action of a current of the liquid, under a sustained and regulated pressure, after they have been deprived of air by a preliminary exhaustion.

No. 23,361.—ALPHEUS C. GALLAHUE, of Northeast Centre, N. Y.—*Improvement in Machines for Pegging Boots and Shoes*.—Patent dated March 29, 1859.—The object of this invention is to obtain a machine that will perform the whole of the work that relates to the pegging of boots and shoes, to wit: The making of the holes in the soles to receive the pegs and the driving of the pegs in the holes; and also the splitting of the pegs from the strip or block, as well as the duplicating of the rows of pegs entirely around the sole, or at certain points of the sole, each at right angles to the surface of the sole where driven.

The inventor says: I do not claim a rack block E, arranged so as to feed the shoe with a continuous motion underneath the awl and peg driver, for such device has been previously used.

But I *claim*, first, forming the rack bar E, of two parts *e f*, arranged as shown, so as to admit of being lengthened and shortened, to compensate for different length of shoes.

Second. The adjustable or swinging plate G, in connection with the inclined planes *i i*, or an equivalent device, for actuating the plate G, for the purpose set forth.

Third. The inclined peg gauge *y*<sup>1</sup>, in connection with the peg or feed box S, so as to gauge the pegs from their lower ends, as described.

Fourth. The vibrating socket *e*<sup>1</sup>, in connection with the plunger rods *u v*, arranged in the same slide bar *t*, to operate as set forth.

Fifth. The bar R, provided with the shoulder or bearing *s*<sup>1</sup>, and rendered capable of being operated, when necessary, by the adjustable yoke *o*<sup>1</sup> and cam *p*<sup>1</sup>, for the purpose of duplicating the row of pegs when required.

Sixth. The combination of the swinging bed plate D, with a rack E, arranged to operate substantially as and for the purpose set forth.

No. 23,362.—JAMES GILLESPIE, of Freeport, Pa.—*Improvements in Revolving Retorts for Distilling Coal Oil*.—Patent dated March 29, 1859.—This invention consists in keeping the mouth of the eduction pipe of a revolving coal oil retort stationary in the upper part of the retort, and thereby preventing, as far as practicable, the entrance therinto of solid matters.

*Claim*.—Securing the hopper-like cup I in position, by means of the pins *o o*, or their equivalents, surrounding the exit journal *h* of each retort, the square headed shaft J, passing through a hollow journal at the opposite end of the retort, and the external plate *p*, the whole applied and operating substantially as described.

No. 23,363.—FRANCIS GILLILAND, of Port Jackson, N. Y.—*Improvement in Stoves*.—Patent dated March 29, 1859.—This invention relates to an improvement in stoves which have



sheet iron cases or body, and consists in a novel way of lining the same and controlling the draft, whereby the sheet iron casing or body will be protected from the fire, and the latter at the same time allowed to diffuse its heat without being materially absorbed or obstructed by the lining.

*Claim.*—In combination with the lining E, and sheet metal case B, the cylinder F, placed within the body of the stove, and provided at its top with the register or sliding band *h*, and a register or slide *f*, on its flanch *d*, for the purpose set forth.

No. 23,364.—L. F. GOODYEAR, of New Haven, Conn.—*Improved Tool for Cutting Metal.*—Patent dated March 29, 1859.—The knives, or cutters C, are adjusted within the rings or bands A by regulating the screws B, so that the knives or cutters may be adjusted perfectly horizontal or in oblique positions, the wedges D retaining the cutters at equal distances apart at whatever distance they may be from the inner peripheries of the rings.

*Claim.*—The arrangement and combination of the adjustable wedges D, cutters C, and ring A, substantially as and for the purpose shown and described.

No. 23,365.—CHARLES GORDON, of Washington, D. C.—*Improved Protractor.*—Patent dated March 29, 1859.—This invention consists of an instrument having a heavily weighted base A, to an arm of which is firmly attached a graduated arc D, a vernier E and parallel rule F, by means of which engineers, surveyors, and draughtsmen can protract triangles or other right lined figures.

*Claim.*—The improved protractor, as described, consisting of the base, the meridian limb, the vernier, the arc, and rulers, with the clamping screw, the whole arranged and operated as specified.

No. 23,366.—ALBERT GRANGER, of New York, N. Y.—*Improved Metallic Pen Holder.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The holding of a pen on the outside of a metallic tube (commonly called a pen holder) in such a manner, by reason of pierces, cracks, and indentations, as to leave the entire length of a pen, when inserted in proper writing position, uncovered.

No. 23,367.—WILLIAM A. GREENE and JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Gridirons.*—Patent dated March 29, 1859.—This improvement consists in attaching a check plate on the under side of the gridiron B, immediately behind the reservoir G, and riveted thereto. Said check plate extends across the whole width of the hearth A and descends down within a short distance of the bottom of the same, for the purpose of separating the fire from the air chamber J, situated between said check plate and the front of the hearth.

*Claim.*—The check plate I attached to a stove gridiron B when the same is constructed and arranged in the manner and for the purpose set forth.

No. 23,368.—SMITH GROOM, of Troy, N. Y.—*Improved Hose Coupling.*—Patent dated March 29, 1859.—By having the wedge-shaped flanges *ee* and notched lugs *hh* arranged upon the outside of the movable ring B and fixed part C for conjoint operation, there is a combination of advantages thereby secured of much practical value; for this coupling makes a packed joint which is increased in tightness according to the increase of power applied in turning up the ring of the coupling, and the length of hose or pipe is not required to be twisted in being united thereby, so that in these respects it is not inferior to the common screw coupling in general use.

The inventor says: I *claim* the arrangement of the notched lugs *hh* and wedge-shaped flanges *ee* for conjoint operation upon the outside of the fixed part C and movable ring B of the two halves of the coupling, as and for the purpose described.

And in combination with the lugs *hh* and flanges *ee*, constructed and arranged upon the coupling for conjoint operation, as described, I also claim the ratchet teeth *j* and catch *k*, when arranged upon the two halves of the coupling, as described, for the purpose specified.

No. 23,369.—WILLIAM J. GRIFFIES, of Marietta, Ga.—*Improvement in Ploughs.*—Patent dated March 29, 1859.—The nature of this invention is a plough stock A, upon which any kind of plough hoe may be readily fitted, moved, and adjusted. The lower part of the foot or helve to which the plough hoe is attached is iron, made open or forked at BB, into which the upper part of the stock, which is made of wood, is let and fastened by two iron bolts CC.

*Claim.*—The arrangement of the stock A, forked and slotted foot BB, screw E, shovel F, brace G, wedge C, beam H, and handles II, the whole being constructed as and for the purposes set forth.

No. 23,370.—ELIJAH HARRIS, of Princeton, Ill.—*Improvement in Watchmakers' Lathes.*—Patent dated March 29, 1859.—The nature of this invention consists in constructing a lathe for drilling and turning which will combine both and do the work of either, and in constructing different standards to be used in the same slide head, in finishing them with perforations or holes, with rimmer *b*, to support the substance and the drill, and with dovetail slide *d*.



*Claim.*—The standard F with rimmer *b*, the standard shown at Fig. 3, and the standard shown at Fig. 4, with dovetail slide *d*, the extra slide head E, in combination with the standards F, Figs. 3 and 4, and the slide tongs shown at Fig. 8, substantially as shown and described.

No. 23,371.—JACOB HAYNES, of Cameron, Ill.—*Improvement in Corn Planters.*—Patent dated March 29, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the hinged shoe T, formed with a serrated plate, and with the wings V and W, substantially in the manner and for the purpose described.

I also claim the combination of the movable seat A<sup>1</sup> with and supported by the hinged radius bars B<sup>1</sup> and by the sliding bars C<sup>1</sup>, for the purpose of enabling the driver to raise or lower the front end of the machine, substantially in the manner and for the purpose described.

No. 23,372.—FRANCIS M. HEMPHILL, of Newport, Ky.—*Improvement in Grinding Mills.*—Patent dated March 29, 1859.—The nature of this invention will be explained by reference to the claim and engraving.

The inventor says: I *claim*, first, in the described combination with an adjustable bridge tree, the spindle E, confined below to the tree and hinged above to the cup formed driving and feeding ryne N *n n*, having a hinged attachment to the runner, and enabling a discretionary increase of the stress of the runner on the grain by the lighter screw operating wholly from below, as set forth.

Second. The described arrangement of the cup formed driving and feeding ryne N *n n*, gudgeons P, bolts Q, sleeves *q q*, and metallic eye R, having the described or equivalent connection with a runner and spindle, respectively, for the purposes set forth.

Third. The cup formed driving and feeding ryne N *n n*, having the described or equivalent hinged attachments to the spindle and the runner, respectively, and operating as set forth.

Fourth. The frame A B C, constructed substantially as and for the purpose set forth.

No. 23,373.—RUSSEL HICKOK, of Fort Edward, N. Y.—*Improved Insulator for Lightning Rods.*—Patent dated March 29, 1859.—This invention consists in attaching lightning rods to buildings through the intervention of insulators D, each of which consists of a single piece of glass or other suitable insulating material, which surrounds the rod B, and which has alternate ribs or projections *e* and grooves or spaces *f*, so arranged around its interior surface that while the ribs or projections hold the rod so closely as to prevent disagreeable or injurious shaking of the rod, there is also, at the same time, abundant room in the spaces *f* for the water which runs down on the rod to pass through the insulator.

*Claim.*—A lightning rod insulator, made in one piece, so as to support and insulate the rod, and also leave open spaces for water to pass through it, and for air, when suddenly expanded, to escape from within it, as set forth.

No. 23,374.—GARDNER P. HOPKINS, of Cabot, Vermont.—*Improved Churn.*—Patent dated March 29, 1859.—The wheels *i* on the axle *f* run over the inclined planes *n* and thereby cause an up and down motion of the dashers *g*, while the same revolve in different directions when the churn is in operation. By means of the dashers revolving in different directions and by means of the cogs *o* in the inside of the barrel *b* of the churn, the cream is prevented from acquiring a circular motion in the process of churning.

*Claim.*—The construction of the churn in the manner hereinbefore described, so as to combine the rotary motion of the barrel with the up and down and rotary motion of the dashers, and so to prevent the cream from acquiring a circular motion in the process of churning.

No. 23,375.—ROBERT JOBSON, of Wordsley, England.—*Improvement for Making Moulds for Casting.*—Patent dated March 29, 1859; patented in England May 31, 1856.—This invention has for its object a combination of apparatus to facilitate the making of moulds for casting metals, with a view to render it unnecessary that the workmen should turn over the flasks or boxes by hand.

*Claim.*—Constructing the table platform or bed *b* so that it may turn on or about necks or axes, substantially as described.

No. 23,376.—HENRY R. KEESE, of Bridgeport, Vt.—*Improvement in Harvesters.*—Patent dated March 29, 1859.—By the raising of the outer end of the lever J it will actuate the arms *p p*, and the latter, in consequence of being connected to the back end of the draft pole H by the link *o*, will throw up the front end of the main frame A, and the front ends of the fingers of the bar C, thereby allowing said fingers to pass over slight obstructions, or preventing them from catching against them, so that the finger bar may rise and pass freely over.

The inventor says: I *claim*, first, the employment of a hinged supplemental frame D, in combination with the main frame A and driving wheel B, when the said frame D is provided with an adjustable bearing wheel E, or its equivalent, all substantially as and for the purpose shown and described.



Second. The combination of a driver's seat G with the supplemental frame D and driving wheel B, as set forth, so that, by lateral change of his position, the driver may elevate or depress the cutters, or diminish the traction, and otherwise balance and govern the machine, as shown and described.

Third. Hinging the supplemental frame D to the main frame A, substantially as and for the purpose set forth.

No. 23,377.—RUFUS S. LEE and WILLIAM D. LEAVITT, of Cincinnati, Ohio.—*Improvement in Rocker Boxes for Saw Shafts.*—Patent dated March 29, 1859.—This invention consists in combining with a rocker box B an interior box D that has its end motion therein, the box D resting and moving upon friction rollers *h h*, and against or with a spring *i*, also combined within the rocker box.

The inventors say: We *claim* so connecting the inner to the outer box, through the medium of a spring, as that said inner box or bearing may have end motion in the outer one against the action of said spring, substantially as described and for the purpose set forth.

And we also claim, in combination with the elastic or spring connexion between the inner and outer box, the rollers *h h* for the inner box to move on, substantially as set forth and described.

No. 23,378.—EDWARD LINDNER, of New York, N. Y.—*Improvement in Breech Loading Fire-Arms.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the method described for operating or closing the breech, and forming a tight joint at the junction of the barrel with the breech by the employment of a screw ferule or sleeve, fitting an outer screw thread on the barrel, and provided with a projecting annular flange for grasping and releasing the breech, and for drawing the same backwards and forwards in the direction of the barrel, to or from the rear end thereof, upon said screw threaded sleeve, being operated substantially as described.

Second. I claim, in combination with a movable box within the breech, constructed and operating as described, the packing thereof by means of asbestos, or its equivalent, substantially in the manner and for the purposes described.

Third. Locking the screw threaded sleeve that operates the breech, by forming the pivoted lever which serves to turn said sleeve with an eccentric or cam, arranged to act upon a locking pin by pressing down said lever after the breech is drawn tight, as set forth.

No. 23,379.—WILLIAM H. LOCHMAN, of York, Pa.—*Improved Portable Writing Desks.*—Patent dated March 29, 1859.—In the drawing, 1 and 2 are different parts of the lid, 3, the back; 4, the bottom or lower part; 5 5, side or end pieces; 6, the front part; and 7 7, the springs to keep the side pieces firm.

*Claim.*—The mode and manner of uniting the different parts of a writing desk by hinges, or their equivalents, so as to admit of its being folded up into a comparatively small space, in the manner substantially as set forth.

No. 23,380.—MATTHIAS LUDLUM, of Fairhaven, Vt.—*Improved Life-Boat.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* providing the exterior of the boat with adjustable side-floats, constructed and hung, or arranged to operate in, or at different fixed positions or distances, to or from the sides of the boat, substantially as set forth.

Also, providing either float, arranged along the outsides of a boat, with an open or trellis-work railing, made to project below the float, essentially as specified.

No. 23,381.—CHARLES MEYER, of Fond-du-Lac, Wis.—*Improved Expanding Augur.*—Patent dated March 29, 1859.—This invention consists in arranging the cutters E on sections D D, which slide in and out in slots *a*, made in the stock C of the augur, and which sections are operated and retained by a scroll groove *d*, so as to be always at equal distances from the centre, and the cutters are attached to the lower face of two of those sections in such manner that the bottom of the hole made by this augur is flat and even.

*Claim.*—As a new article of manufacture, an expanding augur, constructed and operated substantially as described.

No. 23,382.—JOHN G. MITCHELL, of Collington, Md.—*Improvement in Corn Planters.*—Patent dated March 29, 1859.—In the lower portion of the hopper H is the seed roller R, which turns on a shaft *b*, and is moved by the meshing of a pinion *p* on the end of said shaft, with the cog wheel W<sup>1</sup> attached to the main wheel W. The covers consist of a double mould board M, upon an inclined stock D, supported by the axle bar F; a lever *l*, on the head of the shank passing through the bar, serving to turn the stock.

*Claim.*—The combination of the swinging hopper H, constructed and arranged as described, with the adjustable cover and dropping tubes, the whole arranged for joint operation in the manner set forth.



No. 23,383.—J. A. MOORE and A. H. PATCH, of Louisville, Ky.—*Improvement in Harvesters*.—Patent dated March 29, 1859.—This invention relates to an improvement in that character of combined reaper and mower which employs standards G, having long curved slots *g*, said slots serving for the axle I of the driving wheel to be hung and adjusted in, and said standards, with the axle, when the harvester is used bracing the frame laterally.

The inventors say: We *claim*, first, the enlargement, as at *z*, of the curved slots *f* of the standards G, substantially as and for the purposes set forth.

Second. The arrangement, relatively to each other, of the vertically perforated curved stop bar H, slide *d*, constructed as described, and lever F, for the purpose set forth.

No. 23,384.—SAMUEL MORRETT, of West Pennsboro', Pa.—*Improvement in Preserve Cans*.—Patent dated March 29, 1859.—The nature of this invention consists in closing an aperture of any size in fruit cans by a circular convex cover B, adjusted on the can while the fruit is hot; and with the cover firmly compressed the can is inserted in cold water until an equilibrium of temperature is obtained, when the can is removed the lid is held in its position by the outward pressure of the atmosphere.

*Claim*.—The covering of fruit cans by means of the concave cover B, when the same is constructed and applied as described, and retained in place solely by atmospheric pressure.

No. 23,385.—HENRY W. MOSHER and JOSEPH A. CONBOIE, of New York, N. Y.—*Improved Apparatus for Cleansing Bristles*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The inventors say: We do not confine ourselves to any particular number of clamps on the shaft D, nor to any particular arrangement thereof, for various modifications of the same may be used.

But we claim the rotating bristle clamps E, placed within a cylindrical box or case A, provided with diagonal plates *c*, and used with or without the brush C, and soap bar or other cleansing substance *h*<sup>1</sup>, substantially as and for the purpose set forth.

No. 23,386.—JOHN PACKER, of Philadelphia, Pa.—*Improvement in Hay Mangers*.—Patent dated March 29, 1859.—The nature of this invention consists in combining with the hay manger A a falling rack B, which, lying on top of the hay, prevents the horse from throwing it out, and which rack continues to fall and lie upon the hay so long as any remains in the manger, the horse getting at the hay through the slats of the rack.

*Claim*.—Combining with a hay manger a falling rack B, to prevent the horses from pulling out and unnecessarily wasting the hay therein, as described and represented.

No. 23,387.—JOHN PATRICK, of New York, N. Y.—*Improvement in Ventilating Vault Covers*.—Patent dated March 29, 1859.—This invention consists in the introduction of a perforated plate *a*, a short distance below the roof or sidewalk *b*, the perforations in which are formed at the apex of thimbles or projections, and the ends or edges of these plates are turned down into troughs or gutters *c*.

The inventor says: I *claim* the perforated plate and gutter, in combination with the metallic roof, ceiling, or walk, for forming a ventilating space and catching any water of condensation, in the manner and for the purposes specified.

And, in combination therewith, I claim the ventilating pipe *d*, as and for the purposes specified.

No. 23,388.—WILLIAM PATTERSON, of Constantine, Mich.—*Improved Machine for Bending Tire*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* connecting the clevis to the lever and segment in such a manner that the lever will cause the clevis to grasp and release its hold on the bar to be bent, independently of and before said segment commences to move, as illustrated by the red lines in the drawings.

Second. Providing the outer end of the clevis with an arm *L v*, so arranged in relation to the circumference of the segment as to bear against the outer side of the tire and support it (while being bent) above the end of the segment as represented, thereby preserving the circle of the tire by preventing it from springing back during the descent of the lever.

Third. Making the clevis adjustable for the purpose of adapting it to the use of different sized segments in the same machine, as described.

No. 23,389.—HENRY C. PEIRSON, of Philadelphia, Pa.—*Improved Hoop Machine*.—Patent dated March 29, 1859.—The nature of this invention consists in the arrangement of a series of bending rollers *D D*<sup>1</sup>*D*<sup>2</sup> in rear of the cutter B, so as to operate together upon the hoops as the latter are passed from under the cutter, and render them more pliable or ready for use.

*Claim*.—The arrangement of the series of bending rollers *D D*<sup>1</sup>*D*<sup>2</sup>, or their equivalents, in rear of the cutter B, or its equivalent, so as to operate upon the hoops, substantially in the manner and for the purpose specified, as the said hoops pass between them directly from the said cutter.



NO. 23,390.—RANSOM S. POTTER, of Chicago, Ill.—*Improvement in Railroad Coupling Chairs*.—Patent dated March 29, 1859.—This is an improvement on a rail coupling chair, for the purpose of confining the ends of iron rails used in the construction of railroad tracks, so that they are held vertically and horizontally in line with each other, so as to prevent displacement in either direction, secure the ends of rails from injury, and to relieve the rolling stock from the wear and tear consequent upon uneven tracks.

*Claim*.—The use of two wedges or keys, in combination with a railroad chair, when the outer lip of said chair is overhung in the manner described and shown, and its inner surface is of a conoidal form, as specified.

NO. 23,391.—DANIEL R. PRINDLE, of Bethany, N. Y.—*Improvement in Seed Planters*.—Patent dated March 29, 1859.—This invention relates to a machine for planting seeds of any kind in rows on which the operator may ride, and which is so constructed as that the planting devices may be adjusted on the main frame, and the shock or motions imparted to either the seeding or main frame shall not be communicated to the other frame, whilst, at the same time, the two frames are so united as that they may be both raised by one lever.

The inventor says: I *claim*, first, hinging the frame that carries the seeding devices and the beams that carry the furrow opener and coverer to the axle, substantially as and for the purpose set forth.

I also claim, in combination with the axle and hinged frame and beams, the tongue and lever, for raising, lowering, or controlling the planting and covering devices, substantially as described.

I also claim the adjustable hinged clevis irons, made, arranged, and operating as set forth.

I also claim the combination of the curved spring plates *g* and spring *s i*<sup>1</sup>, as applied to the seeding wheels or cylinders, for the purpose explained.

NO. 23,392.—DANIEL READ, of Hamilton, N. Y.—*Improved Clothes Frame*.—Patent dated March 29, 1859.—The metallic catch and brace *EFG* is made of cast-iron and flat upon the sides, through the centre of which is an open space, and is bolted by a small iron bolt to the top of the standard *ii*, so as to readily turn upon the bolt, said bolt being constructed with a flat head; and the other end is fastened to the side of each of the arms *ABCD* by a flat-headed bolt, which freely slides up and down the open space in shutting and expanding said arms.

*Claim*.—The combination and arrangement of the standard with the arms *ABCD*, the standard *ii*, and braces *EFG*, substantially as and for the purposes specified.

NO. 23,393.—LEWIS L. REYNOLDS, of Manchester, N. H.—*Improvement in Machinery for filling Loom Harness Needles*.—Patent dated March 29, 1859.—This invention consists of a bail *E* for carrying the twine from side to side of the needle, hooks *F* for receiving the same, taking it through the eye, over the tongue, and depositing it upon the outer sides of the score of the needle; also, an intermittent rotary oval pin *O* and cams *A*, the joint action of which causes the twine to be evenly laid around the end *P* of the needle.

The inventor says: I do not claim the mere passing of the twine over the tongue of the needle, as it is old, having been done some twenty years since by a Mr. Wilson, of Lowell, Massachusetts.

But I *claim* the hooks *F*, or the equivalent thereof, for depositing the twine or cord upon the outer sides of the score of the needle, when combined with a device for delivering the twine or cord to said hooks.

Second. The combination of the intermittent rotating oval shaped pin *O* with the cam *N*, or their equivalents, for depositing the twine or cord evenly around the end *P* of the needle.

NO. 23,394.—L. SIMPSON REYNOLDS, of Indianapolis, Ind.—*Improvement in Friction Bolts for Flour Mills*.—Patent dated March 29, 1859.—The following is the operation of this bolt: The flour being fed into the bolt in the usual mode is carried as the reel revolves to an elevation equal to the top of the reel or highest part of its revolution, being held upon the sides of the ribs *HHH*, which is effected by their peculiar shape. The flour then falls from them over the shaft, striking the bolting cloth just after the action of the balls or knockers *DDD* has cleared the section or part upon which it falls of all the gumming flour, thereby allowing the clear, raspy meshes of the cloth, as the offal falls forcibly upon the same, to dust the bran, thereby saving the necessity of a bran duster. When the action of only a part of the balls *DDD* is required, any number of them may be stopped by confining them with the rods *EEE*.

The inventor says: I *claim*, first, the sliding knockers *DDDDDD*, in combination with the shaft *K*, ribs *HHHHHH*, and rods *EEEEEE*, when constructed and operated substantially as and for the purposes set forth.

Second. The springs *GGGGGG*, in combination with the knockers *D*, &c., when operated substantially as and for the purposes set forth.

Third. The elastic bridge tree *I*, when used substantially as and for the purposes set forth.



No. 23,395.—THOMAS A. ROBERTSON, of Washington, D. C.—*Improvement in Cultivators*.—Patent dated March 29, 1859.—The point *d* of the plough being started between the rows of plants in such positions that the divider B will run as near to the plant as desirable, the plough is *put in* to such a depth that the cutter G will cut under the surface slightly, and shear off the weeds at the right depth, while the scraper and gatherer A carries them over, and leaves them with the loose earth in the middle of the furrow or in the rear of the plough standard.

*Claim*.—The wing A, extended obliquely from the rear standard E, to a point *d*, from which point projects a straight portion, or divider B, in combination with the oblique cutting bar G, as described.

No. 23,396.—H. R. ROBBINS, of Baltimore, Md.—*Improvement in Stoves*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of the fire chamber A, with the inclined front encircling transparent face plate E, heat pot B, pedestal F, with its doors *b b*, upper back encircling chamber H, with its doors *f*, and divided horizontally as described; smoke and heat pipes I and *g g i*, and back case or reflecting bonnet K, having a conduct *m*, arranged to conduct air to the perforated passage of the upper back encircling chamber H, as described, the whole being arranged for operation, substantially as specified.

No. 23,397.—I. G. ROUX, of Raymond, Miss.—*Improvement in Cotton Presses*.—Patent dated March 29, 1859.—This invention consists in operating the follower I of the press by means of the rotating platform B, having a helical ledge or flanch on its upper surface, and placed below the body of the press, the follower of which has two levers J J attached to its underside, the lower ends of said levers bearing against blocks E E, which are placed on two helical ledges or rails F F, and are made to operate the follower, when in the act of pressing with a progressive or gradually increasing power, as the platform is rotated.

*Claim*.—The rotating platform B, provided with helical ledges, or rails F F, in combination with the blocks E E, placed on the ledges or rails, the levers J J, attached to the follower I and the stationary press box G, the whole being arranged to operate as and for the purpose set forth.

No. 23,398.—JAMES L. ROWLEY, of Angola, Ind.—*Improvement in Railroad Cattle Guard*.—Patent dated March 29, 1859.—The nature of this invention relates to the manner of placing the springs C C to carry the main bar D, to which the chains E E and fender rods G G are attached; and in such a manner that the cars will pass and repass, pressing the spring down, and as the cars leave it, it resumes its standing position across the track.

*Claim*.—The springs C C and bar D, in combination with the chain fender F E, and post J, when constructed and operated in the manner and for the purpose described.

No. 23,399.—ISAAC S. RUSSELL and HENRY R. RUSSELL, of New Market, Md.—*Improvement in Harvesters*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The peculiar arrangement of mechanism, consisting of two segment level wheels G H, two spur wheels K K, an independently turning hub E, having a slotted plate F attached to it, and a crank arm L, having a turning crank pin J, for giving motion to the rake round the reel in the path of a vertical circle, and over the platform in the path of a horizontal circle, substantially as set forth.

No. 23,400.—ERHARD SCHLANKER, of Buffalo, N. Y.—*Improved Forging Machine*.—Patent dated March 29, 1859.—The nature of this improvement will be understood by reference to the claim and engraving.

The inventor says: I am aware of the revolving forging machine of D. Noyes, of Abington, Mass., and of attaching the hammer or hammers, each by a pivot to a revolving disk or crank, so as to revolve therewith, and controlling the position thereof, by stops attached to the face of the disk, or crank, and of drawing the hammer or hammers lengthwise of the anvil, which I disclaim, as being original in principle but defective in operation, by the use of the stops affixed to the disks, or imaginary crank.

I *claim* that portion of the hammer shaft Q Q, from the centre pins *v v*, extending towards the driving shaft W, to be used as a lever in controlling the hammers D D, the centre pins *v v* being the fulcrums, in connection with the wrists and friction rollers Y Y and X X, the location and position of the spring cams S S, upon the duplicate face plates F a F b.

The sections E E, and the independent operating crank cams R R, guide plate *a*, cranks *h h*, levers *c* and *f*, connecting rods *d d u*, as described in the specification.

No. 23,401.—ISAAC C. SHULER, of Amsterdam, N. Y.—*Improvement in Coffins*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the manner of forming a recess in the sheet metal all around the base inside of a metal coffin, also the arrangement of placing an iron frame, or



its equivalent, into the recess described, fastening it firmly to the sheet metal, around the body of the coffin, for the purpose of stiffening the lower edges of the same.

Second. I do not claim the ribs X, separately, as I do not consider them patentable; but the ribs being peculiarly arranged, by being placed under the flange which supports the rim E, and fastened to the frame D in the recess at the bottom, I claim this peculiar arrangement for the purpose of stiffening the sides and end, so as to sustain a heavy weight of earth; also for the purpose of preventing the sides from bulging out, when the handles are placed about an equal distance between the upper and lower edges of a sheet metal coffin, substantially as set forth.

Third. The arrangement of pressing or rolling around the outer edge of the cover of a sheet metal coffin an inverted bead which forms a tongue on the under side of the cover, so arranged as to fill the groove in the upper surface of the rim E, for the purposes of soldering; or cementing the joints, as described and set forth.

Fourth. The arrangement of placing a galvanized iron rim, or its equivalent, on the outside and over the upper edge of the walls of a sheet metal coffin, fastening the same permanently to a flange formed around the upper edge of the walls, for the purpose of shaping and strengthening the upper part of the coffin, and at the same time furnishing a means of securing the coffin top at the joints.

Fifth. I am aware that I have claimed in a former patent an iron frame as a cover over the soldered joints on the top of a sheet metal coffin; I, therefore, disclaim it as an entire frame, but I claim the bisection of the frame A and its reconnection by means of spring catches at the widest part or break of the coffin, substantially as set forth.

No. 23,402.—JOHN SMALLEY, of Bound Brook, N. J.—*Improvement in Cultivators*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The inventor says: I do not claim, broadly, hanging the main wheels of a cultivator to cranked axles for the purpose of deciding the depth to which the teeth shall penetrate the ground, as such a device has been heretofore used in cultivators.

Nor do I claim a central lever for operating the cranked axle or the plough formed teeth, or any other part of the machine, separately.

I claim the frame, its adjustable pole, its teeth  $m^1 n^1$ , and detaching teeth  $p p^1$ , the cranked shaft C, its central lever E, and driver's seat G, when the said seat is so situated as regards the handle that the driver can operate the latter without moving from the seat, and when all the parts are arranged in respect to each other, substantially as set forth.

No. 23,403.—MICHAEL SIMMONS, of Ira, N. Y.—*Improvement in Seeding Machines*.—Patent dated March 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, the use of the eccentrically cut gear wheel D, so as to enable me to place my pinion  $a$  and pinion shaft  $b$  on top of the frame and above the centre of the wheel that drives it, substantially as described.

I also claim the arrangement of the beams H, with their skewed shovels and adjustable connections, so that they may be transposed from side to side of the machine at pleasure, in the manner and for the purpose set forth and explained.

No. 23,404.—CHARLES F. SPENCER, of Rochester, N. Y.—*Improved Spring Bedstead*.—Patent dated March 29, 1859.—The slats E F are arranged by placing one end of each between the bars A B, the end being below A and resting on the top of B, at a little distance back, the opposite end being free to move up and down as its flexibility will allow. A series of horizontal slats G is placed longitudinally on the top of them, one end resting on the free end E and the other on that of F, forming a level stop or surface for the reception of the mattress.

*Claim*.—The combination and arrangement of the spring slats E F, with the bars A A and fulcrum B B, the latter arranged to increase or diminish the effect, and horizontal slats G, resting at once on the free ends of each reverse series, substantially in the manner and for the purpose described.

No. 23,405.—GEORGE H. STARBUCK and L. D. GILMAN, of Troy, N. Y.—*Improvement in Smut Mills*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We claim, first, the combination of the two scouring plates  $a a a$ , placed one above the other, with their roughened or burred surfaces towards each other, in combination with the funnelling plates E, for depositing the grain at the centre of the scourers between which it is passed, forming a double scourer, attached to and revolving with the shaft R, operated in the manner and for the purpose set forth. We do not confine ourselves to any number of scourers for a machine.

Second. The vertical cylindrical opening, as shown, at I, in combination with the outer case K, screen  $f$ , and fans  $h$ , for the purpose of giving free discharge to all light impurities and foreign matter, and preventing the discharge of grain.



No. 23,406.—R. H. ST. JOHN, of Bellefontaine, Ohio.—*Improvement in Watchmakers' Lathes*.—Patent dated March 29, 1859.—A cap G, having a perforation through its centre, is screwed upon the projection H, which projection is screwed to the centering plate E, and has a hole passing through it to receive the centre points. The cap G secures the centre points in the chuck in the centre of the centering plate E; the desired centre is then obtained by loosening the steel ring D, by unscrewing the thumb screws *a a*, which operation allows a free play to the centering plate E.

The inventor says: I *claim* the combination and arrangement of the steel ring D, spring *d d*, set screws *a a*, and centering plate E, substantially as described and for the purpose set forth.

I also claim the employment of the screw cap G, for clamping the article to be centered, in the manner specified.

No. 23,407.—J. C. STODDARD, of Worcester, Mass.—*Improvement in Cultivators*.—Patent dated March 29, 1859.—As the machine is drawn along, the share A and wings C plough up the soil between the hills, the shares *m* eradicate any weeds that may be in close proximity to the plants, and the scraper wheels J loosen the soil, and, by their rotation, cast more or less earth to the plants, as may be desired; the amount of earth cast towards the plants being regulated by adjusting the flanches *h<sup>1</sup>*, and also the wheels J.

The inventor says: I *claim*, first, the share A and wings or blades C, arranged relatively with the wheel or wheels H—that is to say, placing the wheel or wheels behind the share A and between the wings or blades C, substantially as and for the purpose set forth.

Second. The adjustable rotating scrapers J, applied to the wings or blades C, and arranged to operate as and for the purpose set forth.

Third. The combination of the lateral adjustable hoes *m*, share A, adjustable wings or blades C, rotating scrapers J, wheels H, one or more, arranged for joint operation, substantially as and for the purpose set forth.

No. 23,408.—J. C. STODDARD, of Worcester, Mass.—*Improvement in Machines for Digging Potatoes*.—Patent dated March 29, 1859.—This invention consists in the employment or use of an adjustable endless carrier F, attached to an inclined screen, a weed eradicator, levelling and opening shares N E, and a receptacle D provided with screens, the whole being mounted on wheels, and used in connection with a guiding device, whereby potatoes may be dug from hills or drills, separated from dirt, and also assorted, the large from the small, and placed in proper receptacles.

The inventor says: I *claim*, first, the weed eradicator, formed of the vibrating plate *g<sup>1</sup>*, with serrated flanges *h<sup>1</sup>* attached, and arranged to operate as and for the purpose set forth.

Second. The inclined adjustable screen box D, provided with a share E and spur *j<sup>1</sup>* at its lower end, in combination with the endless chain of carriers F, arranged to operate in grooves *o o*, substantially as and for the purpose set forth.

Third. The combination of the weed eradicator, levelling share N, inclined adjustable screen box D, with share E attached, and endless chain of carriers F, with or without the receptacle C, arranged for joint operation, substantially as and for the purpose set for.

Fourth. The adjustable or movable roller shaft L, applied to the machine, and arranged to operate as and for the purpose set forth.

No. 23,409.—N. G. THORN, of Cincinnati, Ohio.—*Improved Manufacture of Wood Screws*.—Patent dated March 29, 1859.—The nature of this invention consists in constructing a wood screw, with two or more threads, as a triple and as a double thread screw, which threads terminate around a central, tapering point, which point may end with or continue beyond the termination of said threads.

*Claim*.—As a new manufacture, the described wood screw, the characteristic feature of which consists in its having two or more parallel threads that terminate at or near the point of a tapering core, substantially as described.

No. 23,410.—JOHN S. THOMPSON and MARVIN J. SEYMOUR, of Glenn's Falls, N. Y.—*Improvement in Cressets for Heating Barrels*.—Patent dated March 29, 1859.—The barrel H, to be operated upon, has its staves secured together by truss hoops, and the barrel is placed on the bed D, and a cover *e* is placed on the barrel H. When the fire in the stove A is lighted, the products of combustion pass up the cylinder or drum B, and down the flue C, and out at the back of the stove. The bed D supports the barrel in proper position, and prevents it from burning at its lower end.

*Claim*.—The arrangement of the annular bed D at the base of the apparatus, and above the escape flue C, to receive and support the barrel, as and for the purpose shown and described.

No. 23,411.—SAMUEL E. TOMPKINS, of Newark, N. J.—*Improvement in Saddles*.—Patent dated March 29, 1859.—This invention consists in so constructing, or forming, the saddle-tree, that large trees for gig harness saddles, and the like, may be of metal, the tree at the



same time being so formed as to admit of the ready attachment to the tree of the material which receives the nails of the covering, and also to admit of the attachment of a crupper loop, which is made to serve as a support to the material that receives the nails of the covering.

The inventor says: I am aware that cast metal saddle-trees have been previously used, and also that safety guards or bridges have been attached to trees to keep the back band from the back of the horse; I therefore do not claim, broadly, the above.

But I *claim* the bow pieces *b e*, connected with the sides *a a*, and provided respectively with the head *c* and cantel *f*, in connection with the central bow piece or "safety guard," when the parts are placed relatively to each other, so as to admit of being cast in one piece, to form a new and improved saddle-tree, as set forth.

I further claim, in connection with the saddle-tree, formed as above, the crupper loop *j*, attached to the cantel bow piece *e* by means of the plate *i*, substantially as and for the purpose specified.

No. 23,412.—FREEMAN E. TUPPER, of Nashua, N. H.—*Improvement in Stoves*.—Patent dated March 29, 1859.—The coal being kindled as represented at *g*, the heated air and gas rise up until they reach the top *E*, when the draft causes them to diverge from the centre of the stove towards the space *h*, between the air chamber *C* and the upper end of *A*, thus causing a partial vacuum directly under the centre of the lower side of *C*, and under the apertures *d*, by which the cool air which is admitted through the tubes *G* is caused to descend, through the apertures *d*, down to the heated coal, as shown by the arrows.

*Claim*.—The arrangement of the air chamber *C* with its air passages or tubes *G*, and apertures *a*, and openings *i i i*, with the casing *A*, supporting and deflecting collar *F*, substantially in the manner and for the purposes set forth.

No. 23,413.—SAMUEL W. TYLER, of Greenwich, N. Y.—*Improvement in Harvesters*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Giving such a shape to the portions *a* and *b* of the finger bar, and to the flanged portions or heads of the fingers *d d*, that the same set of rivets will unite all the said parts with each other into a fingered bar of unusual stiffness, strength, and narrowness, and at the same time form a dovetail groove for the reception and guidance of the cutter bar, substantially as set forth.

No. 23,414.—NATHAN WASHBURN, of Worcester, Mass.—*Improved Machine for Rolling Wheel Tires*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of a set of reducing rollers *A B*, a series of adjustable carrying rollers *d d d*, &c., or their equivalents, and a frame or holder *G*, supported so as to be capable of rising upward within the wheel tire in proportion as the diameter of the inner periphery of the said tire may increase during the process of rolling the tire, and having the said carrying rollers arranged and made adjustable with respect to it and the reducing rollers, in the manner substantially as specified.

No. 23,415.—E. B. WAY, of Jerseyville, Ill.—*Improvement in Clod Crushers*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The employment of the oblique sided, double tapered slats *f*, in combination with the rims *d<sup>1</sup> d<sup>1</sup> e*, so that the clods that wedge between the slats will be carried up, and then dropped, and then broken within the wheel, as shown and described.

No. 23,416.—JOHN WAGNER, of Pittsburg, Pa.—*Improved Sausage Stuffer*.—Patent dated March 29, 1859.—The nature of this improvement consists in a certain arrangement of the gear, for operating the piston, made in such a manner that, by means thereof, the piston is forced forward with the proper slow motion, and, after having accomplished its forward stroke, is drawn back again in a speedy manner.

*Claim*.—The arrangement of using, in addition to the operating crank *c*, for the forward motion, another operating crank *s*, or its equivalent, for the backward motion, when applied to the wheel gear arrangement of worm and wheel, in the manner as described, viz: when set on the spindle *a* of the screw wheel *F*, substantially as and for the purpose set forth.

No. 23,417.—WILLIAM WEBBER, Jr., and JOHN WEBBER, of Rocton, Ill.—*Improvement in Harvesting Machines*.—Patent dated March 29, 1859.—As the arm *c* moves backward it carries the rake *b* in a radial sweep across the platform. When the rake has reached the end of its backward stroke, the arm *h* is prevented by the stop *s* from moving further back; the arm *c*, however, continues to move outward till it reaches the position shown in the engraving. The arm *h* being fixed, and the arm *c* moving, the rod *g*, by reason of its attachment to the arm *k*, raises the rakehandle *f*. At the same time that the arm *c* moves outward, after the arm *h* has stopped, the latch *i* descends along arm *h* until the notch in the latch catches the arm and holds it at a fixed distance from the hinge of the rakehandle. The rake is thus held



while the arm *c* is returning to the initial position. Just before reaching the inclined under side of latch *i* comes in contact with the frame at *t*, which forces up the latch, releases the arm *h*, and suffers the rake to fall upon the platform at its front edge, ready for a repetition of the operation.

*Claim.*—Operating the rake of a harvester, by means of the horizontally oscillating arms *c* and *h*, the rod *g*, and the latch *i*, when the said parts are arranged relatively to each other, and to the other parts of the machine, in the manner set forth.

No. 23,418.—T. J. WHITEHEAD, of South Paris, Maine.—*Improvement in Stoves.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination with the fire chamber described, and with an oven having hollow walls filled in with non-conducting material, of a removable fire chamber casing, which has hollow walls filled in with a non-conducting material, and is in shape, externally, nearly the counterpart of the fire chamber, and serves for incasing the whole of the exposed portion of the fire chamber, and at the same time allows access to the holes in the top of the fire chamber, and to the fuel door thereof, substantially as and for the purposes set forth.

No. 23,419.—W. L. WILLIAMS, of New York, N. Y.—*Improved Foot Scraper.*—Patent dated March 29, 1859.—This invention consists in combining, with a scraper plate, a series of brushes, so arranged that the action of the foot or shoe, on the scraper, in cleaning the dirt from the sole, will actuate the brushes in such a way that they will come in contact with and clean or brush off the dirt from the sides of the shoe and all around it.

*Claim.*—The employment or use of the scraper *B* and the brushes *F G*, either with or without the brush *J*, combined and arranged to operate substantially as and for the purpose set forth.

No. 23,420.—JOHN WOOD, of Brooklyn, N. Y.—*Improved Method of Operating the Knife in Riving Shingles.*—Patent dated March 29, 1859.—This invention consists in giving the frame in which the gate is placed, and works, an intermittingly oscillating or vibrating movement simultaneous with the forward feed movement of the bolt, in such a manner that the knife, as it descends to its work, will have its cutting plane in an oblique position with the edge of the bolt, and consecutively in reverse positions, so that the shingles will be cut from the bolt in taper form, the shingles being cut alternately from each side of the bolt.

*Claim.*—Giving the frame *C*, in which the reciprocating knife gate *O* is placed, an intermittingly vibrating movement simultaneously with the feed movement of the bolt, substantially as and for the purpose set forth.

No. 23,421.—NATHAN AMES, of Saugus, Maine, assignor to Himself and NATHANIEL EVANS, Jr., of Boston, Mass.—*Improved Self Feeding Press for Printing Cards and Bill Heads.*—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the little cams or projections *a b*, arranged in reference to the ink-rollers, and operating in connection with them and the vibrating type-bed, substantially as and for the objects described.

Second. The combination and arrangement of the spring *P*, hinged piece *H*, type-bed *E*, and spring *L*, substantially in the manner and for the purposes set forth.

Third. Attaching the type-bed *E*, as shown, at one of its sides only, to the arm *D*, so that the inking rollers *N N*<sup>1</sup> may pass over and under it, substantially as described.

Fourth. The pitman *r*<sup>1</sup>, screw *r*, top piece *X*, slot *j*, and slides *e e*<sup>1</sup>, when combined, arranged, and operating substantially as set forth.

Fifth. Attaching the feeding plate *f*, as described, to the slide *e*, and causing the latter to move in the groove *g*, so that while the upper side of *f* bears on the surface of *X*, the thickness of *e*, extending below it, prevents the card from ever getting between the surfaces of *f* and *X*.

Sixth. The adjustable guide *l*, constructed and arranged substantially as and for the purpose described.

Seventh. The adjustable lateral guides *m m*, arranged as set forth and for the purpose described.

Eighth. The card pusher *Z*<sup>1</sup>, provided with the slots *P P* and *8*, substantially in the manner and for the purposes described.

No. 23,422.—ELISHA D. BLAKEMAN, of New Lebanon, N. Y., assignor to JACOB J. AUCHAMPAUGH and LEVI AUCHAMPAUGH, of said New Lebanon.—*Improved Fly Trap.*—Patent dated March 29, 1859.—This invention consists in the combination and arrangement of the poison cups with the main body of the fly trap, one being made in the form of a *V*, surrounding the apex of the conical chamber, and secured thereto by hooks, the other being made in the form of a funnel, or inverted cone, and suspended to the centre of the opening of the conical chamber, the two cups being connected together by a continuation of the bail.

*Claim.*—The combination and arrangement of the poison cups *m* and *n*, with the conical chamber *B* and bed plate *A*, substantially as and for the purpose set forth.



No. 23,423.—JAMES W. CARRIER, of Springfield, Mass., assignor to Himself and ABEL B. HOWE, of said Springfield.—*Improvement in Car Couplings*.—Patent dated March 29, 1859.—The object of this invention is to produce a car coupling which shall be self acting when two cars are brought together, thereby saving the operatives the danger encountered in going in between the cars for the purpose of coupling them together, and also one that can be uncoupled from any convenient position on the platform of the car, or any other position.

*Claim*.—The sliding bunter A, connection pin *d*, pin *p*, springs *r* and *l*, straps *m*, sliding pin B, springs *k k*, rack *f*, pinion *g*, ratchet *s*, pawl *t*, and pin *v*, when constructed and arranged substantially as described.

No. 23,424.—CHARLES W. CARTER, of Westville, Ind., assignor to LESTER L. BOND and GEORGE COATSWORTH, of Chicago, Ill.—*Improvement in Corn Shellers*.—Patent dated March 29, 1859.—The nature of this invention consists in constructing a machine with two cones revolving in opposite directions, the internal cone P accommodating itself to the size of the ears of corn passing through by being made in sections, which sections are hinged at the top by the hinge R, held in place at the bottom by the pintle *s*, and made to operate against the external cone O, by means of a guide spring *u*.

*Claim*.—The sectional truncated cone P, constructed as described, with the pintle *s*, guide spring *u*, and hinge R, and arranged to operate in combination with the outer cone O, in the manner and for the purpose specified.

No. 23,425.—HENRY B. COMER, of Temperanceville, Pa., assignor to Himself and JOSEPH S. LEWIS, of said Temperanceville.—*Improved Machine for Rolling Iron*.—Patent dated March 29, 1859.—The nature of this invention consists in a mechanical arrangement for rolling iron, by causing the iron to be rolled to pass between a series of rolls and through guides, the grooves in the rolls and the form of the guides being adapted in form and size to the article desired.

*Claim*.—Furnishing rolls which are placed in front of each other and on parallel lines with guides placed between each set of rolls, said guides being so constructed that they will guide and change the position of the iron as it passes from one set of rolls to another set, as described and set forth.

No. 23,426.—ELEAZER S. GARDNER, of New York, N. Y., assignor to GARDNER & DECKER, of said New York.—*Improved Machines for Preparing Mouldings for Picture Frames*.—Patent dated March 29, 1859.—This invention consists in certain revolving rollers, arranged and operating in combination with a scraper cut to the desired form of the moulding, the said rollers to push forward the strips, one after another, and to pass them under the scraper while the cement is being applied to the mouldings.

*Claim*.—The revolving rollers, arranged and operating substantially as described, in combination with the scraper *n*, for the purpose specified.

No. 23,427.—JOSEPH E. HOLMES, of Newark, Ohio, assignor to Himself and JOSEPH PALMER, of New York city.—*Improvement in Retorts for Distilling Coal Oil*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I do not claim the invention of a revolving retort, that being specified in the French patent of M. Ajasson de Grandsague, dated October 9, 1839; neither do I claim the introduction of steam into the retort during the distilling process.

But I *claim*, first, the combination with the internal vapor pipe E F, of leg E<sup>1</sup>, so applied as to keep the mouth of the said pipe in the upper part of the retort, either by the direct action upon it of the force of gravitation, or by its dragging in the coal or other matter in the lower part of the retort.

Second. The arrangement of the steam pipe *a*, to communicate through the hollow journal with a passage in the leg E<sup>1</sup>, of the vapor pipe E F, for the admission of steam directly into and among the charge, substantially as specified.

No. 23,428.—HENRY J. LEWIS, of Brooklyn, N. Y., assignor to Himself and RICHARD A. LEWIS, of New York city.—*Improvement in Cameras*.—Patent dated March 29, 1859.—The nature of this invention consists in combining with a tripod hinged braces so attached and sliding in slots in the tripod that the legs are firmly held when distended, or can be shut up with ease without detaching any of the parts.

*Claim*.—The combination of the braces *f f f*, and screw clamping blocks *i i i*, or their equivalents, with the legs *a*, in substantially the manner and for the purposes specified.

No. 23,429.—E. L. PRATT, of Philadelphia, Pa., assignor to Himself and R. B. FITTS, of said Philadelphia.—*Improved Milk Pan*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—As new manufacture, a pan, with a detachable or hinged cover, forming when combined a vessel closed, with the exception of a series of minute perforations below for the access of cold air, and, a suitable distance above the latter, another series of perforations for



the exit of warm air and gases, and otherwise constructed, substantially as set forth and for the purpose specified.

No. 23,430.—ALONZO R. ROOT, of Keokuk, Iowa, assignor to RUFUS S. RICKEY, of said Keokuk.—*Improvement in Seeding Machines*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The inventor says: I do not claim the invention of the revolving head of Mr. Ring's improvement, nor the application of the centrifugal force to the purpose of seed sowing, nor any other principle secured to A. Ring, Esq., by letters patent.

But I do *claim*, first, in combination with the hopper I and the revolving tubes or arms, the regulator B, constructed and operating therewith substantially as described.

I also claim, in combination with the regulator and revolving tubes or arms, the vertical and inclined partitions C C and lip D, for the purpose of directing the seed to be sown from the hopper to the openings in the arms or tubes, and to prevent the seed from escaping unduly through the arm or tube, for the time being, immediately under the lip, substantially as described.

No. 23,431.—GEORGE SELSER, of Philadelphia, Pa., assignor to Himself, J. COOK, and W. COOK, of said Philadelphia.—*Improvement in Grinding Mills*.—Patent dated March 29, 1859.—A is a box containing a drawer for receiving the ground materials. To the top of the box is secured a stand C, in the upper end of which turns the hollow spindle D, the burr E being secured to the lower end of this spindle. F is the shell of the mill, secured between the underside of the stand C and the cross bar G, by means of screws *a a*, the lower end of a rod H, which passes through the interior of the hollow spindle, being secured to the cross bar.

*Claim*.—Attaching the hollow steel burr to the spindle D, by screwing or otherwise securing the end of the latter to a plate I, which is fitted snugly to the inside of the burr, a shoulder *e* on the spindle bearing on the top of the burr, as set forth.

No. 23,432.—JOHN TAGGART, of Roxbury, Mass., assignor to Himself and GEORGE R. SAMPSON, of Brookline, Mass.—*Improved Marine Propeller*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* my improved mode of propelling a navigable vessel through the water, viz: by the conjoint action of two separate rotary or screw propellers E and F, respectively operating in the water and air, arranged and combined substantially as described, and propelled by a steam engine, or motor within, or carried by the vessel.

I also claim arranging the air screw propeller F, or its axis, at an inclination upward from the keel or plane of flotation of the vessel, substantially as shown, in order that the said propeller, while being rotated, may operate not only to draw the vessel ahead but to lift her bow more or less out of water.

No. 23,433.—DAVIS L. WEATHERHEAD, of Philadelphia, Pa., assignor to Himself and S. E. SOUTHLAND, of said Philadelphia.—*Improvement in Gas Retorts*.—Patent dated March 29, 1859.—This invention relates to an improvement in that class of gas retorts which consist of an upper and lower chamber, the latter for the generation of the gas and the former for the passage of the gas to the exit pipe; and it consists in the forming of a box on the outside of the cap of the retort, and in the peculiar situation of the said box in respect to the upper and lower chambers and outlet pipe.

*Claim*.—The cap E, with its box or reservoir F, when arranged in respect to the lower chamber A, the upper chamber B, and exit pipe D of the retort, substantially as and for the purpose set forth.

No. 23,434.—OLIVE ANN BROOKS, of Great Falls, N. H., administratrix of the estate of LEBBEUS BROOKS, deceased, late of said Great Falls.—*Improved Saw Set*.—Patent dated March 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement and application of the benders and bending screw together, and with respect to the two handles, substantially as set forth, whereby the centre of motion of the benders is at the place of contact, or the vertex of the angle of their upper surfaces, and no fulcrum pin is employed for the support and connection of the levers.

No. 23,435.—WILLIAM ARTHUR, of Brooklyn, N. Y.—*Improved Arrangement of Extinguishing Fires in Steam Vessels*.—Patent dated April 5, 1859.—The nature of this invention consists in the application of the ample power and supply of water, furnished and always ready in every vessel having a condensing engine for propulsion, for the purpose of flooding the decks or holds of the vessel in case of fire, by using the power of the engine communicated to the air pump and the discharge water from the air pump for that purpose.

*Claim*.—The application of the waste water discharged from the air pump raised to such



height as to flood the steam vessel with water for the purpose of extinguishing fire, as described, instead of discharging it, as usual, as waste water from the sides of the vessel.

No. 23,436.—S. A. Bailey, of New London, Conn.—*Improved Machine for Wringing Clothes*.—Patent dated April 5, 1859.—A represents the box which is rectangular; from the sides of said box are erected two perpendicular supports B B, said supports being constructed with a rectangular slot through them, in which the journal bearings *h h* are allowed to move up and down freely. C C represents two cylinders through which pass the shafts E E, said shafts having their bearings in the journal boxes *h h*.

*Claim*.—The employment of the cylindrical wooden spring piece *a a*; which is divided in two parts at its centre, each part being slotted from the place of division, as shown, towards its outer end, the same being covered by a rubber cylinder, substantially in the manner and for the purpose specified.

No. 23,437.—ABEL H. BARTLETT, of Speyten Duyvil, N. Y.—*Improvement in Condensing Covers*.—Patent dated April 5, 1859.—A A represents the lower portion of the cover; B, the handle; I I, the lower water reservoir; H, the handle; G G, the flange projecting over the lower reservoir, with its edge turned down to keep the reservoirs in position; F, the overflow pipe; E, the pipe opening into and leading to the reservoir; C, the opening through the reservoir and leading to the space D between the reservoirs I and R; M M, pieces of isinglass fastened under the openings in the cover by means of the flanges *k*; and J represents a frying pan, showing the manner of fitting the cover to it.

*Claim*.—The reservoirs I and R, the pipes F and E, when made and arranged substantially as and for the purposes specified.

No. 23,438.—ALEX. BECKERS, of New York, N. Y.—*Improved Apparatus for Exhibiting Stereoscopic Pictures*.—Patent dated April 5, 1859.—The nature of this invention consists in constructing an apparatus for exhibiting stereoscopic pictures, which apparatus will be capable of containing a large number of pictures, by placing the endless belt or chain in an oblique position to the base of the apparatus, and by placing the slides or frames of the pictures in an oblique position to the endless belt.

The inventor says: I *claim*, first, placing the endless belt, chain, band, or apron *o o* in such a position as to form an acute or obtuse angle with the base F of the box or chamber of the apparatus, substantially as described.

Second. Placing the slides or frames holding the pictures in such a position as to form acute or obtuse angles with the endless belt or with the line of motion, substantially in the manner and for the purpose as described.

No. 23,439.—ASA G. BILL, of Cuyahoga Falls, Ohio.—*Improvement in Metallic Piston Packing*.—Patent dated April 5, 1859.—This invention consists in expanding the rings all round by means of two levers, which are placed in the central hub of the piston, and which operate on a ring placed in the packing ring, and cut open on one side so that the levers, by pressing on the opposite edges of this cut or gap, expand this ring equally all round, and that, by the action of this ring on the packing rings, the latter are expanded and pressed against the sides of the cylinder, said levers to be operated by a cam, to which a ratchet wheel is attached, so that the ring may be gradually expanded without opening the piston.

*Claim*.—The arrangement of the arms F F<sup>1</sup> on the central hub B of the piston, which act on a ring E, and which are operated by means of a cam G, substantially as and for the purpose set forth.

No. 23,440.—ROBERT B. BENSON, of New York, N. Y.—*Improvement in Reefing Sails*.—Patent dated April 5, 1859.—This invention consists of a method of taking the reefs from the lower part of the sail instead of from the head, as is usually done in the square sails.

The inventor says: I have described my invention in connection with a topsail, but I do not wish to limit myself to that use only, as it is evident that the same general principles are also applicable to other sails.

I *claim* reefing the sail from the deck by the use of a supplementary foot rope, or its equivalent, in combination with the auxiliary sheet and with the reefing lines, substantially in the manner and for the purposes set forth.

No. 23,441.—WILLIAM BLAKE, of Boston, Mass.—*Improvement in Gas Burners*.—Patent dated April 5, 1859.—The nature of this invention consists in the arrangement and application of one or more tubes of small bore, or the equivalent in the burner or its chamber, so as to project upward from the bottom thereof, and the gas entrance passage or passages, in a spiral or inclined direction, with respect to the bottom of the chamber, and to discharge the gas above the said bore. And it further consists in an annular outlet orifice in combination with such means of producing spiral or helical currents within the burner chamber.

The inventor says: I *claim* the arrangement of one or more conduit tubes *h h* in the burner



or jet chamber, and with respect to the base of the said burner or jet chamber and its inlet passage or passages, as described.

And in combination with the arrangement of the inlet conduit or conduits in such manner as to cause the gas to pass around in the expansion jet chamber in one or more helical currents, I claim an annular or ring exit orifice *i*, whereby the current or currents of gas may be thrown out of the burner in one or more helical streams, so as to equalize the height of the flame and prevent it from flickering.

No. 23,442.—MANNEVILLETTÉ E. D. BROWN, of Utica, N. Y.—*Improved Life-Boat*.—Patent dated April 5, 1859.—This invention consists mainly in the combination of three boats in one. To the ship rudder a groove (or grooves) is made in the rudder iron, a peg of suitable size is inserted in the rudder bolt *c*, so that the rudder when shipped may not easily be unshipped by the action of the waves.

The inventor says: I *claim* the construction of a life-boat with three recesses, substantially in the manner and form and for the purposes specifically set forth.

Also, in combination with the foregoing, the making of a groove in the rudder iron and a peg in the rudder bolt, as above described, for the purpose substantially set forth.

No. 23,443.—WILLIAM R. BROWN, of Cleveland, Ohio.—*Improvement in Pumps*.—Patent dated April 5, 1859.—The bicuspid valve is formed by dividing a hollow cone into two or more equal parts, as seen at *U*<sup>1</sup>. The apex of the cone must be placed upward, its base to rest upon a horizontal valve seat whose circumference is equal to the circumference of the base of the cone. The sides of the valve rise vertically from the outside of the valve seat to a height equal to the length of the cone.

The inventor says: I am aware that pumps with an oscillating diaphragm are not new.

But I *claim*, first, the bicuspid valve, constructed substantially as described.

Second. I claim the arrangement of the bicuspid valve in connection with the oscillating pump, the whole being constructed, arranged, and operated substantially as set forth for the purposes described.

No. 23,444.—JOEL BRYANT, of Brooklyn, N. Y.—*Improvement in Hydrants*.—Patent dated April 5, 1859.—The nature of this invention consists in constructing hydrants with a shaft tube, or rod, extending down from the top of the hydrant through the barrel and main valve, and to a considerable distance below the valve, so that water may be obtained through the medium of the shaft, tube, or rod, without operating the main valve in the ordinary way of opening hydrants. In connection with the shaft, the hydrant is provided with a perforated open top and banded chamber, which, in connection with the bottom plate and the inside of the barrel, serves as the main valve and for closing and setting free the opening for the waste water.

The inventor says: I *claim*, first, in the construction and use of hydrants, the shaft *A* (whether hollow or solid, naked or encased,) when used for obtaining water, substantially as described and for the purposes set forth.

Secondly. And in connection with the said shaft *A*, I claim the perforated open top and banded chamber valve *B*, constructed and operating substantially as described and for the purposes set forth.

No. 23,445.—CYRUS CHAMBERS, Jr., of Philadelphia, Pa.—*Improvement in Paper Folding Machines*.—Patent dated April 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I do not desire to confine myself to the precise construction of the devices described, as several modifications of, or equivalents to, the same might be substituted, without departing from the main features of the invention.

But I *claim*, first, the register pins *e* and *e*<sup>1</sup>, so constructed and so attached to a paper folding machine that they shall retain a position proper for the adjustment of the sheet, and yield by the movement of the latter.

Second. Adjusting one of the register pins *e*<sup>1</sup> laterally and longitudinally, independently of the other pin, by means of the slides *n*<sup>1</sup>, or their equivalents.

Third. Adjusting both pins simultaneously, both laterally and longitudinally, by the frames *X* and *Y*, or their equivalents, the frame *X* being adjustable in one direction on the frame *Y*, and the latter, together with the frame *X*, being adjustable in another direction on the frame of the machine, or any attachment thereto.

Fourth. Any convenient number of rods 1, 2 and 3, terminating at one of the folding rollers, the ends of the rods passing into grooves in the said rollers, as and for the purpose specified.

Fifth. The adjustable stop *Z*, with its inner edge of a curved or angular form, or otherwise, so constructed that the end of the folded edge only of the sheet shall be in contact with the said stop, for the purpose specified.

Sixth. The plunger 6, with its adjustable plate 8, in combination with the adjustable plate 9, the said plate being arranged substantially as and for the purpose set forth.



Seventh. The curved wires 15 and 16, or their equivalents, attached to the machine in any convenient manner, situated under the folding apparatus and adjacent to the trough, for the purpose specified.

Eighth. The combination of an alarm or indicating apparatus with a paper folding machine, when the said indicator is operated by a sheet folded by the machine.

Ninth. Causing the sliding board  $O^1$ , to move along the trough with a diminution of friction as the folded sheets accumulate by means of the springs 4, attached to the said board, and arranged to bear against the wedge formed or inclined strips 5, substantially as set forth and for the purpose specified.

No. 23,446.—WILLIAM H. CHEETHAM, Jr., of New York, N. Y.—*Improvement in Power Looms*.—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the employment of a frame L, to contain the shuttles which are inoperative, constructed so as to hold the said shuttles, arranged in proper order, in two tiers, and applied in such a manner in front of either or each set of shuttle boxes of the loom, as to be capable of receiving in one tier the shuttles which are required to be thrown out of operation, and of supplying from the other tier the proper shuttles to take their places, substantially as described.

Second. The box M, applied and operating in combination with the shuttle frame L, substantially as and for the purposes specified.

Third. The pushers  $m m$ ,  $n n$ , and  $p p$ , applied and operating in combination with the shuttle frame and box M, substantially as and for the purpose described.

No. 23,447.—JOHN B. CHRISTIAN and ABNER BEELER, of Mount Carrol, Ill.—*Improvement in Pumps*.—Patent dated April 5, 1859.—This pump belongs to that class in which the pump proper is located at the bottom of the well, or in the water, and the power is applied from a lever E at the top of the well through connecting rods  $a a$ , and in which the pipe C conducts the water upward to the spout D.

*Claim*.—The construction, arrangement, and combination of the pumping cylinders G G, and cylinders B B and I I, substantially in the manner and for the purpose specified.

No. 23,448.—HENRY CLAYTON, of Tamaqua, Pa.—*Improvement in the Valve Arrangement of Steam Engines*.—Patent dated April 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in combination with a slide valve, of one or more shutters applied and secured thereto, substantially as described, to vary and regulate the area of the opening of the port or ports, as and for the purposes specified.

Second. Combining the two shutters E  $E^1$  (when two are employed) with the slide valve by means of two screws G  $G^1$ , one of whose stems passes through the other, which turns in a bearing on the back of the valve, and both of which stems pass through one end of the valve chest, the whole operating substantially as described.

Third. The valve L, with its screwed stem  $w$ , or its equivalent, and spring  $y$ , arranged and applied substantially as described for the purpose set forth.

No. 23,449.—LEVI H. COLBORN, of Baltimore, Md.—*Improvement in Polishing Rice*.—Patent dated April 5, 1859.— $a$  is a frame work consisting of four uprights, with suitable cross pieces to support the several parts of the machine;  $b$  is a horizontal shaft having its bearings upon the upper cross piece of the frame; it carries a grooved vertical disk C which, with a similar eccentric disk  $d$ , secured to the casing  $e$ , which incloses both, forms a mill with which the outer covering of the rice can be broken.

*Claim*.—The process of breaking the outer covering and moistening the inner coating of rice, and polishing the same, as set forth.

No. 23,450.—JACOB A. CONOVER, of New York, N. Y.—*Improvement in Steam Engines*.—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Combining with the mechanism which connects the governor with the throttle valve, to regulate the admission of steam to the engine, substantially as described, a mechanism which disconnects the throttle from the governor to permit it to be closed by an independent power, to shut off the steam from the engine, as described, and for the purpose set forth.

No. 23,451.—CALEB COOK, of Hillsborough, N. H.—*Improved Shoe Peg Machine*.—Patent dated April 5, 1859.—The nature of this invention consists in an improved mode of pointing and splitting shoe pegs at one operation, and in several arrangements calculated to facilitate this operation.

The inventor says: I *claim*, first, the disks, as described.

Second. The method of holding the peg wood together by the chain and drum and friction appliance, substantially as described.



Third. The method of holding the peg wood firmly in place by pressing it up against the guide-piece D by means of the spring S and the lever and posts, substantially as described.

Fourth. The method of relieving the upward pressure against D for the purpose of the feed motion, by means of the system of levers  $x x$ , substantially as shown and described.

No. 23,452.—JACOB CREAMER and THOMAS W. RICARDS, London, Ohio.—*Improvement in Mole Ploughs*.—Patent dated April 5, 1859.—This invention relates to the arrangement of an adjustable beam upon a sliding shoe, in such a manner that the mole connected therewith may be adjusted to the depth required.

*Claim*.—The arrangement of the beam B, screw H, wheel  $d$ , and shaft S, upon the sliding shoe A  $a a b b$ , constructed and operating substantially as described.

No. 23,453.—JAMES E. CRONK, of Poughkeepsie, N. Y.—*Improved Pump*.—Patent dated April 5, 1859.—In the operation of this machine, in ascending the lower diaphragm causes all the space between the valves J and K to be filled to its full extent. In descending the upper valve J opens, and the lower valve K being closed, both diaphragms assume an inverted position; the space between the two diaphragms is filled and the surplus discharged at E.

*Claim*.—The peculiar form and arrangement of the diaphragms H and I, with the shells B and C, as described, and the ring A forming a chamber between them, with the discharge therefrom, as before mentioned, and for the uses and purposes expressed.

No. 23,454.—EPHRAIM CUSHMAN and JOHN R. CUSHMAN, of Amherst, Mass.—*Improvement in Manufacturing Artificial Leather*.—Patent dated April 5, 1859.—The first part of this invention consists in carrying the felt a greater distance round the upper roll, so that when it leaves this roll the weight of the film shall no longer operate to cause it to adhere to the felt.

The second part consists in loosening the particles of leather from the surface of the felt by a scratcher, or card, applied to its surface before it enters the felt washer.

The inventors say: We *claim*, first, holding the felt H up to the roll F, for the purpose substantially set forth.

Second. Removing the adhering fibres from the surface of the felt H before it reaches the felt washer, by means of the scratcher  $o$ , or its equivalent.

No. 23,455.—CHARLES DICKINSON and WILLIAM BELLAMY, of Newark, N. J.—*Improved Ice Pitcher*.—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—As an improved article of manufacture, an ice pitcher provided between its walls with a hard non-conductor, so as to prevent the walls from indentation or fracture from within or without, while it also assists refrigeration, as shown and described.

No. 23,456.—JAMES EASTERLY, of Albany, N. Y.—*Improvement in Grate Bars*.—Patent dated April 5, 1859.—The nature of this invention consists in constructing grate bars B B with corrugations.

*Claim*.—The described corrugated grate bar, constructed substantially in the manner and for the purpose specified.

No. 23,457.—WINTHROP B. FAY and RUSSELL W. COLLIER, of Upton, Mass.—*Improvement in Boot-Trees*.—Patent dated April 5, 1859.—This invention consists in having the foot piece of the tree constructed so that it may be rendered capable of being expanded laterally, and also adjusted to the instep so that the foot-piece may be adjusted to the foot of the boot, and made to conform to the same.

*Claim*.—The elastic plates B B attached to the sides of the foot-piece A, in connection with the adjustable bars C C, arranged to operate substantially as and for the purpose set forth.

No. 23,458.—FRITZ FEDDERKE, of New York, N. Y.—*Improved Billiard Table*.—Patent dated April 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing a billiard table which may be changed from an American into a French billiard table by effecting a perfect continuation of the cushion throughout the whole length of the same by means of cushion pieces D and E inserted between and fastened to the jaws by a handle N operating upon a fork lever L, latches or bolts R, and springs S, and reconverting the French billiard table thus formed into an American billiard table by removing the said cushion pieces by the same means, substantially as described.

No. 23,459.—JOSIAH P. FITCH, of New York, N. Y.—*Improvement in Water Wheels*.—Patent dated April 5, 1859.—This invention consists in placing the gate of the penstock or flume in a certain relative position to the wheel, whereby the wheel is rendered more efficient than usual, inasmuch as the water is permitted to pass in a direct line on the wheel, and in a column, the diameter of which will at all times equal that of the wheel irrespective of the



distance the gate may be open and of the rapidity and velocity of the discharge of the water.

*Claim.*—The combination of the wheels D, one or more, and gate F arranged relatively to each other, and placed within a proper case, which is fitted within a penstock or flume A, substantially as and for the purposes set forth.

No. 23,460.—HIRAM M. FLETCHER, of Newport, N. H.—*Improved Clothes Frame.*—Patent dated April 5, 1859.—A is a plank attached by screws or nails to the ceiling, to which another and thicker plank B, which contains the apparatus for revolving the reel, is attached by screws or other obvious means. C is the upper portion of the sectional shaft penetrating the socket E, and upon which the reel frame slides up and down when elevated or lowered. D is the lower section of the frame shaft. F F<sup>1</sup> F<sup>2</sup> F<sup>3</sup> are arms inserted into the socket E, to which are attached the outside pieces G G<sup>1</sup> G<sup>2</sup> G<sup>3</sup>, both constituting the frame of the reel upon which the clothes to be dried are placed.

The inventor says: I *claim* first, The plank A in combination with the plank B, the bearings M and N, and the sectional shafts C D, constructed and operating substantially as described.

Second. The sectional shaft C D constructed and operating substantially as described.

Third. The reel frame composed of the parts E F F<sup>1</sup> F<sup>2</sup> F<sup>3</sup>, G G<sup>1</sup> G<sup>2</sup> G<sup>3</sup>, and H H<sup>1</sup> H<sup>2</sup> H<sup>3</sup> in combination with the sectional shaft C D, the plank A, the plank B, the bearings M and N, with their corresponding mortises *m* and *n*, the spring K, the pulley O, and the cord L, constructed and operating substantially as described.

No. 23,461.—ALVIN K. GILMORE, of Bath, Maine.—*Improvement in Mechanism for Obtaining Rotary Motion from Reciprocating Rectilinear Motion.*—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the bifurcated slider A, two pulley sectors C D, their double pawls G H, or mechanical equivalents therefor, and the wheel F, the whole being arranged, connected, applied to one shaft E, and made to operate substantially in the manner and for the purpose set forth.

I also claim, in combination with the pawls G H and their disk wheels I I, the disk moving mechanism consisting of the levers *m m*, bent arms *o o*, sliders *p p*, forked arms 5 3, slide rod *t*, and shifting lever *u*, combined and arranged substantially as explained.

I also claim, in combination with each double pawl G H and the shaft E, a disk or wheel I, having studs or stops *i k*, and being applied to the shaft and friction wheel *l*, substantially as and for the purpose described.

No. 23,462.—JOHN M. HANCOCK, of Lansing, Iowa.—*Improved Fire Escape.*—Patent dated April 5, 1859.—The whole of the machinery of this invention is made fast in the drawer, or attached to the top of a table "S," or its equivalent, which is attached by means of two hooks, and chained to the window-sill. There is also attached to the basket W, or its equivalent, a cone *u*, which can be used to assist the person descending to guide the basket, so as to enable him to avoid the fire which may be issuing from beneath.

The inventor says: I *claim* the flying pinions E E, in combination with the detent *x*, the driving wheel D, the spring brake M, and block brake *v*, as substantially described and for the purpose set forth.

I also claim, in combination with the described piece of mechanism, the table, or its equivalent, as substantially described and for the purpose set forth.

No. 23,463.—A. E. HARDING, of Middletown, Ohio.—*Improved Ship's Propelling Apparatus.*—Patent dated April 5, 1859.—This invention relates to the arrangement and combination of propellers, and propeller and water chambers, in boats and vessels, in such manner that the said propellers may be operated without material friction, loss of power, or the formation of a vacuum, and also discharge the water which may be admitted within the propeller chambers, without interfering with the operation of the propellers.

The inventor says: I *claim*, first, the rollers *g*<sup>1</sup>, arranged and operating substantially as described.

Second. I claim the arrangement and combination of the propeller chambers B B, air tubes *d d*, openings *c*, chambers E E, pistons *f h f h*, gates *j j*, pipe *p*, and propellers *g g*<sup>1</sup>, all arranged substantially as described, for the purposes set forth.

No. 23,464.—GORDIS D. HARRIS, of Fitchburg, Mass.—*Improved Stump Extractor.*—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, as an improved article of manufacture, a stump puller having a pulley N, and two conical shafts D E; one shaft D for winding the chain with a variable speed, the other shaft E for correspondingly winding the rope M, and otherwise constructed as shown and described.



No. 23,465.—LEVY J. HENRY, of New York, N. Y., assignor to DANIEL BENRIMO, of said New York.—*Improvement in rendering Friction Matches Waterproof.*—Patent dated April 5, 1859.—The nature of this invention consists in dipping the match that has been dipped with the phosphoric compound into a melted mass of resinous matter, so that the said gum hardens immediately on cooling, and is of sufficient thickness to render the match partially or entirely water-proof.

*Claim.*—Rendering friction matches partially or entirely waterproof, by the application of the melted coating in the manner and for the purpose substantially as specified.

No. 23,466.—DANIEL HUGHES, of Rochester, N. Y.—*Improved Rotary Engine.*—Patent dated April 5, 1859.—This invention consists in the employment, in combination with oscillating abutments, of oscillating shoes, to be operated upon the pressure of the steam or other fluid which moves, or is moved by, the engine, for the purpose of preventing any leakage between such abutments and the piston hub. It further consists in a novel mode of applying metallic disks between the revolving piston hub and the cylinder heads, for the purpose of preventing any leakage between the hub and heads.

The inventor says: I *claim* the oscillating shoes G G<sup>1</sup>, applied and operating in combination with the oscillating abutments and the rotating piston hub, substantially as and for the purposes described.

And I also claim the disks N N<sup>1</sup>, having openings g g and sockets d d, applied in combination with the rotary piston hub, the cylinder heads, and the main shaft, substantially as and for the purposes described.

No. 23,467.—J. BURROWS HYDE, of Newark, N. J.—*Improvement in Treatment of Peat for Compost.*—Patent dated April 5, 1859.—The claim explains the nature of this invention.

*Claim.*—The use of peaty matter as a basis for admixture with other richer manures, when said peaty matter shall have been dried and finely powdered, previous to admixture, as set forth.

No. 23,468.—J. BURROWS HYDE, of Newark, N. J.—*Improvement in Rotating Shot and Shells.*—Patent dated April 5, 1859.—The nature of this invention consists in the employment of smooth-surfaced cylindrical bored guns and smooth-surfaced cylindrical shot or shell, which are caused to rotate by fuses placed in the solid portion of the front end of the shot, by boring tangentially from the surface into the solid metal, in advance of the bursting chamber.

The inventor says: I *claim* the use of tangential holes, bored from the outer surface into the solid portion of the front end of the shot, for receiving the rotating composition.

I also claim the use of the adjustable tubes or cases of rotating composition.

No. 23,469.—ANTHONI ISKY, of Lancaster, Pa.—*Improvement in Extension Tables.*—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the arrangement of the pivoted cross slats F, fixed on each side of the central partition I, in the table frame H H<sup>1</sup>, the double wings B C, when hinged, so that the wing c may be turned upon the slats F, when extended, as also the adjustment and combination of the several parts described, and for the purpose specified.

No. 23,470.—EDMUND M. IVENS, of New Orleans, La.—*Improvement in Steam Boilers.*—Patent dated April 5, 1859.—This invention consists in substituting for that class of boilers having a series of flue tubes passing horizontally through the cylinder the ordinary single or double flue cylinder, and inserting within said flue or flues an annular or other water drum connected at or near its highest point at one end with the body of the boiler, and receiving its supply of water from the force pump at or near its lowest point at the opposite end.

*Claim.*—The arrangement of a cylindrical or annular water drum (having a forced circulation) within the flue of an ordinary flue boiler, in the manner and for the purposes set forth.

No. 23,471.—HIRAM JOHNSON, of Farmersville, N. Y.—*Improvement in Tanning.*—Patent dated April 5, 1859.—The claim explains the nature of this invention.

*Claim.*—The use of a solution of quick lime as a tanning ingredient, to be used in connection with any of the tannic acids or tanning ingredients now in general use, not confining myself, however, to the exact proportions, as specified.

No. 23,472.—WILLIAM JOHNSON, of Lambertville, N. J.—*Improved Lathe Clutch.*—Patent dated April 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of toothed wheels and arms, actuated by a single screw shaft, so as always to present three several points of pressure centrally upon the body to be turned or wrought, substantially as described and set forth.



No. 23,473.—**AHロン LEWENBERG**, of New York, N. Y.—*Improvement in Moulds for Forming Artificial Teeth*.—Patent dated April 5, 1859.—The nature of this invention consists in providing a divided socket, receiving the pin or pins that are inserted into the teeth, whereby the socket is removed from the mould.

*Claim*.—A divided socket or holder, receiving the pins of artificial teeth, so fitted as to be removable from said pins prior to taking the teeth out of the mould, for the purposes specified.

No. 23,474.—**RICHARD LEWIS**, of Charleston, S. C.—*Improvement in Metallic Cotton Bands*. Patent dated April 5, 1859.—To unite the clasp and band the legs *g g*, or small shoulders of *B*, are passed through the opening *f* in *A* by contracting them; they are afterwards expanded to secure the plates together. The end of the band is then secured to plate *B*, when it is ready for use.

*Claim*.—In the device, plates *A B*, with slots *c d*, projections *E E*, opening *f*, legs *g g*, and shoulders *h h*, in combination, constructed, united, and operated in the manner substantially as described and for the purpose set forth.

No. 23,475.—**RICHARD LEWIS**, of Charleston, S. C.—*Improvement in Metallic Cotton Bands*. Patent dated April 5, 1859.—To operate this band, it having encircled the bale, plate *B* is turned down, when the band is passed up through the slot in *B*. The plate is then turned up with the end of the band that was bent down upon it. By this operation, the adjustable end of the band is secured where it is caught by the expansive force of the cotton. When released from the press, the projections *ff* on plate *A* are struck down upon *B* with a hammer, for the purpose of preventing the device from unlocking by the removal of the expansive force of the cotton.

*Claim*.—The plates *A B*, opening *E*, projections *ff*, shoulders *c c* and *d d*, in combination, constructed, united, and operated in the manner substantially as described and for the purpose set forth.

No. 23,476.—**E. D. LOCKWOOD**, of Penfield, N. Y.—*Improvement in Mode of Attaching Horses to Vehicles*.—Patent dated April 5, 1859.—This invention consists in having a strap pass around the breast of the animal, its ends being attached in a novel way to the thills, and having a strap pass around the back of the animal, the ends of the latter strap being attached to the sides of the former ones. The usual breeching and holdback straps being employed and connected to the shafts in the usual way.

*Claim*.—Attaching the strap *B* to the thills *A A*, by means of the perforated plate *c*, and the pins *f*, placed in the recesses *e* of the thills, and having wide and narrow parts *1 2*, substantially as described.

No. 23,477.—**MATTHIAS SUDLUM**, of Fairhaven, Vt.—*Improved Water Tight Doors for Marine Safes, Lockers, &c.*—Patent dated April 5, 1859.—The main door *A* is hollow in its inside, and its inner portion faced with a secondary door *C*, between which and the main door is a semi-elliptic spring arranged to cross the centres of the doors and kept in place by screws *d*, which pass through slots in the ends of the spring, so as to admit of free play to the spring in its action against the inner door to press it outwards, or in the action of the inner door, when forced inwards against it.

*Claim*.—The double door *A C*, constructed and operating substantially as described, in combination with the outer or surrounding framework *B*, and independent interior frame *E*, or its equivalent, essentially as and for the purpose set forth.

No. 23,478.—**JACOB MARX**, of New York, N. Y.—*Improved Refrigerator*.—Patent dated April 5, 1859.—The nature of this invention consists in providing the refrigerator with a drawer in which the ice water collects, in constructing the ice chamber *A*, with a double front piece *a e*, and a corrugated bottom *n*, and the provision chamber *B* with internal openings for the purpose of effecting a double circulation of air or ventilation.

*Claim*.—The combination and arrangement of ice chamber *A*, the gutter *D*, pipe *E*, the water tank *C*, and provision chamber *B*, substantially as and for the purpose specified.

No. 23,479.—**CHARLES MCBURNEY**, of Roxbury, Mass.—*Improvement in India Rubber Soles for Boots and Shoes*.—Patent dated April 5, 1859.—This invention consists in a vulcanized sole of India rubber, or a compound composed of India rubber, sulphur, and scraps of cloth, having the holes for the pegs or nails formed in it at the time it is vulcanized by suitable pins in the interior of the mould.

*Claim*.—A sole made of vulcanized India rubber, and having the holes for the reception of the pegs formed in the mould in which it is vulcanized, as set forth.

No. 23,480.—**WILLIAM MCCONNELL**, of Philadelphia, Pa.—*Improvement in Sandals*.—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—A sandal, consisting of three blocks *B B<sup>1</sup>* and *B<sup>2</sup>* of wood or other suitable mate-



rial, attached to an elastic metal strip A, when the said blocks are so situated in respect to each other that one shall coincide with the toes, the other with the ball, and the third with the heel of the wearer's foot, as and for the purpose specified.

No. 23,481.—O. H. MELENDY, of Delhi, Iowa.—*Improvement in Seeding Machines*.—Patent dated April 5, 1859.—In this invention the operator has perfect control of the seed distributing device through the medium of the lever H. This lever can be actuated by the knee of the operator, and the dropping of the seed retarded or expedited, as may be necessary for the planting of the seed in check-rows, and both the rotary cutters J Q and the shares o R may be elevated by actuating the levers M M<sup>1</sup>.

*Claim*.—The levers F H, slides E G, and projections g on the wheel B<sup>1</sup>, in connection with the bars I K O P, connected by the links j, the whole being arranged substantially as and for the purpose set forth.

No. 23,482.—GREGOR MENZEL, of Milwaukie, Wis.—*Improvement in Steam Boilers*.—Patent dated April 5, 1859.—The nature of this invention consists in the construction of an upright steam boiler, and in the manner of conveying the heat through the ascending tubes E and descending tubes G, and then circulating around the blow pipes A, cylinder m, and steam dome L so that the heat is consumed before it enters the chimney J, and the boiler being surrounded by jacket N, is protected from the cold atmosphere.

The inventor says: I *claim* first, The arrangement in an upright cylindrical boiler of a fire box D and series of ascending tubes E, a smoke box F, a single or double circle of descending tubes G, a flue H, and flue I, in combination with jacket N, without or with horizontal steam dome L, as shown and described.

I do not claim, irrespective, a circulation pipe for an upright boiler.

But I claim the arrangement of my circulation pipes K which hang loose and inside the cylinder m, openings T, and steam dome L, in the manner shown and described.

No. 23,483.—ALBERT H. NORTH, of Hartford, Conn.—*Improvement in Lamps*.—Patent dated April 5, 1859.—The revolving plate A is made to revolve by the action of the vertical gear wheel D, actuated by the motion of the crank wheel G. As the plate A revolves, it actuates all of the gears E, the teeth of which are made of an angular or sharp form, to perforate or press into the wick, sufficient to lift or lower the same.

*Claim*.—The rotating plate A with the elongated scroll teeth, in combination with the vertical gears E and the vertical actuating gear D, in the manner and for the purpose substantially as described.

No. 23,484.—WASHINGTON OBENCHAIN, of Logansport, Ind.—*Improved Machine for making Patterns for Cog Wheels, &c.*—Patent dated April 5, 1859.—Motion is given to the cutters I, which commence below the wheel and are gradually raised by turning the feed screw M until they are elevated entirely above the wheel, cutting the full depth of the cog groove, the feed screw is then reversed and the cutters run down in the same track, cleaning and smoothing the groove as they run down to their former position.

The inventor says: I *claim*, first, The mode of adjusting the arm E vertically by means of screw M, in combination with the upright D, which is also adjustable about a vertical axis, as and for the purposes set forth.

Second. The track frame F when adjustable laterally for the purpose of giving taper to the piece cut.

Third. The arrangement and devices for adjusting the cutter I as and for the purposes set forth.

No. 23,485.—JOHN K. O'NEIL, of Kingston, N. Y.—*Improvement in Pumps*.—Patent dated April 5, 1859.

The inventor says: In the construction of the pump-body, my object is to produce a pump which can be furnished at a moderate cost, and which is, at the same time, effective and simple, not liable to get out of order, and can readily be taken apart for inspection or repair. To accomplish these objects, the pump-body is made of two castings, A and B, which are fitted together by means of bolts passing through holes a a, and held by nuts, a suitable packing b being placed between the castings, to make the joints tight.

*Claim*.—The combination and arrangement of the vibratory arm p o, rod q, stem m, guide n, and spring r, for controlling the valve I from the top of the well, substantially as described.

Also constructing the pistons o o, with raised rims w w, and guiding edges h h upon the heads thereof, in combination with the packing y, coiled springs z z, and central disk u, arranged in the manner and for the purposes set forth.

No. 23,486.—JOHN W. PEER, of Troy, N. Y.—*Improvement in Rope Machinery*.—Patent dated April 5, 1859.—This invention consists in the method of conducting the strands from the bobbins to their respective flyer-heads, whereby they are caused to draw with nearly



equal freedom, and hence to have nearly the same tension, whether supplied from the middle of, or near the ends of their bobbins.

*Claim.*—Conducting the strands from their bobbins round the exterior of one side of the flyer, and from thence over guide rods *ff*, or their equivalents, to and through a hole or guide *c*, on the opposite side of the flyer, substantially as and for the purpose set forth.

No. 23,487.—DANIEL A. PEIRCE, of East Greenwich, R. I.—*Improvement in Pencil Cases.*—Patent dated April 5, 1859.—In using this improvement, the pencil is held in the fingers of one hand by the bulb, and the handle *J* is turned by the other, until the tube *E* projects beyond the point *C*, when, by placing the end of the head in the end of the tube and turning it, it will be screwed in and may be drawn to the point by a reverse motion of the handle.

*Claim.*—Constructing the end of the tube *F* with a screw thread, and forming the row of teeth therein in the manner substantially as described and for the purposes set forth.

No. 23,488.—WILLIAM L. POTTER, of Clifton Park, N. Y.—*Improvement in the Arrangement of Machinery for Operating Corn-Shellers separately, or jointly with a Fan or Cutters.*—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I do not limit myself to the precise construction, arrangement, and proportion of the parts shown in the drawings. Nor do I claim, broadly, the employment of a winnowing, corn-sheller, and straw-cutter complete in one frame.

I claim the arrangement of the fan *E E*<sup>1</sup>, and the gearing *i*, in relation to the shafts *C* and *I*, so as to connect and disconnect the same, for the purpose of allowing either the fan or the cutting apparatus to be operated with the sheller, or the sheller to be worked independently of either, substantially in the manner described.

No. 23,489.—JOHN POWERS, of New York, N. Y.—*Improved Pump.*—Patent dated April 5, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I claim arranging two forcing valvular pistons back to back in line with each other, and combining them by means of a piston-rod, or other connection common to both, with the arm of the pump-brake, at a point between the two pistons, substantially as set forth, so that both may be operated by the same arm of the pump-brake.

I also claim combining the pump-brake with the duplex pump-barrel, by means of an air-vessel, constructed and located substantially as set forth, so that it forms a secure fulcrum for the brake and affords a passage through it, for the arm of the brake to the piston-rod, upon which it acts.

No. 23,490.—SAMUEL PIERCE, of Troy, N. Y.—*Improvement in Steam Boilers.*—Patent dated April 5, 1859.—This invention consists in the employment of perforated air tubes *I* in the fire chamber *A*, and above the fuel, which tubes receive atmospheric air from outside the fire chamber, and discharge it in numerous small jets among the gaseous products of combustion, when the said air tubes are combined with water tubes surrounding them, and connected with the water legs *b c d*, or other water spaces of the boiler, and also connected with the inside air tubes *I*<sup>1</sup> by hollow stay bolts, forming passages for the discharge of the numerous jets of atmospheric air among the gaseous products of combustion.

*Claim.*—The employment of air tubes placed within the fire chamber of a steam boiler, substantially as described, in combination with the surrounding water tubes, connected at both ends with the water spaces of the boiler, and connected with the inner air tubes by means of hollow stay bolts, when the air and water tubes so combined are arranged substantially as specified and for the purpose set forth.

No. 23,491.—GEORGE W. PITTMAN and WILLIAM C. BOONE, of Bushwick, N. Y.—*Improvement in Machinery for Laying Rope.*—Patent dated April 5, 1859.—This invention consists in the method of forwarding the twist of the strands from the flyers which are furthest from the laying point. Also, in a guide ring *i*<sup>1</sup> applied to that one of a series of flyers which is furthest from the laying block, for the purpose of carrying forwards, toward the laying block, the forehand twist which is given by the revolution of the said flyer to a strand supplied from a spool which turns on fixed bearings outside of the flyers.

The inventors say: We claim the laying and unlaying of the strands *c*<sup>1</sup> *c*<sup>2</sup>, to forward the twist, as described.

And we further claim the ring guide *i*<sup>1</sup>, applied in combination with the bobbin *C*<sup>2</sup>, to the nearest flyer, substantially as and for the purpose set forth.

No. 23,492.—THOMAS H. POLLOCK and DANIEL BLIVEN, of Greenville, Conn.—*Improved Cheese Cutter.*—Patent dated April 5, 1859.—This invention consists in arranging a lifting turntable *D* in such relation to a stationary platform *A*, that a cheese placed on the latter can be lifted clear from the same, and turned by means of the lifting table, which latter, when the cheese has been turned sufficiently, is let down again so that the cheese rests on the platform



ready for a fresh cut The knife E is attached to a rack F, which is moved up and down in a suitable guide *k*, fastened to the base or frame B on which the platform rests.

The inventors say: We *claim* the platform A provided with a rim *a* and with projection J in combination with the turn-table D, or its equivalent, to operate substantially as and for the purpose specified.

And we do also claim the arrangement of the knife E\*, the cutting edge of which makes an obtuse angle with the rack to which it is attached, and operates in combination with slots *p* and *o*, substantially in the manner specified.

No. 23,493.—RANSOM S. POTTER, of Chicago, Ill.—*Improvement in Rail Splicing Chairs*.—Patent dated April 5, 1859.—The clamp wedge is drawn down into place by means of bolts 7 7, and as it is drawn down the same bolts operate the wedge and the clamp, and a combined action is produced, which gives a pressure in *three* directions, while each end of the clamp wedge in a measure acts separately upon its own rail.

*Claim*.—A clamp wedge operated by the same bolts as a clamp and as a wedge acting upon each rail equally, in combination with the chair guard 6, substantially as shown and specified.

No. 23,494.—JESSE REED, of Marshfield, Mass.—*Improved Machine for Pointing and Splitting Shoe Pegs*.—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, a traversing carriage M in combination with a revolving table R, so arranged that after a series of cuts has been made in one direction the table may be revolved 90 degrees preparatory to making the second series of cuts.

Second. I claim the device for traversing and returning the carriage, consisting of the following parts, or their substantial equivalents, in combination, viz: the screw shafts U and V, the block X, the lever Z, with its spring C<sup>2</sup>, and tripping arrangement *f* B<sup>2</sup> A<sup>2</sup>, the whole operating in the manner substantially as set forth.

Third. I claim the device for automatically revolving the table R, consisting of the spring *l*, and the parts *m n o p* and *k*, or their equivalents, operating in the manner substantially as described.

Fourth. I claim the grooving and splitting irons *e* and *g* traversing the block, as set forth, in combination with the holders D<sup>2</sup>, or their equivalents, operating in the manner substantially as described.

Fifth. I claim feeding the block S by means of the continuous revolution of a screw operating through a spring X, as described, so that when the block is released the feed is instantly given to it in the manner substantially as set forth.

No. 23,495.—BENJAMIN F. RICE, of Clinton, Mass.—*Improvement in Air Engines*.—Patent dated April 5, 1859.—The nature of this invention consists in giving a rotary motion to the plungers *d* or pistons in air engines, and in keeping their entire surface continually lubricated, thereby overcoming the friction, and preventing the sudden wearing out of the packing.

The inventor says: I *claim* giving to the plungers or pistons of air engines a rotary motion, for the reasons specified.

I also claim giving to the plungers or pistons of air engines a rotary motion, in combination with the means employed for keeping the entire surfaces of the plungers or pistons continually lubricated, in the manner and form and for the purposes substantially as set forth.

No. 23,496.—ANDREW RALSTON, of West Middletown, Pa.—*Improvement in Bands for Binding Grain, Hemp, &c.*—Patent dated April 5, 1859.—This invention consists in attaching to one end of a suitable cord or strap *b*, a T shaped clasp *a*, so arranged that by passing the other end around the clasp it will be locked between it and the cord.

*Claim*.—Furnishing cords or straps, used for binding grain, hemp, &c., with a T shaped clasp, as described and for the purpose set forth.

No. 23,497.—SILAS G. RANDALL, of Middlebury, Vt.—*Improvement in keeping Air Springs supplied with Air*.—Patent dated April 5, 1859.—The air enters the air pump through an opening or seat, that has a valve 2 snugly fitting it, said valve having attached to it a valve rod 3 and a spring 4 to close it after the air has opened it and rushed in to fill the vacuum created by the drawing forward of the piston *i*.

*Claim*.—Combining an air spring and an air pump, or its equivalent, with a car or carriage, or other moving conveyance, so that the motion of said car, carriage, or other conveyance, shall, through such air-supplier, keep the air springs supplied with air substantially as set forth.

No. 23,498.—J. CLINTON RANSIER, of Lyons, N. Y.—*Improvement in Car Couplings*.—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, clevis B, in connection with fulcrum E, key bolt D, for the purpose of a connecting link between railroad cars, so constructed and arranged that said clevis or link will encircle and revolve up and down, and sway to the right and left over the



outside of bumper plate or plates I and the body of the bumper, and otherwise arranged and constructed for the purpose substantially as set forth and described.

Second. I also claim revolving arms A A, or their equivalents, in combination with dog *o*, as seen in the right hand plan, fig. 1, for the purpose of aiding in casting off the opposite clevis from hook C, in the process of disconnecting or uncoupling; also for a rest for and in aid of throwing clevis B on the same bumper forward from its upright position, in the process of effecting a coupling, substantially as set forth and described.

Third. I claim hook C or its mechanical equivalent placed on top of the upper bar H and in rear of the top shoulder of fulcrum E for the purpose of receiving the curved point of the opposite clevis B in the process of coupling. I do not intend to confine myself to rod or shaft N, for the purpose of turning dog *o* against the shoulder of arms A A, for the purpose of raising the points of said arms in the process of casting off the opposite clevis in uncoupling as described, as other well known modes of screw or lever power can be applied with equal effect.

No. 23,499.—JESSE REED, of Marshfield, Mass.—*Improved Capstan*.—Patent dated April 5, 1859.—This invention consists in placing at the base of the capstan an inclined, movable ring D or spiral, which may be readily fixed in any required position to suit the direction in which the cable is drawn towards the capstan.

The inventor says: I *claim* the adjustable detached fleeter, operating as set forth.

Second. I claim the employment of the double inclines *t*, whereby I am enabled to fleet the cable whatever may be the direction in which the capstan is turned.

No. 23,500.—THOMAS N. ROOKER, of New York, N. Y.—*Improvement in Printers' Type Cases*.—Patent dated April 5, 1859.—This invention consists in a method of so arranging the several boxes or compartments in a "type case" that a person *put at case* may learn the position of the various letters very easily, and also that the movements of the body and travel of the hand of the compositor may be greatly reduced.

*Claim*.—The described method of arranging the compartments of a type case—that is to say, placing at the side of the lower case character its corresponding upper case character, for the purposes and in the manner substantially as set forth.

No. 23,501.—JAMES SANGSTER and AMOS W. SANGSTER, of Buffalo, N. Y.—*Improvement in Pegging Machines*.—Patent dated April 5, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventors say: We *claim*, first, the combination of the wheels P and Q, the ratchet C, and the peg wood L, with the awl, peg driver, the knife F', and the shoulder J<sup>2</sup>, when the same are arranged substantially in the manner specified.

Second. Placing the adjustable wheel R in arrangement with those parts which form the subject of the first claim, for the purpose of regulating the distance at which the pegs are to be driven from the edge of the leather or material pegged, substantially as set forth.

No. 23,502.—HENRY SAUERBIER, of Newark, N. J.—*Improved Machine for Making Hoes*.—Patent dated April 5, 1859.—A disk is cut from the plate; the two wings *a b*, when turned down and bent over and the ends welded together, form the eye. This disk is placed in the machine between two dies *c d*, with the wings *a b* projecting above the top of the dies; a kind of a V shaped projection is formed in the front, under the eye of the hoe, tapering to a point which gives support and strength to the blade.

*Claim*.—The cam lever A and the dies *c* and *d* in combination with the lever B, the loose pin *7*, and the clamp *e*, constructed and arranged substantially in the manner and for the purpose specified.

No. 23,503.—L. K. SELDEN, of Haddam, Conn.—*Improvement in Umbrellas*.—Patent dated April 5, 1859.—The slide D is allowed to work freely on the tube B, and is fitted and works between shoulders *ff* thereon. The slide D is attached by a pin *g* to a rod F', which is fitted within the tube B, the pin *g* passing through a slot *h* in the tube B. The arms or bars *a a*<sup>1</sup> are formed of metal. The rim A, tube B, with its rod F', and the stretchers, form the frame of the device.

*Claim*.—As a new and improved article of manufacture, an umbrella or parasol, having its frame constructed of a rim A and stretcher C, formed of arms or bars *a a*<sup>1</sup> pivoted and connected together as shown, in connection with the tube E and rod F', arranged as described.

No. 23,504.—WILLIAM W. SHAW, of Troy, N. Y.—*Improved Rubber Head for Lead Pencils*.—Patent dated April 5, 1859.—The rubber A is provided with a socket B, the diameter of which corresponds to the size of ordinary pencils, and which is just large enough and deep enough to fit tightly on the top of the pencil.

*Claim*.—As an improved article of manufacture, a head A for lead pencils, made of rubber, in the manner shown and described.



NO 23,505.—THOMAS E. SHULL, of Millersburg, Pa.—*Improvement in Breech Loading Fire-Arms*.—Patent dated April 5, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, the combination with a fire-arm constructed with a stationary and closed breech or breech piece, and with an opening in the barrel, to receive the cartridge, of a hinged flap door or lid, which opens and closes the cartridge charging aperture, substantially as and for the purposes set forth.

Second. The combination with a hinged flap door or lid of a sliding collar or sleeve, so that the operation of sliding the collar back will open the flap door or lid, and the operation of moving it forward will close and lock the same, substantially as and for the purposes set forth.

NO. 23,506.—HENRY T. SISSON, of Providence, R. I.—*Improved Portfolio*.—Patent dated April 5, 1859.—This invention consists in a novel apparatus which may be applied in the back of a portfolio, or attached to a suitable handle, for the purpose of holding and securing music sheets, pamphlets, or papers of any kind.

*Claim*.—The combination of the barrel A, shaft B, hooks or teeth *b b*, a spring or springs *d d*, spring latch *f*, and stop *g*, the whole constructed and arranged substantially as and for the purposes set forth.

NO. 23,507.—ALEX. McDONALD SPRAGUE, of Mobile, Ala.—*Improvement in Side Wheel Steamers*.—Patent dated April 5, 1859.—This invention consists in dividing the after guard  $A^1 A^2$ , and elevating a section of the same next adjacent to the wheel W, so that the guard will be without the influence of the water raised and the back current produced by the motion of the wheel.

*Claim*.—Raising the after guards next adjacent to the wheel, about the deck and hull of the boat, and also above the forward guard, substantially as described, so as to leave a clear water way beneath the after guard, and immediately abaft of the wheel for the purpose set forth.

NO. 23,508.—W. S. STETSON, of Baltimore, Md.—*Improvement in Harvesters*.—Patent dated April 5, 1859.—A detailed description of this invention would require too much space to be given here.

The inventor says: I *claim* giving to the frame H a back and forth motion upon the axle-tree B, said frame supporting at its rear end the axis of the driving pinion K, all in the manner and for the purpose as set forth.

I claim the vibrating frame, connected with the rear end of frame H, and having its centre of motion coincident with the axis of pinion K, as set forth.

I claim the combination of the shoe X, with the vibrating frame R, by means of the hinge bolt *y*, arranged and attached to the rear of said frame, in the manner set forth, by which combination the knife bar is made self-adjustable.

I claim connecting the adjusting lever Z, with the platform C, and sliding frame H, as set forth.

I claim horsing the knife over the platform, or in a position at right angles, or nearly so, to the axle B, by the two movements, substantially as described.

NO. 23,509.—W. H. STIMPSON, of Boston, Mass.—*Improvement in Cooking Ranges*.—Patent dated April 5, 1859.—This improvement consists in so arranging the central or main flue *d d*, that the heat from the fire chamber *a a* shall pass out of the same some distance below the top; and in an arrangement by which the expansion of the grate is prevented from injuriously affecting the remaining portions of the range by throwing or pushing them apart. It also consists in the use of sliding covers *q q* to the boiler apertures, which are arranged so as to slide back and forth without being removed from the range.

The inventor says: I *claim* the combination of the flanges or projections, attached to the side plates of the boiler chambers with the grate constructed so as to admit air to the fuel from below, and hung so as to allow of its free play, and made narrower than the fire chamber, as described, whereby the contraction and expansion of the grate is prevented from injuriously affecting the remaining portion of the range or stove.

Second. The use of the sliding covers *q q*, in combination with the top plate arranged to operate substantially as described.

NO. 23,510.—STEPHEN STRUNZ, of Birmingham, Pa.—*Improvement in the Manufacture of Resin Soap*.—Patent dated April 5, 1859.—The inventor says: First melt 100 pounds of tallow or fat with 200 pounds of rosin, warm this mass to 70° or 80°, Reaumeur, and add 150 pounds pure, cold, caustic ley, stir the mass well during the process, and, when it is well combined, add 75 pounds of carbonated ley.

*Claim*.—The admixture, compounding, and preparing of the ingredients named, in proportions specified and for the purpose set forth.



No. 23,511.—SAMUEL TEAGUE, of Newton, Ohio.—*Improvement in Machines for Dressing Mill Stones.*—Patent dated April 5, 1859.—To operate the machine it is placed upon the stone to be wrought and motion given to the picks *a a*, by turning the cylinder B, by means of the crank L, meanwhile driving the picks forward as the work progresses by means of the screws *s s*, turned by the hand-wheel H. The arbor *r*, of cylinder B, projects through, and traverses a slot in the outer box or case.

*Claim.*—The adjustable braces *f*, when combined with the picks *a*, sliding frame A, and levers *l*, constructed and operated in the manner set forth for the purpose specified.

No. 23,512.—ALFRED THOMAS, of Howard, Pa.—*Improvement in the Manufacture of Iron.*—Patent dated April 5, 1859.—The claim will explain the nature of this improvement.

*Claim.*—The mixing of charcoal and anthracite metal and forge cinder, in the proportion substantially as stated, and working them together in the puddling or boiling process, or in a refinery fire, for the purpose of making a superior quality of iron, as stated.

No. 23,513.—PELATIAH THOMPSON, of Springfield, Ohio.—*Improved Bedstead.*—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the combination of the double series of helical springs *d*, with the removable holder strips E, and series of cross slats *c*, operating with their steadying pins *e*, the whole arranged to operate as and for the purpose specified.

In combination with the series of slats *c*, operating with a series of springs, as specified, and the removable holder strip E, I claim the series of guiding blocks *b*, when two or more are extended down, to prevent the removable strips E from jumping, as described.

No. 23,514.—JONATHAN TROOP, of Sinclairville, N. Y.—*Improved Machine for Jointing Staves.*—Patent dated April 5, 1859.—This invention consists in the employment or use of a rotary adjustable cutter wheel C, and a vibrating frame F, provided with a clamp *h h*, and form bed *e*, and used in connection with a gauge *a*<sup>1</sup> and adjusting device.

The inventor says: I *claim*, first, the vibrating frame F, provided with the clamp bars *h h*, and stave-adjusting bars *m*, and used in connection with the gauge screws *a*<sup>1</sup>, arranged substantially as shown, for the purpose of properly presenting the staves to the cutters.

Second. The combination of the above named parts with the rotating cutter wheel *e*, arranged for joint operation, substantially as and for the purpose set forth.

No. 23,515.—WILLIAM C. TURNER, of St. Louis, Mo.—*Improved Syrup Charging Apparatus.*—Patent dated April 5, 1859.—The nature of this invention will be understood by reference to the claim and engraving

*Claim.*—The construction of a machine, so arranged that a uniform and definite measure of any liquid may be supplied to a bottle, or any other vessel, before, during, or after filling the same with soda, mineral, or water surcharged with carbonic acid gas or other gas, or any other liquid, by means of pump, air vessel, safety valve, charging valve or charger, constructed and applied substantially as described in specification

No. 23,516.—ALBERT WARREN, of Jefferson, Ohio.—*Improvement in Machines for Cutting Soles of Boots and Shoes.*—Patent dated April 5, 1859.—This invention consists of a long, shallow box, the bottom covered with sheet-iron, and a press working with the foot.

*Claim.*—A series of pieces covering the bottom of the box like *c c*, separated by a straight line through the centre, together with the series of pieces, like B C, with the knife J, held securely between their crooked edges, and arranged alternately, with a toe to the right and left, and covered by the forms D D D, &c., in the manner described, when these devices are combined with the slide P, arranged and operating as specified.

No. 23,517.—NATHANIEL WATERMAN, of Boston, Mass.—*Improved Egg Pan.*—Patent dated April 5, 1859.—Where the rim of each cup is nearest to that of an adjacent cup, it is joined to the same by a short connection *b*, and so as to leave open spaces *c c c* between them. These spaces are left between the cups A B C, in order to allow the currents of heat to pass upward between them, so as to equalize the heat against their surfaces.

*Claim.*—The new or improved manufacture of baking pan, or arrangement of cups, and a handle at each end of the series, all connected together and cast or founded in one solid piece of metal and with heat passages between the cups, substantially as stated.

No. 23,518.—CLINTON G. WELLS, of Galveston, Texas.—*Improvement in Fastening Iron Bands on Cotton Bales.*—Patent dated April 5, 1859.—The band to be used is to be placed around the bale with the end to which the clasp is attached standing upright; the other end of the band, upon which the washer C is placed as a slide, is then to be drawn through the clasp D, until the band is tight. The end is then to be turned up and laid flat against the band at B, and the washer slid over the end.

*Claim.*—The application of the washer C, and the mode of fastening the end of the band



with it as mentioned above, and thus expediting the operation of baling and compressing bales of cotton, or merchandise, and retaining them securely in their compressed form.

No. 23,519.—GEORGE D. WEST, of Brandywine Hundred, Delaware, assignor to P. W. NEEFUS, of New York City.—*Improvement in the Valve Motion of Oscillating Steam Engines.*—Patent dated April 5, 1859.—The nature of this invention consists in providing an arch *d*, and an intermediate lever *c*, to produce a quick and sudden motion in the valves of the oscillating engine.

*Claim.*—The combination of arch *d* and lever *c*, for the purpose and in the manner substantially as set forth.

No. 23,520.—LEROY S. WHITE, of Waterbury, Conn.—*Improved Burnishing Machine.*—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, so applying two burnishers, in a burnishing machine, that they shall operate simultaneously, at opposite points on opposite sides of the article or piece of work to be burnished, and burnish both sides at once; and that during such operation, each shall serve to support the article or piece of work against the pressure of the other, substantially as set forth.

Second. The combination of the reciprocating and partially rotating shaft *K*, and yoke *D*, or their equivalent, and the tool stock *R*, by means of the rods *S S*, the arm *k*, rod *l*, and arm *m*, the whole operating substantially as and for the purposes specified.

Third. The sliding bars *n n<sup>1</sup> p*, applied in combination with the tool stock carriage, to operate substantially as and for the purposes specified.

No. 23,521.—D. A. WOODBURY, of Rochester, N. Y.—*Improved Variable Cut-off for Steam Engines.*—Patent dated April 5, 1859.—This invention consists in the combination of a vibrating yoke *D* attached to the stem of a cut-off valve, and a rotary cam or wiper wheel *E*, deriving a positive rotary motion from the engine, which provides for the opening of the cut-off valve always at the proper time, and the closing of the same to cut off the steam at any point in the stroke of the engine that may be desired.

*Claim.*—The combination of the vibrating yoke *D*, attached to the valve stem, and the rotary cam, or wiper wheel *E*, having arc-formed tappets, or wipers *h h*, the whole being applied and operating substantially as set forth.

No. 23,522.—WILLIAM H. YATES and GEORGE YATES, of Chittenango, N. Y.—*Improved Method of Sawing Shingles from the Bolt.*—Patent dated April 5, 1859.—This invention relates to an improvement in that class of shingle machines in which a circular saw is employed for cutting the shingles from the bolt, and the bolt fed to the saw by hand. This invention is designed to facilitate the manual operation of such machines, and enable the operator to present the bolt obliquely to the saw, so that the shingles may be sawed therefrom in taper form, and cut but and point alternately from either end of the bolt.

*Claim.*—The adjustable bar *H*, and the carriage *E*, provided with the adjustable dog *e*, connected with the hand lever *F*, the whole being arranged for joint operation as and for the purpose set forth.

No. 23,523.—ANTHONY ZINK, of Lancaster, Ohio.—*Improvement in Trace Fastenings.*—Patent dated April 5, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim.*—A new article of manufacture, to wit: a trace fastening, consisting of the metal ferrule *B*, provided with a circular groove *E*, running in the path of a vertical circle, and two slots *a a*, running at right angles to the groove, and a metal cap *F*, having two lugs *c d* on its inner circumference, with a space existing between them and its head, and a plate *b*, extending from the circumference of the head some distance into the side of the trace, all as set forth.

No. 23,524.—JAMES BLACK, of Philadelphia, Pa., assignor to GEO. M. WORL and WM. S. WORL, of said Philadelphia; and the said GEO. M. WORL assigned his interest in the same to WM. S. WORL aforesaid.—*Improved Steam Engine.*—Patent dated April 5, 1859.—The nature of this invention consists in connecting one end of a piston rod to a hoop *F*, which revolves on fixed circles set eccentrically to the shaft *B*, upon which the cylinder *A* turns, in which said piston turns.

*Claim.*—The arrangement of the cylinder *A*, hoops *F F*, and the disks or wheels *G G*, when said disks are set eccentrically to an axle which pierces the cylinder transversely, and one end of the piston rod of the cylinder is connected with and operates the hoops, substantially in the manner specified.

No. 23,525.—LEVI W. BUXTON, of Nashua, N. H., assignor to JOSEPHUS BALDWIN and L. KIMBALL, of said Nashua.—*Improved Bedstead Fastening.*—Patent dated April 5, 1859.—



The end of the piece *e*, which projects into the rail, is provided with a hole corresponding to a slightly conical hole in the rail *d*, conical pin *h* is driven through these holes in the rail and piece *e*, a pin *g* is inserted through the post, and supports a small friction roller *f*, in the groove *c*. The end of the piece *e*, which projects into the post, is made into a hook *e*<sup>1</sup>, which is to be slipped over the friction roller *f*, when it is desired to fasten the rail to the post.

The inventor says: I *claim* the combination of the shoulders *J J*, on the locking or rail piece *e*, with the notched or serrated circular edges *l l* and conical pin *h*, substantially as and for the purposes set forth.

I also claim the combination of the hook *e*<sup>1</sup> with the tube or friction roller *f* and stationary pin *g*, substantially as and for the purposes described.

No. 23,526.—JACOB EDSON, of Boston, Mass., assignor to Himself and H. F. GARDNER, of said Boston.—*Improved Carpet Sweeper*.—Patent dated April 5, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, holding the rubber tire upon the driving wheel by means of the groove *c*, formed in the said wheel as described, whereby I am enabled to use a cheaper form of soft or elastic tire than would otherwise be possible, as set forth.

Second. The use of the flap or float *h*, arranged and operating as described, for preventing the escape of dust and the wear of the brooms, as set forth.

Third. Arranging two sets of brooms on their common shaft in such a manner that they shall cross each other diagonally, as described, and for the purposes set forth.

Fourth. Holding the brooms upon their shaft by sectional adjustable clamps that reach by or overlap each other, whereby, while every portion of the brooms is securely held, they can be adjusted at pleasure or new ones inserted.

Fifth. Hanging the broom shaft in such a manner by means of the hinge or pivot joint and yielding spring, that the brooms will adapt themselves to any and all inequalities of the surface to be swept, and at the same time perform their work thoroughly.

No. 23,527.—WILLIAM C. GRIMES, of Philadelphia, Pa., assignor to Himself and R. B. FITTS, of said Philadelphia.—*Improved Washing Machine*.—Patent dated April 5, 1859.—This invention consists in suspending, within a washbox *A*, two washboards or corrugated plates *B C*, and depending from its own rock shaft *e i*, so as to oscillate freely within the said box; the bottom of the latter having a double curvature in the form of two arcs of circles concentric with the centres of the rock shafts respectively.

*Claim*.—The combined arrangement of the two parallel rock shafts *c* and *i*, having the washboards *B* and *C* attached thereto respectively and connected together by the flexible apron *D*, as described, in combination with the double curved bottom *m* and *m*<sup>1</sup> of the box *A*, the same operating together in the manner and for the purpose set forth and described.

No. 23,528.—WILLIAM C. GRIMES, of Philadelphia, Pa., assignor to Himself and R. B. FITTS, of said Philadelphia.—*Improved Portable Steam Generator*.—Patent dated April 5, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I *claim*, first, making the three distinctively specified parts, consisting of the furnace *A*, the boiler *B*, with its external cylinder *K* and float *V* attached, as described, and the reservoir *H*, so as to be readily separated from each other and re-adjustable at any moment, as specified, in the manner and for the purpose set forth and described.

Second. Making the boiler *B* self-supplying (with water) by means of the float *V* and its containing cylinder *K*, arranged in connection with the boiler, as described, the same operating together in combination with the reservoir *H*, substantially as set forth and described.

Third. I also claim making the furnace *A*, with an annular chamber between the fire cylinder *D*, the outside shell *A*, and the rings *C* and *F*, when the same are constructed, arranged, and combined together, and with the other parts of the boiler, so as to cause the air which supports the combustion of the fuel in the said cylinder *D* to pass down through the said annular chamber *F* before it enters the said fire cylinder *D*, as and for the purpose set forth and described.

No. 23,529.—GUSTAVUS A. LILLIENDAHL, of New York, N. Y., assignor to MARTHA J. COSTON, of Washington, D. C.—*Improved Pyrotechnic Night Signals*.—Patent dated April 5, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, inclosing the necessary charges of pyrotechnic composition for producing signal fires within cases whose sides are composed of thin paper and tin-foil, substantially as set forth.

Second. Separating the respective layers of composition, in the above mentioned cases, by means of thin partitions or disks, substantially as set forth.

Third. Charging the aforesaid cases with such proportions of combustible and non-combustible materials as will allow the cases to be all made of the same length, and also enable a socket to be formed at the lower end of each of said cases, substantially as set forth.

Fourth. So proportioning the paper and tin-foil portions of the aforesaid cases that a



sufficient portion of the tin-foil will project above the stiff sides of each of said cases, to form when bent inwards, a metallic covering for the top of the same, substantially as set forth.

No. 23,530.—JAMES H. MOSHER, of New York, N. Y., assignor to Himself and ANSON P. COLT, of said New York.—*Improved Steam Pressure Gauge*.—Patent dated April 5, 1859.—This invention relates to mercurial gauges which have their index closed at the top, and it consists in certain means by which provision is made for the charging of such gauges in a proper manner by persons having no previous practice in charging gauges, and while said gauges are in their places attached to boilers; also, for renewing the air in the index leg from time to time, as may be desirable.

*Claim*.—So applying the valves *E c* in combination with each other that the gauge may be charged while both legs are open to the atmosphere, as described, and that the air above the mercury in the index tube may be caused to have an ordinary atmospheric pressure while the mercury is at zero, and there is only the pressure of the atmosphere on the back leg.

No. 23,531.—WILLIAM H. MCNIECE, of Conshohocken, Pa., assignor to WALTER CRESSON, of said Conshohocken.—*Improved Gauging Device attached to Hand-Saws*.—Patent dated April 5, 1859.—This invention consists in fitting an adjustable or folding blade or plate *B* in the metal rib or back bar *c* of the saw, whereby said blade or plate in connection with the rib or back bar of the saw produces the combination of the back saw *A*, square, and bevel.

*Claim*.—As a new and useful article of manufacture, the back saw *A*, with the folding or adjustable blade *B* fitted in its rib or back bar *c*, substantially as described.

No. 23,532.—JULIUS A. PICKERING, of Milford, Mass, assignor to WILLIAM WALKER, of said Milford.—*Improvement in the Mode of Attaching Straps to Boot Legs*.—Patent dated April 5, 1859.—The inventor says: I make a cut through the boot leg, where it is desired to place the strap, as at *C D*, cutting through both parts, and passing one part of the strap on each side at the top. I then insert the ends between the parts at the cut, and secure them below the cut in the usual way.

*Claim*.—Supporting or retaining the loop or upper part of the strap, in the manner and for the purpose substantially as set forth and described.

No. 23,533.—GEORGE W. RANDALL, of Boston, Mass., assignor to Himself and REUBEN J. TODD, of said Boston.—*Improvement in Faucets*.—Patent dated April 5, 1859.—The nature of this invention consists of a combination of two taps or valve tubes *B C* and a case or body *A*, provided with conduit pipes *D D*, the whole being arranged and applied together in such manner as to enable either of the currents of fluid conducted into the case by either of its conduits to be discharged out of the lower end of the inner tap or valve *C*, and the remainder of the currents to be shut off therefrom.

The inventor says: I *claim* the combination of the auxiliary or inner tap with the outer tap and the conduit case, provided with two or more conduits, the whole being constructed and made to operate together, substantially as described.

I also claim the arrangement of the air passage *d*, so as to discharge, with reference to the discharging end of the inner tap, substantially as described.

No. 23,534.—D. J. WILCOXSON, of Milan, Ohio, assignor to Himself and ISAAC COLLINS, of Huron, Ohio.—*Improved Ships' Steering Apparatus*.—Patent dated April 5, 1859.—These improvements in steering apparatus for vessels relate to that class in which two parallel screws are used to control and give motion to the rudder, the nuts of which act on the yoke of the rudder-post.

The inventor says: I *claim*, first, the combination of the double yoke with the traversing nuts, arranged substantially as described, and for the purposes set forth.

Second. Arranging the screws by which the rudder is turned on either side and below the top of the rudder-post, so that, in case of accident, the tiller may be used to steer the vessel without its being interfered with by the steering mechanism.

No. 23,535.—CUTTING B. WILEY, of Adrian, Mich., assignor to Himself and ALEXANDER STEBBINS, of Lenawee county, Mich.—*Improved Hub-Borer*.—Patent dated April 5, 1859.—This invention consists in the combination and arrangement of the screw *C*, having a bearing at the top and the bottom in the frame *A*, with the sliding cutter heads *G* dovetailed to the ways and attached near the top on each side to the nut *K* by connecting rods *H*, by means of which the cutter heads rise and fall with the nut.

*Claim*.—The combination of the sliding cutter head *G* with the adjustable ways or slides *E*, with the nut *K*, and screw *C*, the whole being arranged as described, and for the purpose set forth.

No. 23,536.—MARTHA J. COSTON, of Washington, D. C., administratrix of the estate of B. FRANKLIN COSTON, deceased.—*Improved Pyrotechnic Night Signals*.—Patent dated April



5, 1859.—This invention consists in a method of signaling any numerals or combination of numerals by the display of different pyrotechnic fires.

*Claim.*—The signaling of any numeral, combination of numerals, or any character, or any combination of characters, by a methodical exhibition of different pyrotechnic fires, substantially as set forth.

No. 23,537.—I. WALLACE ARNDT, of Green Bay, Wis.—*Improved Machine for Noting the Sums of Numbers added.*—Patent dated April 12, 1859.—This invention consists in arranging a swivel arm *d* with a pointer in such relation to a ratchet wheel *D*, and to a dial plate *B*, marked with units, hundreds, and thousands, that by turning the arm until the pointer points to a certain figure in the unit scale of the dial plate, the ratchet wheel is rotated, and that by this operation, and by the aid of a series of pinions *ch i* and gear wheels *F G H I*, three indexes *c m k* are rotated on the face of the dial, one of which indicates the units, another the hundreds, and the third the thousands.

*Claim.*—The arrangement of three indexes *c m* and *k* on a dial marked with units, hundreds, and thousands, in combination with the swivel arm *d*, the ratchet wheel *D*, and the pinions *c h* and *i*, and with the gear wheels *F G H* and *I*, or their equivalents, to operate substantially as and for the purpose specified.

No. 23,538.—WILLIAM H. ARNOLD, of Washington, D. C.—*Improved Projectile for Fire-Arms.*—Patent dated April 12, 1859.—In the drawings, *B* represents a conical ball of ordinary form, with a cavity in its rear portion, cast upon a metal rod *R*, whose axis is coincident with that of the projectile. The rod *R* may be either plain or its rear extremity may be split, a small ring *a* being used to hold the branches together.

*Claim.*—Combining with hollow base projectiles *B* a shaft *R*, split at its extremity, and otherwise constructed as described.

No. 23,539.—J. E. ATWOOD, of Mansfield Centre, Conn.—*Improvement in Gauging Threads.*—Patent dated April 12, 1859.—This invention consists in a series of rollers *c c c*, so arranged and applied as to constitute a number of gauges through which the thread to be sorted or measured is conveyed by suitable means, and by which its thickness is measured at several points at the same time, and a multiplied measurement is obtained.

*Claim.*—The apparatus consisting of a series of rollers, or other equivalent devices, so arranged and applied that their surfaces combine to constitute a number of gauges through which the thread is conveyed by suitable means, and by which its thickness is measured at two or more points at the same time, and a multiplied measurement is obtained, substantially as described.

No. 23,540.—SILAS D. BALDWIN, of Milwaukee, Wis.—*Improvement in Gas Regulators.*—Patent dated April 12, 1859.—This invention belongs to the class of regulators where it is designed to regulate the passage of gas from the supply to the delivery pipe, by the pressure of the gas itself, so that whenever that pressure shall become extreme the transmitting space between the valve and its seat shall be so much diminished or contracted as to keep the pressure of the gas in the delivery pipe at that degree which may be desired.

The inventor says: I *claim*, first, the annular recess or chamber *W*, for the purpose stated.

Second. And in combination with a regulator having such recess, I claim the union piece *u*, arranged and operated as set forth.

No. 23,541.—JAMES K. BARKER, of Lawrence, Mass.—*Improved Shutter Operator.*—Patent dated April 12, 1859.

The inventor says: I use a block or arc *A* for wooden buildings, and *B* for brick or stone buildings, which I fasten to any part of the blind centreing nearly with the centre of motion of the blind, or to the building directly above or below the centre of motion of the blind. These blocks or arcs are the leverage by which I control the exterior blinds from the inside of buildings. I then arrange the pipes *G*, which are made very smooth on the inside, to avoid friction and wear to the cord or chain. I then fasten one end of the cords or chains to the blinds at *H*, and pass them around the block *A* or *B*, and through the outside pipes *G*, into the pockets of the window jamb. I then, from the inside of the building and through the aperture made to receive the inside pipe *I*, pass a wire bent in the form of a hook, and draw the cords from the jamb and fasten them to the straps *C*. I then, by means of the knob *F*, which is slipped into one of the holes of the straps, make the blind fast either open or shut.

The inventor says: I *claim* the use of the block or arc *A* and *B*, of convenient size, to be fastened to the blind or building, as described in the specification, and for the purpose described.

I also claim the design of arranging the pipes and cords, and the design of opening, shutting, and fastening exterior blinds, in the inside of buildings, by means described in the specification.



No. 23,542.—FREDERICK S. BARNARD, of New York, N. Y.—*Improvement in Dovetail Joints for Wood, &c.*—Patent dated April 12, 1859.—The nature of this invention consists in tongued and grooved sectional dovetail, so constructed that the tongue can be entered into the groove for any length of material, and then the dovetail of the tongue is slipped into the dovetail of the groove by an endwise movement, which draws the joint tightly together, in a manner that is permanent, durable, easily applied, without the use of glue or cement, and will insure a perfectly tight or close joint.

*Claim.*—The tongued and grooved sectional dovetail joint, to connect wood or other material together, substantially in the manner specified.

No. 23,543.—ALEXANDER BECKERS, of New York, N. Y.—*Improved Stereoscope Case.*—Patent dated April 12, 1859.—This invention consists in confining the pictures by means of an elastic frame E, which adapts itself to different sizes of pictures, and which, by means of a hook C in the centre of its upper bar, assists in placing the picture properly in the centre; and it also consists in arranging two arms H, one on each side of the stereoscopic case, which arms form the bearings for the upper one of the two shafts on which the chain C revolves, carrying the picture frames.

The inventor says: I *claim*, first, the picture frames E, constructed of elastic wire, or of any other suitable substance, and provided with a hook C, for adjusting the pictures in the centre, substantially as described.

Second. I claim the arms H, arranged in such relation to the pictures, that by the motion of the arms each of the pictures, when brought before the eye glasses, can be moved to and from the same, until it comes into the proper focus, substantially in the manner specified.

No. 23,544.—ABNER BEELER and JOHN B. CHRISTIAN, of Mount Carroll, Ill.—*Improved Pump.*—Patent dated April 12, 1859.—This invention consists in the employment of three concentric cylinders G H I, one stationary, and the other two sliding, each provided with a valve *m h i*, and so arranged in connection with the other parts of the pump as to raise a continuous stream of water.

*Claim.*—The combination of two sliding cylinders with each other, and with a third stationary cylinder, arranged and operating substantially in the manner and for the purposes specified.

No. 23,545.—FRANCIS H. BELL, of Washington, D. C.—*Improvement in Self Priming Gunlocks.*—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim.*—The combination of mechanical devices, substantially as described, with the slide E, by means of which the latter can be either kept rigidly in position over the mouth of the magazine chamber, thus intercepting all communication with the latter, or be thrown in gear with the lock plate, so that by cocking the hammer it will be operated in such manner as to force a cap from the magazine chamber into the discharge chamber of the hammer on the descent of the latter upon the nipple, for the purposes set forth.

No. 23,546.—JACOB BENNER, of Allegheny, Pa.—*Improvement in Grain Separators.*—Patent dated April 12, 1859.—The nature of this invention consists in a mechanical arrangement of a suction fan *n* and a revolving distributing table *j*, furnished with beaters *s*, in connection with a receiving chamber D, separating chamber C, gathering chamber E, and a collecting chamber B, the whole being arranged and combined for the purpose of effectually separating all foreign matter from wheat and other grain.

The inventor says: I *claim*, first, The arrangement of the receiving chamber D, separating chamber C, collecting chamber B, and gathering chamber E, when used in connection with the suction fan *n*, as described and represented, and for the purpose set forth.

Second. The arrangement of the shutes *e*, valves *f*, when used in connection with the conical or convex bottom *h* of the chamber B, as described and for the purpose set forth.

No. 23,547.—JACOB BENNER, of Allegheny, Pa.—*Improvement in Smut Machines.*—Patent dated April 12, 1859.—The nature of this invention consists in the arrangement of a fan *m*, separating and discharging flues D F, and a revolving drum *r*, furnished with beaters *q*, in connection with receiving, distributing, gathering, and eddy chambers A B C L, the whole being arranged and combined for the purpose of separating smut and other impurities from wheat and other grain.

The inventor says: I *claim*, first, The use of plate with the cone 8, and the opening *o* between the lattice-work *v* and plate *p*, when used in connection with the suction fan *m*, the beaters *q* on drum *r*, and the flues D F and *e*, as described and for the purpose set forth.

Second. The arrangement of the chambers A B C and L, and the flues D F and *e*, when used in combination with suction fan *m*, lattice-work *v*, opening *o*, plate *p*, with cone 8, and beaters *q* on drum *r*, as described and for the purpose set forth.

Third. The use of the straight or perpendicular part X with cap 7 of the casing *y* of cham-



ber A, for the purpose of forming an eddy in chamber L, as described and for the purpose set forth.

No. 23,548.—HIRAM BERDAN, of New York, N. Y.—*Improved Bread Cutter*.—Patent dated April 12, 1859.—This invention consists in the employment of a large cylinder A placed vertically, with its upper end level with one floor of the building, so that dough can be emptied into it from above.

The inventor says: I *claim* the arrangement of certain devices, viz: the adjustable cavities, or their equivalents, in combination with the cutting off knife, or its equivalent, and the large cylinder and piston, or their equivalents, and so connecting the several parts that the amount of dough displaced by the piston shall be exactly equal to the cubic contents of the cavities presented for filling between each stroke of the cutting off knife, substantially as and for the purpose specified.

I also claim the devices for rounding up the loaves as they fall from the cavities, consisting of the grooved roller and shield, or their equivalents, the roller having a vibratory motion, in the manner and for the purpose specified in combination with the preceding arrangement of devices claimed, substantially as and for the purpose specified.

No. 23,549.—DOUGLAS BLY, of Rochester, N. Y.—*Improvement in Attaching Thills to Vehicles*.—Patent dated April 12, 1859.—The inventor says: My invention consists in an improved method of attaching the thills and pole to carriages or other vehicles, by which three important advantages are obtained. First, Seventy-five per cent. of the requisite expense is saved. Second, Increased securities against accidental disengagement. Third, Great convenience in changing the thills for a pole, and *vice versa*.

*Claim*.—The construction and arrangement of the movable piece or block E, having the notch G and screw shank in half, and slightly wedge shaped, in combination with the oblique shoulder H on the notched screw shank R, and with the hook J of the block D, substantially in the manner and for the purposes set forth.

No. 23,550.—MICHAEL BRAYER, of Rochester, N. Y.—*Improved Device for Drawing Sawdust, &c., from Stave Machines*.—Patent dated April 12, 1859.—This invention consists in the employment or use of levers *n n* fitted in the bed A of the machine, to aid in removing the waste or refuse pieces of the bolts from the machine.

*Claim*.—The employment or use of the levers *n n* in combination with the inclined bed A, arranged substantially as and for the purpose set forth.

No. 23,551.—BARNES CLAYTON, of Philadelphia, Pa.—*Improved Fastening for Shirt Studs*. Patent dated April 12, 1859.—This invention consists in making the post B, with a projecting arm D<sup>1</sup> on its upper side and the front part of the stud capable of being partially rotated in contact with one end of the post, by means of a stem C, which is fixed perpendicularly to the back of the front piece A, passes longitudinally through the post and carries a cross piece D, which is fixed at right angles upon the stem, and in contact with the opposite end of the said post.

*Claim*.—The armed post B in combination with the cross piece D, fixed to the stem C of the front piece A, the same operating together substantially in the manner and for the purpose set forth and described.

No. 23,552.—LEVI H. COLBORN, of Baltimore, Md.—*Improvement in Harvesters*.—Patent dated April 12, 1859.—The spiral cutter revolves, when in action, in the direction of the arrow, through openings in the guard *g*, which are circular, and fit close to the cylindrical cutter *f*, giving a shearing cut between the edges of the cutter and the opposing edge of the openings. The edge of the cutter also comes in shearing contact with the edge of the upper bar or plate *d*, which may be plain or serrated.

*Claim*.—The spiral revolving cutter, constructed and arranged substantially as described, with a continuous opening through its centre, for the purpose specified.

No. 23,553.—I. M. COLMAN, of Milwaukie, Wis.—*Improved Variable Cut Off for Steam Engines*.—Patent dated April 12, 1859.—This invention consists in so combining with the ordinary slide valve *c c* the double seated balanced or equilibrium valve *g g*, as to have it act as a drop valve cut off, variable in its action, and deriving its motions from the movements of the slide valve.

*Claim*.—Combining the double seated balanced or equilibrium valve with the ordinary slide valve of steam engines, as set forth.

No. 23,554.—J. P. CRUTCHER, of Silver Spring, Tenn.—*Improvement in Cotton Seed Planters*.—Patent dated April 12, 1859.—The seed is placed in the chamber C by the door *h*. The frame B being attached to the main frame, allows the chamber C to roll on the bottom of the furrow, and drill the seed from the opening *o*. The clearer *f* prevents the seed from packing in the chamber, and removes whatever soil may adhere to the edges of the discharge opening.



*Claim.*—The rotating hollow chamber C, constructed as described, in combination with the clearer and agitator *f* and swinging frame B, substantially as and for the purposes set forth.

No. 23,555.—JOSIAH DANFORTH, of Middletown, Conn.—*Improvement in Hernia Trusses.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—Uniting, by a screw or rivet, the two springs 4 4, at a given point 2, from the end of each, with pads attached, which can be adjusted to the body without any additional spring, and thereby making the arrangement and combination of the two springs 4 4, with their respective pads, a truss of itself.

No. 23,556.—EDWARD L. DORSEY, of Green Wood, Ind.—*Improved Churn.*—Patent dated April 12, 1859.—The pin *o* revolves eccentrically to the shaft I, so that when said shaft causes the wheel H to revolve the pin *o*, and pitman F communicate an up and down motion to the dashers K, while the teeth of wheel H work between the rounds *n*, of the trundle wheel C, and gives a circular motion to the dashers.

*Claim.*—The employment of the trundle wheel C, staff E, pitman F, and cog wheel H, substantially in the manner herein shown, for the purpose of giving at the same time a vertical and a circular motion to the dashers for churning butter, as is fully set forth.

No. 23,557.—NATHANIEL DRAKE, of Newton, N. J.—*Improvement in Guide Attachments for Vehicles.*—Patent dated April 12, 1859.—This invention consists in having the front end of the draft pole D connected to the strap bar F, by a catch G, which is connected by cords *c* to levers H, placed within reach of the driver's feet.

*Claim.*—The slotted pole strap bar F and catch G, placed on and connected with the draft pole D, respectively, as shown, in connection with the cords *c*, attached to the catch G, passing through the uprights E and shieves *d* of the horse collars, and attached to foot levers H, or their equivalents, substantially as and for the purpose set forth.

No. 23,558.—JOHN B. DUANE, of Schenectady, N. Y.—*Improvement in Sowing Machines.*—Patent dated April 12, 1859.—The board G is vibrated by the teeth *h*<sup>1</sup> on the pulley S, said teeth acting against a beveled projection on the board and the spring *i*, and the board through the medium of the lever H communicates a vibratory motion to the bar E. The seed in box D are kept in a loose state by the movement of the teeth *j*, and, by being agitated by the said teeth, pass down through the perforations *g e*, of the slide *f* and bottom *d*, into the grooves, the discharge passage being regulated by adjusting the slide *f* of the roller F, the roller throwing the seed on the inclined toothed board G, which distributes the seed evenly and in a broadcast manner on the ground.

The inventor says: I *claim*, first, the arrangement of the vibrating toothed board G and agitating bar E, connected by the lever H, in connection with the adjustable slide *f* and perforated bottom *d*, and grooved roller F, the whole being arranged to operate as and for the purpose set forth.

Second. The roller H<sup>1</sup>, when attached to the frame A, by the bent levers I I, and connected with the caster wheels M, through the medium of the bars J J K K L L, arranged substantially as shown and for the purpose set forth.

No. 23,559.—RICHARD H. DUTTON, of Philadelphia, Pa.—*Improvement in Artificial Limbs.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the use of the hardened cylindrical tube A, in constructing joints for artificial limbs, substantially as and for the purposes set forth and described.

Second. The use of the feather spring D, when constructed and arranged, to operate substantially as set forth.

Third. The use of the bolt E and pulley F, when constructed and arranged for the purpose described.

Fourth. The use of the spring G, when constructed and applied to act, substantially as and for the purpose set forth and described.

No. 23,560.—THOMAS FILDES, of Media, Pa.—*Improvement in Oil Cans for Lubricating.*—Patent dated April 12, 1859.—This invention consists in attaching a clamp B to a handle A, in which a lever or pressure bar C is fitted and arranged with a cord *i*, so that the can may be secured in the clamp, and the nozzle of the can directed by the attendant to the desired spot without the aid of a ladder, and the oil ejected from the can by actuating the pressure bar.

*Claim.*—Attaching the oil can D, by means of a clamp B, to a handle A, and using, in connection therewith, the lever or bar C, actuated by the cord *i* and slide *k*, or their equivalents, substantially as and for the purpose set forth



No. 23,561.—JAMES FORD, of Wabash, Ind.—*Improvement in Grain Drills*.—Patent dated April 12, 1859.—The lower part of the box E is provided with two seed slides S, which work longitudinally in grooves in the box E. The slides are perforated to permit the escape of the seed into troughs *l*. The seed, after entering the troughs *l*, fall by their own gravity through them into the tubes H, and thence into the ground. By pressing down the side T the rear side T<sup>1</sup> will be raised, and the tubes H will be lifted from the ground.

*Claim*.—The arrangement and combination of the seed box E, lever N, rod P, slide S, lever M, and tilting frame T T<sup>1</sup>, as and for the purposes shown and described.

No. 23,562.—ELBRIDGE FOSTER, of Hartford, Conn.—*Improvement in Covers for Travelling Trunks*.—Patent dated April 12, 1859.—The nature of this invention consists in the formation of covers or cases to protect travelling trunks and packages from injury while travelling, and, in case of accident, to save them from sinking in the water.

*Claim*.—The air-inflated trunk cover, in the manner substantially as set forth, and for the purposes described, as a new article of manufacture.

No. 23,563.—WASHINGTON L. GILROY, of Philadelphia, Pa.—*Improvement in Coffee Roasters*.—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The arrangement of the two sets of the united staying and guiding pieces B B and B<sup>1</sup> B<sup>1</sup>, on the inner side of the said hollow sphere, each set being placed diametrically opposite to the other, and with their apexes in the direction of the rotary motion of the said sphere, that they may, in succession, operate in combination with the interior spherical curve of the latter, during its rotary motion, to remove the coffee from the middle of the bottom of the said sphere toward the end thereof, and essentially permit it to fall gradually over the edges of the said staying and guiding pieces into the middle of the bottom again, as specified, thus rendering the said spherical coffee roaster perfect in its operation, as described.

No. 23,564.—FAYETTE GOULD, of Huntington, N. Y.—*Improved Callipers*.—Patent dated April 12, 1859.—This invention consists in having an index *e* attached to the sliding jaw C, and operated by a rack *b* and pinion *c*, and the movement of the jaw, so as to give very minute fractional parts of an inch or other divisions marked on the bar A, on which the jaw works.

*Claim*.—In combination with the jaws B C and graduated bar A, the dial plate *f*, and index *e*, the latter being actuated by the pinion *c* and rack *b*, substantially as and for the purpose set forth.

No. 23,565.—HENRY H. GRAHAM, of Paterson, N. J.—*Improvement in Chairs for Railroad Bars*.—Patent dated April 12, 1859.—The binder *d* has a flat or fish shaped head on the inner side of the bar *a*, and a mortise through its body in such a position as to receive the wedge shape spike *e*, which passes down outside of and against the vertical side *c* of the chair and through a mortise in the base of the chair into the cross tie.

*Claim*.—The inventor says: I do not claim a chair taking the side of the rail and coming up to the top thereof, neither do I claim a cross key or bolts uniting the rail by the use of fish bars, or similar devices; but I do not know of any previous instance in which the horizontal binder and vertical key spike have been used to bind the ends of the rails into a chair having a vertical side and fitted to receive the rail.

Therefore I *claim* the horizontal binder *d* and vertical wedge *e*, constructed substantially as set forth, in combination with the chair that receives and sustains the ends of the rails, in substantially the manner described and shown.

No. 23,566.—MARSHALL GRANNISS, of Waterbury, Conn.—*Improved Carpet Fastener*.—Patent dated April 12, 1859.—By turning the forked pieces A A<sup>1</sup> down to a horizontal position, the carpet is stretched and the prongs take a firm hold in the same, and if the wire rods *b* or the arms *b<sup>1</sup> b<sup>1</sup>* of the forked pieces of metal wire A<sup>1</sup> are far enough depressed so that the ears *d d* catch over the same, the strain of the carpet acts to retain the forked piece of sheet metal more firmly in a horizontal position.

*Claim*.—As an improved article of manufacture, a carpet fastener, composed of a plate B, provided with ears *d d*, and a fork or plate A A<sup>1</sup>, having prongs *a a*, as shown and described.

No. 23,567.—EDWIN J. GREEN, of Valparaiso, Ind.—*Improvement in Joint Bodied Buggies*.—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* connecting the front axle of a carriage to the body by means of a swivel joint, composed of shaft G, king bolt E, turning plate D, and stationary plate C, when the latter is secured directly to the body of the carriage, substantially in the manner and for the purpose described.

I also claim connecting the front springs to the coupling, or reach, by means of the shaft G, which is welded or otherwise secured to said springs, as represented.



I also claim, in combination with a hinged carriage body, the braces P and Q, for the purpose of preventing the rear axle from being thrown angling when the carriage is loaded heavier on one side than on the other, substantially in the manner described.

No. 23,568.—IRA GRIGGS, of Utica, N. Y., assignor to the UTICA SCREW MANUFACTURING COMPANY.—*Improved Machine for Threading Screws*.—Patent dated April 12, 1859.—This invention consists in the manner of applying and controlling the operation of the rest, which supports the screw blanks during the threading operation, whereby better provision is made for the support of the blanks in cutting at or near their points; and in depressing the point of the cutter as it approaches the points of the blanks in such a manner as to make it cut screws with tapering points. It also consists in a certain construction of the cutter, whereby it is made to produce a cleaner cut and a truer thread than the cutter ordinarily employed.

The inventor says: I *claim*, first, so applying the rest E, and controlling it by a spring *d*, or its equivalent, as to provide for its longitudinal movement in and independently of the carriage, substantially as and for the purposes described.

Second. Fitting the cutter stock with an eccentric *m*, operated by means substantially as described, to provide for it a movement for tapering the point of the screw, independent of the vibrating movement to feed the cutter, in cutting the other portion of the screw, as set forth.

Third. And though I do not claim, broadly, a two-pointed cutter, I claim the construction of the cutter, with two points, at such a distance apart as to straddle two turns of the thread and the intervening space, substantially as and for the purpose set forth.

No. 23,569.—IRA GRIGGS, of Utica, N. Y., assignor to the UTICA SCREW MANUFACTURING COMPANY.—*Improved Machine for Nicking Heads of Screws*.—Patent dated April 12, 1859.—This invention consists in presenting the screw blanks to the notching saw, and in a novel mode of discharging the blanks from the machine after their notches have been cut.

The inventor says: I *claim* the arrangement of the holding dies and feeding slider in a carrier F, which swings upon the same shaft which carries the cams for operating the said dies and slider, and operates in combination with the notching saw, substantially as described.

And I also claim the discharging of the notched blanks from the holding dies, in a lateral direction, by the introduction of the new blanks into the said dies, as set forth.

No. 23,570.—H. S. HALL, A. D. HUNT, and C. J. WINCHESTER, of Jamestown, N. Y., assignors to H. S. HALL, A. D. HUNT, and C. E. JEFFORDS, of the same place.—*Improved Machine for Tapering Sticks*.—Patent dated April 12, 1859.—This invention consists in the employment of hollow rotating cylinder C, provided with radial sliding bearings *jj*, and one or more cutters *k*, and two feed rollers  $m^1 m^2$ , operated automatically from the driving or power shaft B, whereby the snaths, after being properly steamed and bent, may be finished, rounded, or cut in taper form.

*Claim*.—The rotating cylinder C, provided with the adjustable bearings *jj*, and cutter *k*, one or more, when said bearings and cutter are operated through the medium of the plate D, bar E, with inclined bar *q* attached, and the rack and pinion *ab*, in connection with the springs *e*, or their equivalents, substantially as described.

No. 23,571.—LOREN HALE, of Milford Mass.—*Improved Elastic Polishing Wheel*.—Patent dated April 12, 1859.—This invention consists in a hollow inflated polishing wheel A of India rubber, the surface of which is coated with sand or powdered emery, and which is employed by stretching it over a wheel or cylinder, or over an endless band carried by two drums or wheels.

*Claim*.—As an improvement in wheels for grinding or polishing, the hollow elastic ring, operating as set forth for the purpose specified.

No. 23,572.—WILLIAM J. HAMERSLY, of Hartford, Conn.—*Improvement in Stirrups*.—Patent dated April 12, 1859.—The nature of this invention consists in introducing an elastic device between the loop iron of the saddle and the stirrup, or to the stirrup itself, to relax the rigidity or stiffness of the limbs of the rider.

*Claim*.—As a new, useful, and improved article of manufacture, in a saddle stirrup, the employment of the tube C, spring E, spindle D, or their equivalents, for the purpose substantially as described.

No. 23,573.—H. P. HART, of New Woodstock, N. Y.—*Improved Bed Bottom*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim*.—The arrangement described of the springs *b*, hooks *a*, and rails or rods *g*, in combination with each other, by which the turns of the hooks are made to form shoulders to support the springs against the pressure of the rods *g*, when these are made to bear directly upon both ends of the springs, as described.



No. 23,574.—CHARLES T. HARVEY, of Marquette, Wis.—*Improvement in Piers or Breakwaters.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The inventor says: I do not claim, of itself, a crib or frame of timber filled with stone or other material, and to be sunk on the bed of a river, lake, or sea, as such is well known to engineers.

But I *claim* the combination and arrangement of the adjustable bottom fender or crib H, with the pier constructed substantially in the manner as specified, the said fender being hinged or so applied to the pier as to be capable of adapting itself to the slope of the bottom in front of the vertical side of the pier, and of protecting the foundation of such pier from the corroding action of currents, the whole being substantially as specified.

No. 23,575.—THOMAS HARVEY, of Baltimore, Md.—*Improvement in Horse Collars.*—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim.*—The arrangement of the parts forming the body of a horse collar, and the construction of an underback in such form as that the outer edges of the underback, and the face of the collar, and the outer back are all made perfectly secure by an under seam, and at the same time the under seam is hid from view and wear, as also showing the stitched edge of the outer back in its proper place, all being accomplished previously to the filling of the collar instead of putting on the outer back after the collar is filled, as in the manner in putting together a case collar.

No. 23,576.—THOMAS HARVEY, of Baltimore, Md.—*Improvement in Horse Collars.*—Patent dated April 12, 1859.—The nature of this invention consists in the construction and addition of a fancy welt to a welted horse collar, and so arranged as to show a neat stitched edge, which is brought close down to the face of the collar.

*Claim.*—The construction and addition of a fancy welt to a welted horse collar, the same being perfectly adapted to its location, being alongside of the usual welt, and so formed as to bring it directly down on the face of the collar, and thus showing a stitched edge, as also being in the proper place to prevent the hame-tug from cutting into the collar, as set forth.

No. 23,577.—WILLIAM CLEVELAND HICKS, of Boston, Mass.—*Improvement in Sewing Machines.*—Patent dated April 12, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, transmitting the motion to the needle stock from that cam or crank on the main shaft which drives the said stock, by means of a pinion interposed between the connecting rod and the needle stock, and combining the two by rack-teeth cut on each, and meshing into said pinion, whereby I am enabled to impart to the needle-stock the precise motions of said cam or crank as set forth.

Second. I claim setting the feed wheel, or other feeding mechanism, and the shuttle race, in such position beneath the sewing table, that the direction in which the materials will be fed and sewed shall be in a line parallel with the bracket arm, and toward or into the bight formed by said arm and the table as set forth.

Third. I claim the herein described apparatus for giving out and taking up the slack of the thread, consisting of a partially revolving crank or arm, placed and operating substantially as set forth.

No. 23,578.—W. T. HILDRUP, of Harrisburg, Pa.—*Improvement in Rotary Harrows.*—Patent dated April 12, 1859.—D D are bars, which are pivoted to ears on the lower extremities of the sleeves B B at one end, and to cars on the rear of draft bar at the other. E E are bars which are pivoted to ears near the top of the sleeves and to a piece F which slides freely upon the draft bar C. I I are braces which are secured to the top of the sleeves at one end and to the collar H at the other.

*Claim.*—The arrangement of the bars E E, sliding-piece F and braces I I, draft bar C, substantially in the manner specified, for the purpose of giving two or more harrows a self-adjusting movement, to or from each other, as is fully set forth.

No. 23,579.—SAMUEL A. HILL and DAVID ALTER, of Freeport, Pa.—*Improvement in Lamps.*—Patent dated April 12, 1859.—This invention consists in placing a semi-cylindrical cap E over the top of the wick tube C, said cap having a plate or strip F placed concentrically within it but at a certain distance from it, to allow a suitable space between the cap and strip, both the cap and strip being slotted longitudinally and directly over the wick tube.

The inventors say: We do not claim separately the cap E, nor any portion of the choice covered by the patent granted to P. Plant, April 6, 1858, but we *claim* the arrangement and combination of the strip F within the cap E, as and for the purpose shown and described.

No. 23,580.—W. C. HOLMES, of Barnesville, Ga.—*Improvement in Ploughs.*—Patent dated April 12, 1859.—The interior limb of each beam *a a* is bent up at right angles inwardly, *b*



forming an adjustable brace by being attached; *d* is a hook to be attached when it is wished to change the double into a single stock; *f* is an attached seed dropper, of which *g* is a block through which the axle passes.

The inventor says: I *claim* the arrangement of the double beams *a a*, hook *d*, cross adjustable braces *b* and *c*, shanks *k*, and braces *m*, the whole being constructed in the manner described for the purpose specified.

I also claim, in combination with the above, the seed-dropper *f*, constructed for operation conjointly, as set forth.

No. 23,581.—WILLIAM R. JACKSON, of Baltimore, Md.—*Improved Railroad Car Seat and Couch*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim*.—The method described, of constructing the ordinary reversible seats of railroad cars, so that the backs can be brought down into line with the bottoms; but this I only claim when the backs, when so brought down, occupy the positions previously occupied by the bottoms, and the bottoms are used to fill the intermediate spaces between them, substantially as described and shown.

No. 23,582.—WILLIAM B. JOHNS, of the United States Army.—*Improvement in Knapsacks*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim*.—The construction of knapsacks, so as to be entirely separated from their slings, and with the means of uniting several of them together, and stitching them as described, so that the knapsack will perform the double function of sheltering the soldier and holding his kit, substantially as specified.

No. 23,583.—HENRY JOHNSON, of Washington, D. C.—*Improvement in Burners for Vapor Lamps*.—Patent dated April 12, 1859.—*b* is the packing box screwing upon the pipe *c*, *b*<sup>1</sup> the cotton packing passing around key *a* and held in place by screw box *b* pressing it up against pipe *c* and key *a*; *c* is the fluid pipe, and serves as case or nut to screw key *a*; *g* the burner; *h* the gas pipe leading from the generator *i* to the burner. The generator is cast solid, and then has cylinders or cavities *n o l* drilled in it.

*Claim*.—The generator *i*, burner *g*, and packing box *b*, constructed substantially as described, in combination with gas pipe *h* and fluid pipe *f*, arranged and operating substantially as described, and for the purposes set forth.

No. 23,584.—ISAAC G. JOHNSON, of Spuyten Duyvil, N. Y.—*Improvement in Stove Covers*.—Patent dated April 12, 1859.—The object of this invention is to prevent the warping and destruction of the small centre pieces between the boiler holes in the top plates of cooking stoves and ranges. It consists in constructing the centre piece, shown at *a*, of malleable cast-iron.

*Claim*.—The said centre piece, constructed of malleable cast-iron, as an article of manufacture, as specified.

No. 23,585.—WILLIAM JOHNSON, of Hampstead, N. H.—*Improvement in Machines for Chamfering Soles of Boots and Shoes*.—Patent dated April 12, 1859.—This tool is composed of a knife holder *A*, a stationary edge bearer *B*, a sole rest *C*, spring presser *D*, and a knife *E*; the said knife being provided with a handle *h*, and inserted with the knife holder and held in place therein by a screw *a*.

*Claim*.—The improved chamfering tool, or manufacture, as constructed with its sole rest and presser, arranged with respect to the carrier *f*, and the knife holder, substantially as shown in the drawings, and as specified.

No. 23,586.—WILLIAM KEGG, of Lassellville, N. Y.—*Improved Mortising Machine*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engravings.

The inventor says: I *claim* the method of feeding along the work, as specified, consisting, essentially, of the feeding wedge or wedges *M M*, combined with the arms or projections *N N*, sliding bolts *O O*, and adjustable cams *P P*, and arranged in connection with the feeding table *G*, frame *A*, and sliding frame *B*, substantially in the manner described.

I also claim the adjustable stops *Q Q* and notches *m m*, in the wedges *M M*, with their suspending hooks or staples *n n*, arranged as described, in combination with the feeding apparatus, for the purpose set forth.

I also claim the combination of the double scale *d*, on the face of the feeding table *G*, with the movable or adjustable pointer *f* in the bed piece *E*, arranged and operating in the manner and for the purposes specified.

I also claim the supporting index standard *F*, in combination with the scale *g* and arrangement *a a b c*, for adjusting the bed piece of the feeding table in position, and securing it in place, substantially as described.



I also claim the "keytenon," T fitting into the oblique groove *v*, in the bottom of the feeding table G, for the purpose of properly securing and tightening the said table on the bed piece E, while at the same time the desired freedom of its motion is allowed, substantially as set forth.

No. 23,587.—GILBERT J. KINGSBURY, of Rochester, N. Y.—*Improvement in Stoves*.—Patent dated April 12, 1859.—The coal is fed into the feeding cylinder D through the side door E, where it descends the inclined plane *m* and falls on the bottom grate F, on which the fire is kindled. The door E being closed, air is supplied through the opening *i* to the ash chamber H, the draft ascending through the coal and through the spaces *b* of the side grate, and thence around cylinder D to the top of the stove, where the products of combustion escape through the pipe G.

*Claim*.—Constructing the fire pot or furnace B so that a portion thereof is flaring or funnel shaped, yet having side grates or bars, with perpendicular faces *a* and flame passages *b*, with air tubes and jets *i o* and grate cap C, when combined with the interior feeding cylinder D; the whole arranged and operating substantially in the manner and for the purpose shown and described.

No. 23,588.—SAMUEL LAMON and W. S. GASKILL, of Van Wert, Ohio.—*Improved Device for Heating Feed Water of Steam Boilers*.—Patent dated April 12, 1859.—This invention consists in introducing the exhaust steam of an engine into a cylindrical vessel, provided with spiral water passages around it in a perpendicular way, and through which the water is introduced in a very circuitous manner into the boiler, and exposed to the steam during the passage through said cylinder, so as to become heated thereby.

*Claim*.—The cylinder or other suitable vessel A, provided with the induction and eduction exhaust steam pipes B C, and the spiral or helical feed water passages E, arranged substantially as and for the purpose set forth.

No. 23,589.—A. B. LATTA, of Cincinnati, Ohio.—*Improvement in Steam Generators*.—Patent dated April 12, 1859.—This invention consists of a curved cast-iron pipe A, provided in the middle with a mouth piece B for the reception of the end of the main coil or pipe, on the latter of which is cut a male screw, which enters a female screw thread *b*, cut in the end of the mouth B of the dividing piece. Through the middle of the curved pipe A, opposite the centre of the mouth piece B, and leading into it, is fitted securely a partition D, which divides the pipe into two branches.

*Claim*.—The method of regulating the circulation of water through the division coils, by means of a dividing piece A, constructed in the manner and for the purposes substantially as set forth.

No. 23,590.—RICHARD S. LAWRENCE, of Hartford, Conn.—*Improvement in Self Priming Gunlocks*.—Patent dated April 12, 1859.—This invention is an improvement in the introduction of the pellets into the tube or magazine provided for them in the lock plate, and provision is made for shutting them off to permit the use of common percussion caps in the ordinary manner when desired, and to prevent the pellets from interfering with or being interfered with by the movements of the hammer, when desired to operate the hammer, without delivering the pellets.

The inventor says: I *claim*, first, the "shut-off" *g*, constructed, applied, and operating substantially as and for the purposes specified.

Second Constructing the driver with its rear portion about double the thickness of the pellets, and with the wedge like bevel *11* and the groove *12*, substantially as and for the purpose described.

Third. The combination of the downwardly extending tooth *20* of the cover spring, and the notches *17* and *18* in the shut-off, and *k* in the lock plate, substantially as and for the purpose set forth.

No. 23,591.—HENRY LOCKWOOD, of New York, N. Y.—*Improved Alarm Lock*.—Patent dated April 12, 1859.—This invention consists in having both the latch and bolt of the lock connected with the hammer of the bell in such a manner that an alarm will be sounded by operating either the latch or the bolt.

The inventor says: I *claim*, first, the bar L, provided with the buttons *e e*, connected with the hammer rod D, and arranged with the latch E and bolt J, provided with projections *g h*, substantially as and for the purpose set forth.

Second. The movable or adjustable plate or disk M, arranged with the key-holes *j k k*, and provided with projections *j<sup>1</sup>*, to act on the button *i* of the bar L, substantially as and for the purpose set forth.

Third. The combination of the plate or desk M and bar L, when arranged with the latch E and bolt J, to operate as described.



No. 23,592.—GILDEROY LORD, of Watertown, N. Y.—*Improvement in Harvesters*—Patent dated April 12, 1859.—The nature of this invention consists in so constructing the rake head, and arranging it relatively to an endless belt O, and to a tripping foot or hand lever Q, that the rake will be when at the near side of the platform A, and in a horizontal position, out of gear with the belt, and in gear with the foot lever, and remain so until the proper quantity of grain is cut and deposited on the platform.

The inventor says: I *claim*, first, the rake head, constructed as described, in combination with the endless belt O, and tripping foot or hand lever *q m*, substantially as and for the purposes set forth.

Second. The combination of the ledge L<sup>1</sup> with the spring catch L of the rake head, arranged substantially as and for the purposes set forth.

No. 23,593.—EDWARD LYNCH, of Washington, D. C.—*Improvement in Steam Boilers*.—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—Circulating the water and aiding the generating of steam in the main boilers of ocean steamers, by passing the steam from the steam space of an auxiliary boiler into the water of the water space, below the ash pit of the main boilers, as set forth.

No. 23,594.—EDWARD LYNCH, of Washington, D. C.—*Improvement in Steam Engines*.—Patent dated April 12, 1859.—This improvement is upon the geared engine, and is designed to drive a propeller with high speed. The invention is one of arrangement of the various parts of an engine in relation to each other, by which a very compact and efficient engine of easy access can be placed entirely below the water line of the vessel. This improvement may be used with a jet condenser or as a non-condensing engine.

The inventor says: I *claim*, first, the arrangement of the several parts of the engine, in their relation to each other and to the propeller shaft, set forth.

Second. I claim constructing the connecting rod of one of the cranks or cross heads, in the manner described, so as to allow of its surrounding the propeller shaft, as described.

No. 23,595.—HENRY MARTIN, of Louisville, Ky.—*Improved Folding Life Boat*.—Patent dated April 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The described arrangement of the ribs, one half of which fold towards one, and the other half towards the other side, in combination with the hinged bottom boards D, which, by means of slots *e*<sup>1</sup>, secure the ribs in an upright position, and which are provided with seats E, which are hinged to the bottom boards by means of rods *d*, and which are connected by the dovetailed projections *d*<sup>1</sup>, the whole being constructed and operated substantially as and for the purpose set forth.

No. 23,596.—JONATHAN M. MATTHEWS, of New York, N. Y.—*Improvement in Carpet Bags*.—Patent dated April 12, 1859.—At the centre of the upper part of one of the frames A, a lock D is placed. This lock secures the upper ends or parts of the frames A B together, and at each side of the frames there is a catch E. This catch secures the sides of the frames together, preventing them from springing out.

*Claim*.—The combination of the two frames A B, with the catches E E, substantially as and for the purpose specified.

No. 23,597.—JOSEPH W. MAUTERSTOCK, of New York, N. Y.—*Improvement in Metallic Laths*.—Patent dated April 12, 1859.—The parts *b b*<sup>1</sup> *b*<sup>1</sup>, of the plates formed between the slits *a a*<sup>1</sup> *a*<sup>1</sup>, are made into a double series of ridges and furrows, by raising one strip in an angular or curved form and depressing the next one in the same row through the series.

*Claim*.—As an improved article of manufacture a metallic lathing, composed of plates, provided with slits, ridges, and furrows, as shown and described.

No. 23,598.—JAMES MONTGOMERY, of Baltimore, Md.—*Improved Screw Propeller*.—Patent dated April 12, 1859.—A is the shaft of the propeller, B B are helical blades, act separately, and each formed with a segmental flange *b*, which flange is made to clasp the shaft and are secured firmly by bands D, so as to form the hub of the screw. C is a cylindrical casing surrounding the periphery of the blades, and firmly attached thereto by tenons *c*.

*Claim*.—A screw propeller, composed of a plurality of blades attached to their shaft, in one frame, or nearly so, when surrounded by a containing cylinder firmly attached to the peripheries of the said blades, substantially in the manner and for the purpose set forth.

No. 23,599.—RICHARD MONTGOMERY, of New York, N. Y.—*Improved Machine for Corrugating Metal Plates*.—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, feeding the sheets, or plates of metal, at the proper time, by a feeding device, constructed and operated substantially as described.



Second. The feeding device above described, in combination with the adjusting pins, on the first set of corrugating rolls, as set forth.

Third. The combination of two sets of corrugating side guides *h h*, constructed, arranged, and operated, substantially as shown and described.

Fourth. I also claim the corrugated sweeping and forming roll *w*, constructed and used as and for the purposes described.

No. 23,600.—THOMAS W. H. MOSELY, of Cincinnati, Ohio.—*Improvement in Attaching Iron Roofing*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I *claim*, first, securing the metallic roofing to the ribs, or purlins, so that it may slide or move freely upon and in the direction of the length of the purlins, substantially as set forth.

Second. I claim securing the purlins to the rafters of the building, so that they may have freedom of motion in the direction of their length, substantially as set forth.

Third. I claim the combination of the chairs *c*, double flanged rail *e*, anchors *n*, and metallic roofing *m*, as set forth.

No. 23,601.—E. P. NEEDHAM, of New York, N. Y.—*Improvement in Reed Musical Instruments*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I *claim*, first, applying and arranging two or more actions, one above another, above the rear portion of the key board of a harmonium, or other reed instrument, in such a manner, substantially as described, that one or more of such actions may be removed at any time, and any one be exposed for repair or other purpose.

Second. In combination with the so arranged actions, I claim the passages *e e*, and upright passage *f*, arranged as described to combine the said actions with the bellows.

Third. Combining the several valves, or two or more of them, with the key, by a system of push pins, or other equivalent direct connection from one valve to another, substantially as described.

Fourth. The sound board *g*, applied to constitute the back of the wind passage *f*, substantially as described.

No. 23,602.—JOHN F. PAGE, of Philadelphia, Pa.—*Improvement in Spark Arresters*.—Patent dated April 12, 1859.—This invention consists in a casing *B*, having a number of openings *d* at the side, and a deflecting plate *h* attached to the upper edge of each opening, said casing being arranged in respect to the chimney *c*, the deflector *G* above the same, and the exterior casing *A* of a spark arrester, so as to afford means of readily disposing of the sparks, and allow the escape of steam and products of combustion.

*Claim*.—The intermediate casing *B*, with its openings *d*, and deflecting plates *h*, when arranged in respect to the chimney *c*, the deflector *G*, and the outer casing *A*, substantially as and for the purpose set forth.

No. 23,603.—JAMES B. PARISH, of Cleveland, Ohio.—*Improvement in Coffee Pots*.—Patent dated April 12, 1859.—The ground coffee is put into the body of the pot, and boiling water poured upon it. The condensing cup *C* is then placed upon it, and filled nearly to the top of the spiral tube *F*, with cold water, and the valve cover *E* introduced. In boiling the coffee, the aroma will be condensed in passing along the spiral tube *F*, and will flow back into the body of the coffee pot.

*Claim*.—The fluid valve cover *E*, as arranged with the cup *C*, and the helical condensing tube *F*, all operating in the manner and for the purposes set forth.

No. 23,604.—FREDERICK C. PAYNE and ALFRED REID, of New York, N. Y.—*Improved Wardrobe*.—Patent dated April 12, 1859.—The nature of this invention consists in so constructing a secretary or wardrobe as that it shall possess the combined advantages of both and a toilet accommodation; and also, by bringing one end thereof forward, either to the right or left, so that one end shall be in parallel line with the wall of the room, a bed arrangement may then be produced from the back thereof.

The inventors say: We *claim* the combined arrangement with a secretary or wardrobe, of a bed in the back thereof, substantially in the manner and for the purpose described.

Also, the arrangement of the brackets *L*, board *M*, for the twofold purpose of folding compactly, to hold the clothes in place, the folding legs *K*, the pulleys *P*, the cord *R*, weight *S*, as and for the purpose described.

No. 23,605.—AUGUSTUS H. PHELPS, of Trenton, Mich.—*Improved Water Cooler*.—Patent dated April 12, 1859.—The nature of this invention consists in having the substance to be cooled separate from the cooling compound, and protection of the faucet from the action of cold, by being surrounded by an air chamber *D*.



The inventor says: I *claim* the arrangement or combination of the tank C, the refrigerator B, and nonconducting chamber or casing.

I also claim, in combination with the preceding, the air chamber D, surrounding the faucet; all the parts arranged substantially as and for the purpose described.

No. 23,606.—LEONARD L. POLLARD, of Worcester, Mass.—*Improvement in Treeing Sticks*.—Patent dated April 12, 1859.—The handle B is made with projecting nibs or studs *o o*, and in each end of A are cavities to receive these nibs; to the handle B the rod *c* is firmly attached, and passes through A and the other handle, and has a screw on its end, on which a nut fits, which holds all together.

*Claim*.—As a new article of manufacture, the described treeing stick, when constructed and operating in the manner and for the purposes set forth.

No. 23,607.—ROBERT RAMSEY, of New Wilmington, Pa.—*Improved Clothes Frame*.—Patent dated April 12, 1859.—The nature of this invention consists in constructing an adjustable clothes horse in a single column, with arms, as shown in the drawing, which is a perspective view of the clothes horse partly closed.

*Claim*.—The combination and arrangement of the standard and the arms, with the bolts, washers, and springs, substantially as and for the purpose specified.

No. 23,608.—HENRY RIEMAN, JR., of Rogersville, Ind.—*Improvement in the Mode of Applying Power for Extracting Stumps and Raising Heavy Weights*.—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

The inventor says: I *claim*, first, the described combination with the worm shaft F and spur wheel E, the arrangement and application of the movable pillow block M, and wedge L, to hold the said spur wheel firmly in position, or admit of its being readily thrown out of gear, as set forth.

Second. I claim the adjustable supports N and Q, adapted in the manner set forth, to sustain the machine on wheels, to convey it from place to place, permitting its deposit on the ground while in operation.

No. 23,609.—D. F. ROBBINS and SIMEON MORRISON, of DeWitt, Ill.—*Improvement in Mole Ploughs*.—Patent dated April 12, 1859.—This invention relates to the manner of forming the plough beam A, and uniting thereto the sledge C, and drag bar E, by which the plough is directed and managed so as to bring the whole contrivance within the management of the operator.

The inventors say: We *claim*, first, making the beam of a mole plough in two parts, united by a horizontal joint, to give it lateral adjustment, substantially as described.

We also claim connecting the drag (which supports, and upon which the point of the beam is made adjustable, vertically,) to the rear portion of the beam, by a hinged joint or connection, so that the raising or lowering of the point of the plough beam shall not affect the drag, substantially as described.

No. 23,610.—A. J. ROBISON, of Gypsum, N. Y.—*Improvement in Dirt Scrapers*.—Patent dated April 12, 1859.—The nature of this invention consists in an improved means for emptying or unloading the scraper after it has been filled in the usual manner.

*Claim*.—The combination of the cam plate P with the spring bar A, for consecutively releasing and retaining the scraper in position, as shown, the whole being arranged in the manner and for the purpose substantially as described.

No. 23,611.—JOHN S. ROWELL, DE WITT C. FELTER, and MICHAEL LOWTH, of Beaver Dam, Wis.—*Improvement in Water Wheels*.—Patent dated April 12, 1859.—The principal feature of this invention consists in the combination of a series of curved guides G G, with the buckets D D D of a water wheel E H, whereby the guides and buckets revolve together, and the former receive the first action or direct impulse of the water, while they are serving the office of conducting the same in a collected body down upon the latter, in a manner to secure its full effect before it escapes, and by this means increase the power of the wheel.

The inventors say: We *claim*, first, the combination of a series of curved guides G G, with the buckets of a water wheel E H, in the manner specified and for the purposes set forth.

Second. Having the guides curved and fitted to a hub of a wheel, and arranged on a rising and falling governor or spring, regulated capping plate I, so as to overhang the buckets and extend down, more or less, over the discharging orifices of the same, as specified and for the purposes set forth.

No. 23,612.—MARK RUNKEL, of New York, N. Y.—*Improved Oscillating Engine*.—Patent dated April 12, 1859.—This invention consists in giving an oscillating motion to a piston, which works in a stationary shell B, on the principle of a rotary engine, the steam being admitted alternately on one side or on the other of an abutment *c*, which is rigidly attached to the shell, and which is so arranged by means of some kind of packing inserted in its lower



edge that it works steam tight against the upper surface of the piston, which, in its turn, is provided with two projections *d*, one on each side of the abutment, which work steam tight against the sides of the shell, being open at both ends.

*Claim.*—The segment *D*, with the projections *d*, in combination with the shell *B* and the abutment *c*, or its equivalent, arranged substantially as and for the purpose specified.

No. 23,613.—HIRAM H. SCOVILLE, of Syracuse, N. Y.—*Improvement in Harvesters.*—Patent dated April 12, 1859.—The nature of this invention consists in the method of operating the rake of harvesting machines by the combined action of a propelling crank *E* and stationary cam *F*, and in the method of separating the grain on the platform *B* from that which is falling by suspending an apron in front of the rake.

The inventor says: I do not claim the use of a bow or canvas attached to the back of a rake; but what I *claim* as my invention and desire to secure by letters patent is, the arrangement of the propelling crank *E* and stationary cam *F* with respect to the rake bar and universal joint, when the same are constructed and operated in the manner and for the purposes set forth.

I also claim suspending a swinging apron from a frame work over the platform and in front of the rake, the same being constructed and operating substantially in the manner and for the purpose set forth.

No. 23,614.—WINTHROP D. SHAW, of Farnworth, N. H.—*Improved Machine for Splitting Shoe Pegs from the Block.*—Patent dated April 12, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The feed-roller *I*, in connection with the two reciprocating or vibrating knives *G* *H*, the latter being so operated that one will move slightly in advance of the other, so that the cuts will be given to the block successively and still admit of the proper feeding of the block *M* to the knives; the feed-roller being operated by the pawl *n*, rendered adjustable by the attachment of the bent lever *O* to the adjustable bar *K*, the whole being combined and operating substantially as and for the purpose set forth.

No. 23,615.—D. H. SHIRLEY, of Boston, Mass.—*Improvement in Skates.*—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engraving.

*Claim.*—A sliding heel-piece or clamp, susceptible of being moved forward and back, and fastened at any desired point, in such a manner that, the toe of the boot or shoe being held by a suitable toe-piece or longitudinal binding, force can be brought to bear upon or relieved from the foot, as set forth.

No. 23,616.—ISAAC C. SHULER, of Amsterdam, N. Y.—*Improvement in Metallic Coffins.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of fastening the flange or lower ends of the walls of a sheet-metal coffin in a tray or pan *c*, forming the bottom, and exceeding the circumference of the walls, by a narrow chamber *m*, which may be filled with molten metal for stiffening the base; also, the strengthening bars *l* for stiffening the bottom of this tray, substantially as described.

Second. The arrangement of scrolling or doubling over the flush lower edges of the walls of a sheet-metal coffin, soldering, consecutively, each fold of the sheet-metal, thus making a solid rim or flange of any required thickness, for the purpose of strengthening the base, substantially as described.

Third. The arrangement of placing on the outside of the walls, even with the upper edge and extending downward any required distance, according to the size of the coffin, a sheet-metal rim *f*, which may be filled with the molten metal, for the purpose of strengthening and keeping in shape the upper edges of the walls of a sheet-metal coffin, substantially as described.

Fourth. I disclaim an entire frame for covering the joint of the air-tight lid of a sheet-metal coffin with the coffin walls; I also disclaim any bisected sliding cover; these being claimed elsewhere. But I claim the hinged lids *i*, as applied to the joint in different sections, for the purpose of allowing a greater number of ornamental breaks in the coffin walls, substantially as described.

Fifth. The frame *n* for the support of the coffin handles.

No. 23,617.—HENRY SIMON, of Providence, R. I.—*Improved Fastening for Shirt Studs.*—Patent dated April 12, 1859.—This invention consists in arranging at the under side of a shirt stud four arms *b e*, which are united by pivots in such a manner that they can be compressed so as to pass readily through the button hole of a shirt, and that the same, after they have been passed through the button hole, may be brought in a position parallel with the side of the shirt, in which position the arms form a toggle joint, so that any pressure exerted on the outer ends of the arms tends to lock the same more firmly.



*Claim.*—Shirt studs A arranged with arms *b* and *c*, to operate substantially in the manner and for the purpose specified.

No. 23,618.—JOHN SMALLEY, of Bound Brook, N. J.—*Improvement in Harvesters.*—Patent dated April 12, 1859.—The nature of this invention will be understood by reference to the claim and engravings.

The inventor says: I *claim*, first, the combination of the seats Y Z, one of which is movable, as described, with the seat frame *b b*, elliptical springs X X X<sup>1</sup> X<sup>1</sup>, and main frame of the machine, the whole being arranged substantially as described and shown, and for the purposes set forth.

Second. Constructing the outer piece *c*<sup>1</sup> in the peculiar manner above described, viz: with two or more sockets *a*<sup>2</sup>, in combination with the caster supporting hub 3 and extension piece *x*<sup>2</sup>, for the purposes set forth.

Third. The neck I, in combination with collars J, groove H, standard J<sup>1</sup>, and lever *d*, arranged substantially as shown and described, for the purpose of throwing the gearing in and out of action, as set forth.

Fourth. Supporting the reel arms by means of the peculiarly constructed hub *w*, as shown and described.

No. 23,619.—HORACE W. SMITH, of Hartford, Conn.—*Improvement in Cocks for Water Basins.*—Patent dated April 12, 1859.—The nozzle A is attached to the spindle B, which passes down inside of the spindle guide C and through the stuffing box and ring D and spring E, where is formed a square terminus G, to receive the cam H, which is made to slide, when in operation, to actuate the valve I. Above the cam H is the spring E, which presses against the packing ring D and the cam H, to compensate for the wear of the cam and the compression of the packing on the valve I.

*Claim.*—The employment of the spring E and the grooved and bevel face cam H, when acting in combination as and for the purpose described.

No. 23,620.—JAMES S. SMITH, of New York, N. Y.—*Improvement in Epaulettes.*—Patent dated April 12, 1859.—To the underpart of the shell A are attached permanently by soldering two small metallic straps *a a* and a small staple or eye *b*, the former being attached at each of their extremities so as to leave room between them and the shell, to receive the ends of the adjuster B. This adjuster consists of a strip of metal of rectangular form in its transverse section, and of a form to conform longitudinally to and be received within and covered by the outer margin of the shell.

*Claim.*—The arrangement and combination of the adjuster B, fringe C, and shell A, substantially as and for the purpose shown and described.

No. 23,621.—PHILIP SMITH, of Fall River, Mass.—*Improvement in Grates.*—Patent dated April 12, 1859.—This invention consists in hanging the lower part of the front part of the grate on pivots, so far below the top that when the bottom is swung out to form an opening for the removal of unburnt coal, cinders, or stones, it will carry the top of their plate in and press the upper plate L so hard against the burning coal that it will hold it up while the cinders, &c., are removed from under it; and in arranging the upper inner front plate to vibrate so as to be pressed against the burning coal by the vibration of the lower plate, and hold up said coal while the combustible matter below it is removed. Also, in making the front frame and front plate in separate pieces, so that they may shrink and swell with freedom, without straining any of the parts which compose them.

The inventor says: I *claim* hanging the front plate G on pivots arranged so far below the top that, when the bottom is swung out, it will carry in its top, and operate the inner upper plate L, as described, for the purposes set forth.

I claim arranging the plate L to vibrate substantially as described for the purposes set forth.

I claim the plates H and H<sup>1</sup>, constructed and arranged substantially as described.

I also claim making the plate L in separate pieces, fitted together, substantially in the manner described.

No. 23,622.—PHILO P. STEWART, of Troy, N. Y.—*Improvement in Stoves.*—Patent dated April 12, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the method, substantially as described, of preventing the heat from striking through to the rising flue leading to the chimney by separating it from the back oven plate and from the two descending flues by non-conducting partitions, or the equivalent thereof, as described and for the purpose set forth.

I also claim, in combination with the flue above the oven, and with the rising flue leading to the chimney, the employment of a double damper filled in with cement, or other equivalent non-conducting material, substantially as described, to prevent the heat from striking through from the top flue to the rising flue, as set forth.

And I also claim separating the direct flue under the oven from the return flue below by



means of a plate lined with cement, or rendered non-conducting by equivalent means, substantially as described, to prevent the heat from striking through to the return flue, and thereby impart greater heat to the bottom of the oven, as set forth.

No. 23,623.—AMASA STONE, of Philadelphia, Pa.—*Improvement in Tools for Forming Lugs in the Mouths of Bottles and Jars.*—Patent dated April 12, 1859.—This invention consists in making a portion of the spindle C, which forms the interior or orifice K of the bottle nose to turn freely, while the other portion is held stationary; both portions being provided with corresponding scores H and L for each of the lugs to be made, the score in the rotating part of the spindle forming the lugs, and the scores in the stationary part allowing the lugs formed from the rotating part after the orifice and lugs have been formed and completed.

The inventor says: I *claim* making one part of the spindle which forms the orifice of the jug or bottle to turn freely, substantially as described, while the other part remains stationary in the nose of the bottle.

I claim making one, two, or more scores in that part of the spindle that turns freely, in combination with the corresponding score or scores in that part of the spindle which is stationary, and which aid in forming the orifice in the jug or bottle nose, substantially as described.

No. 23,624.—DAVID STUART, of Philadelphia, Pa.—*Improvement in Stoves.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the distributing chamber or discharging pipe *r*, formed with a central projection *q*, and supplied with heated air from the grate front through pipes *h*, as set forth.

I claim the discharge pipe *z*, located under the oven, and supplied from the grate front by pipes *k*, as set forth.

I claim dividing the grate front horizontally into two series of heating chambers, as set forth.

No. 23,625.—PHILO P. STEWART, of Troy, N. Y.—*Improvement in Cover Lifters in Cooking Stoves.*—Patent dated April 12, 1859.—A hole bored through the handle *b* allows the fitting into it of the stem or prolongation *a* and the two parts are securely affixed to each other by one or two blows of a hammer upon the end of the stem.

*Claim.*—The lifter, made up of malleable cast iron and wood, as set forth.

No. 23,626.—R. H. TUCKER, Jr., of New York, N. Y.—*Improvement in the Construction of Navigable Vessels.*—Patented in England, December 10, 1857; Patent dated April 12, 1859.—C is an air chamber in the stern D D of the vessel, from which air (which constitutes the propelling medium) is forced out upon the water astern, the bottom of which chamber is flush with the bottom of the vessel; *a a* is an opening through which the air is expelled from the chamber C to drive the vessel ahead, said opening extending across the stern, from the bottom to such a height that it will always be submerged, or below the level of the water outside of the vessel.

*Claim.*—The construction of navigable vessels in the form of isosceles triangles, with vertical sides and flat bottom, the base for that side of the triangular figure which terminates in the two equal angles constitute the stern, in combination with the air chamber, constructed substantially as and for the purpose described.

No. 23,627.—S. M. WADE, of Andover, Ohio.—*Improvement in Rotary Harrows.*—Patent dated April 12, 1859.—The pin I, which forms the joint I<sup>1</sup>, is connected with the bar K. At the opposite end of the bar is another pin L, corresponding to I. From the bar K extends an arm M, at right angles thereto, and to the end of this arm is connected a fork N. This clutch grasps one of the draw bars E<sup>1</sup> when the two harrows are brought together with the teeth inward. In this position the harrows are secured together, by having the arms E<sup>1</sup> above the axle D; then the pins I L are inserted through the eyes in the ends of the arms E, at the same time the arm M depends along the side of the drawbar with the clutch or fork N.

The inventor says: I *claim* the bar K, provided with the arm M, clutch N, and pins L, in combination with the angular drawbars and double harrows, in the manner and for the purpose described.

I also claim the rod O, arms Q, and rollers P, in combination with the angular drawbars and double harrows, when arranged in the manner and for the purpose set forth.

No. 23,628.—PAUL WAGNER, of Buffalo, N. Y.—*Improvement in Water Wheels.*—Patent dated April 12, 1859.—D are the buckets of the wheel. They are arranged on the cylinder or drum E. Their lower edges are radial and their upper edges tangential to the cylinder E. G are the discharge vents, and are formed by a number of inclined planes or buckets arranged around a cylinder H, equal in size to the cylinder E.

*Claim.*—The combination of the buckets D, arranged on the cylinder E, as described, and the stationary inclined planes or buckets G, arranged with reference to the cylinder H and



buckets D, as described, the whole being inclosed by the case A, substantially as and for the purposes set forth.

No. 23,629.—ELIJAH WARE, of South Boston, Mass.—*Improvement in Valve Gear for Steam Engines.*—Patent dated April 12, 1859.—This invention consists in connecting the eccentric rod H with the valve rock shaft G, for the purpose of enabling the stroke of the valve to be varied to change the point of cutting off the steam from the cylinder of an engine; also, in a novel combination of mechanism, through whose agency the operating of the slide or valve employed in a steam engine is effected by means of a single eccentric, which is made to work the valves for running the engine, in either direction, and to vary the movement of the valve for cutting off the steam at different points in the stroke of the engine.

The inventor says: I *claim* combining the eccentric rod with the valve rock shaft G or its equivalent, by means of the lever I, with its two arc formed slots *d e* and the movable pins *f g*, the whole applied and operating substantially as and for the purpose specified.

And I also claim the combination with the double slotted lever I, and its movable pins *f g*, of the levers Q V, rods *m U*, levers M N and T, secondary lever O, pinion *u*, toothed arc S, and rods L P, the whole applied and operating substantially as and for the purpose described.

No. 23,630.—MOSES D. WELLS, of Morgantown, Va.—*Improvement in Seeding Machines.*—Patent dated April 12, 1859.—The bar B rests on a series of guides *a a*, which run on the bottom of the hopper, and, while giving ease of motion, prevent the breaking of the seed which work under the slide. The discharge perforations *b* have an upward rim *i*, the height of the guides *a*, so that when the discharge is through but a portion of them, the seed will not flow from those under the bar.

*Claim.*—The notches of the bar with the series of pins *c* therein, in combination with the guides *a a*, and upward projecting rims of the discharge openings *b*, substantially as set forth.

No. 23,631.—JOSEPH WETHERILL, of Manchester, Conn.—*Improved Quilting Frame.*—Patent dated April 12, 1859.—The upper lining I is first wound around the roll E; the lower lining J is wound around the roll D; and the two edges are brought together and secured to the roll C; the two rolls D E are then turned taught as desirable.

*Claim.*—The employment of the rolls C D E, in combination with the arms F, pawls G, notches H, so that the upper roll E may be lifted when desired, arranged in the manner and for the purpose described.

No. 23,632.—GEORGE J. WIDRIG, of Memphis, Tenn.—*Improvement in Hoop Fastening for Cotton Bales.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—The combination of the sides A having slots or grooves *e* with the bar B, for the purpose of fastening cotton bales, or other similar substances, by bringing the last end *f* over the bar B, substantially as described and for the purpose specified.

No. 23,633.—JOHN W. WILCOX, of West Roxbury, Mass.—*Improvement in Constructing Electro-plated Rollers.*—Patent dated April 12, 1859.—This invention consists in making rollers for dressing calico, printing, paper making, and other purposes, by winding a ribbon *a* of copper or other metal around a proper support or base, and then coating the surface of the roller with copper by the electro-plating process.

*Claim.*—Covering the shaft, base, or support with a fillet or ribbon of metal, soldered or otherwise secured thereto, and depositing the copper on said surface by electro-plating, substantially as described.

No. 23,634.—RUSSELL WILDMAN, of Danbury, Conn.—*Improvement in Brick Machines.*—Patent dated April 12, 1859.—The hopper *b*<sup>2</sup> is filled and brought over the mould *m*, when the attendant draws the slide cut off *e*<sup>2</sup>, which allows the material to pass into the mould *m*. The hopper *b*<sup>2</sup> vibrates from the mould *m*. With the lever D the arm B is brought forward and closes against the moulding *u* on the underside of cap *j*, thereby locking the arms B and C firmly together. While the arms are brought into line the mould *m* slides upon the head *d*, compressing the block.

The inventor says: The advantages secured by this improvement is the reducing of the friction. I am not confined to any particular form of mould; the one shown, which forms the hollow block, has been long known, and can be seen in Foster's patent, dated July 22, 1856, and also in Buck's patent, dated December 9, 1856; the toggle-power also is common in most kind of presses; also the slide cut off in the feed may be seen in Isaac Harman's patent, dated August 12, 1856. Therefore I disclaim the above described parts separately considered from their connection.

But I *claim*, first, the vibrating arm B when constructed, combined, and operated, substantially as described.



Second. I claim the vibrating feed, when constructed, arranged, and operated, in combination with the mould *m*, substantially as set forth.

No. 23,635.—C. W. WILLIAMS, of Port Jarvis, N. Y.—*Improvement in Gates for Canal Locks*.—Patent dated April 12, 1859.—This invention relates to a novel means employed for opening and closing the gates, and in the manner of hanging them, whereby the usual balance sweeps are dispensed with and the gates allowed to be operated with but little friction, and rendered capable of being closed much tighter than formerly. It also relates to an improved arrangement of means for operating the wickets, whereby both wickets may be operated singly from one and the same crank shaft.

The inventor says: I do not claim, broadly, the employment or use of the balls *g*, for they have been used for similar or analogous purposes.

But I *claim*, first, the rods C C and rack D applied to the gates B B, for the purpose set forth.

Second. Having the journals *c* of the gates fitted in oblong slots *d* of the pulleys *e*, which are placed in suitable bearings or boxes *f*, and arranged substantially as shown, to admit of the sagging of the gates, and the close fitting of the same when shut, for the purpose specified.

Third. Securing the bearings or boxes *f* to the lock A by means of the rods *h*, the boxes being attached to slides *i*, and arranged substantially as shown, so that the boxes may be adjusted as occasion may require.

Fourth. Operating the wickets H H by means of the gearing, arranged as described, whereby either wicket may be operated from one and the same crank-shaft *q*.

No. 23,636.—W. H. WILSON, of Summerfield, Ohio.—*Improvement in Ploughs*—Patent dated April 12, 1859.—This plough may be regulated by a clevis to run any depth required. The gradual rise of the wings W and shape of the mould board M lift the soil and mellow it, leaving the ground in a better condition for the growth of corn and vegetables than the ordinary plough.

*Claim*.—The arrangement of the sub-soil shovel W, the common shovel M, coulter C, and brace A, the whole being constructed as described for the purpose set forth.

No. 23,637.—C. WINTER, of Piqua, Ohio.—*Improved Adding Machine*.—Patent dated April 12, 1859.—The inventor says: In the operation of this machine we will suppose we have three columns of figures, as follows:  $\begin{array}{r} 846 \\ 573 \\ 291 \end{array}$  which figures are to be added up and their sum obtained.

We will commence adding at the right hand column. The hand *a* on dial B will stand at the 100 mark, and the hand *b* on dial C will stand at the mark *b*; now the first number in the column to be added is 1, and I place my hand on the key which is marked 1, and press it down as far as it will go in opening L; by pressing down the key 1, the lever D to which it is attached presses upon the frame E E<sup>1</sup> and bears it down. When the frame descends the ratchet *z* attached to it turns the wheel K forward just one tooth of said wheel; the movement of wheel *k* operates wheels *j* and *i*, shaft *h* and wheels *m* and *n*, the pulley P moves with shaft *h*, and the cord *o* is wound around it, and the spring in drum J is thus tightened.

The inventor says: I *claim*, first, the arrangement of the lever *c*, spring *d*, shaft *h*, wheels *m n*, and stops *e* and *f*, in the manner set forth and for the purpose specified.

Second. The arrangement of the ratchet-wheel *k*, bevel wheels *j* and *i*, pawls *s* and *z*, cord *o*, and pulley P, in the manner and for the purpose substantially as described

No. 23,638.—WILLIAM ZELLER, of Lebanon county, Pa.—*Improved Mode of Applying and Constructing Horse Power Machines*.—Patent dated April 12, 1859.—The wheel B and the truck F F<sup>1</sup> serve as trucks to the carriage when used for a reaper, but when for a horse power G<sup>2</sup> is detached and the frame turned down, the shaft C is attached to the shaft C<sup>1</sup> at B<sup>2</sup>, the arms A are attached to the outer rim of the driving wheel by the screw bolts *h*<sup>2</sup> *k*<sup>2</sup>. The stays H are also made fast to the arms A and on the rim of the driving wheel by screws D.

*Claim*.—The construction of the horse power machine described, by which it is made to drive a reaping machine or stationary power, when the whole is constructed, arranged, and operated substantially as and for the purpose described.

No. 23,639.—HENRY BELFIELD, of Philadelphia, Pa., assignor to Himself and JUSTICE COX, of the same place.—*Improvement in Hanging Bells*.—Patent dated April 12, 1859.—This invention consists in a lever G, with a spring dog *h*, in combination with a bell crank lever F and hammer H, both levers having springs *n* independent of each other. It also consists in a frame or bracket B, with a projection *b* for holding the bell, and four legs arranged in respect to the levers.

The inventor says: I *claim* the lever G, its spring dog *h*, and spring *f*, in combination with the bell crank lever F, its hammer H, and spring *n*, the whole of the parts being arranged in respect to each other and to the bell C, substantially as and for the purpose set forth.



Second. The bracket B, with its four legs and projection *b*, for holding the bell, the said bracket being arranged in respect to, and in combination with, the levers G and F and their respective springs, substantially in the manner specified.

No. 23,640.—JOHN F. BODINE, of Williamstown, N. J., assignor to Himself, WILLIAM H. BODINE, and JOEL A. BODINE, of same place.—*Improvement in Revolving Plugs for Manufacturing Bottles and Jars.*—Patent dated April 12, 1859.—D is the turning plate, arranged loosely on the central shaft B, and resting on the top of the plug *c*, and underneath a capping stop plate E, being fitted to turn between said plate and the plug on the large ring bearings *a*, which are formed on its upper and lower or outer sides, and set in ring grooves *b*, cut in the under side of the plate E and upper side of the plug.

*Claim.*—The large ring bearings *a*, formed on and near the circumference of the turning plate D, and fitting in ring grooves *b*, formed in the plug C and capping plate E, substantially as and for the purpose set forth.

No. 23,641.—HARRISON FITTS, of Somerset, Mich., assignor to Himself and NELSON TURREL, of Addison, Mich.—*Improvement in Machines for Cleaning Grain.*—Patent dated April 12, 1859.—The grain is received from the screen H and the slide I, upon the concave J, and passes down between it, and the scouring wheel F, where it is subjected to the action of the roughened surfaces of the concave J and wheel F. In the lower part of the concave J there is an adjustable elastic pad or rubber K, by the adjustment of which the discharge of grain from between the concave and rubber may be modified to correspond with the work to be done at the time.

*Claim.*—The combination of the adjustable piece K with the concave and rubber, substantially as and for the purpose set forth.

No. 23,642.—J. F. GREENE, of Brooklyn, N. Y., assignor to SAMUEL B. TOBEY, of Providence, R. I.—*Improvement in Obtaining Fibres from Waste Felted Fabrics.*—Patent dated April 12, 1859.—The claim will explain the nature of this invention.

*Claim.*—Subjecting the felts to be disintegrated to the successive and combined action of steam and picking, substantially as described, the steam having the effect either to so unfelt or loosen the hold which the fibres have on each other in felted fabrics, that they can be drawn apart of sufficient length, to be advantageously employed in the manufacture of other felts or other fabrics.

No. 23,643.—J. F. GREENE, of Brooklyn, N. Y., assignor to SAMUEL B. TOBEY, of Providence, R. I.—*Improvement in Machinery for Disintegrating Waste Felted Fabrics.*—Patent dated April 12, 1859.—The object of this invention is to disintegrate or tear apart waste and refuse felts, and consists in combining a steaming apparatus with a picker *h*, so that the felts may be thoroughly steamed before and as they are presented to the picking machine.

*Claim.*—The combination of the steaming apparatus and the picker, substantially as described, for steaming the felt, as it is passed to the picker to be disintegrated, as set forth.

No. 23,644.—HEZEKIAH JOHNSTON, of Collinsville, Ill., assignor to Himself and RICHARD WITHERS, of the same place.—*Improvement in Machines for Cutting Corn Stalks, &c., on Ground Preparatory to Ploughing.*—Patent dated April 12, 1859.—The first object of this invention is to break down the stalks upon the ground, which is effected by means of the curved frame A<sup>1</sup>. The second object is to straighten out the stalks so that knives E can operate upon them and cut them up into short ends.

*Claim.*—Arranging and combining the curved frame A<sup>1</sup>, with the knives E and the guides J, in the manner described and for the purpose specified.

No. 23,645.—CHARLES MILLER and THOMPSON W. DECKER, of New York, N. Y., assignors to THOMPSON W. DECKER, aforesaid.—*Improved Machine for Cutting Files.*—Patent dated April 12, 1859.—The inventors say: By arranging the gauge rest M to oscillate, the bed C and blank *a* are adjusted at any moment desired, without stopping the machine. The hinging of the frame E to the bed plate at *f* permits the gauge rest M to follow the curve of the face of the file, and thus cause the chisel, which is always arrested by the stop *p*, to produce a uniform depth of cut from end to end of the file, besides affording the greatest convenience for raising the chisel stock to permit the carriage to be run back and to permit the removal of the chisel.

*Claim.*—First, arranging the gauge rest M to oscillate on a fulcrum *t*, located in relation to the cutting chisel, substantially as shown, that by moving the arm of said rest, laterally, by means of the screw N, the bed C and blank *a* may be adjusted to correspond with the cutting edge of the chisel, as set forth.

Second. Hinging the frame E, which carries the chisel and its appurtenances to the frame A, by a joint at *f*, so that the rest M may readily follow the curve of the file blank, and, with the chisel, be thrown back when desired, all as shown and described.



No. 23,646.—T. H. PEAVEY, of Montville, Maine, assignor to Himself and C. G. COLLINS, of Portland, Maine.—*Improvement in Machines for Wringing Clothes.*—Patent dated April 12, 1859.—The article to be wrung being placed between rollers B B, pressure is applied at the foot-board D, which compresses the rollers; motion is then imparted to the rollers by means of crank *i*. As they revolve the clothes are drawn down between them, and pass also between the small rollers on frame F, and come out entirely free from all water and ready to be dried.

*Claim.*—The arrangement of the rollers C with the rollers B, when the same are constructed and operated in the manner and for the purpose described.

No. 23,647.—JOHN J. SIGLER, of Martin's Ferry, Ohio, assignor to Himself and W. M. GRIFFITH & Co.—*Improvement in Threshing Machines.*—Patent dated April 12, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, the series of rollers  $E^1 E^2 E^3$ , &c., provided with fingers or projections  $a a^1 a^2$ , &c., in combination with the slab device  $b b^1 b^2$ , the fingers working in the spaces between the slats, and being used for the purpose of carrying the straw from the threshing cylinder to the place of discharge, and at the same time so tossing it as to secure an effectual separation of the grain therefrom, the slab device  $b b^1$ , &c., being employed for the purpose of supporting the body of the straw between the impulses of the fingers  $a a^1$ , &c., and also for the purpose of preventing the straw from winding on the rollers E  $E^1$ , &c.

Second. I claim the application of the oscillatory motion to the fingered shaft R, by means of which I secure an agitation inwardly towards the fan G, in addition to the throw towards the place of discharge M, for the purpose of more effectually freeing the apertures near the tail of the riddle K from obstruction, the required motion being obtained by means of the pinion *h*, rack segment Q, and arm X, or their equivalents.

No. 23,648.—ORRIN D. VOSMUS, of Boston, Mass., assignor to Himself and EDWARD W. SERRELL, of Greenfield, Mass.—*Improved Method of Arranging Galvano-Electric Helices for Magnetizing the Driving Wheels of Locomotives.*—Patent dated April 12, 1859.—The nature of this invention consists in applying a helix *b* of wire around the lower part of the wheel *a*, in such a manner that the lower part of the wheel is converted into an electro-magnet, the wheel revolving within said helix. The said helix producing magnetism in that part of the periphery of the wheel that is in contact with the track, enabling the locomotive to perform much more labor, without increasing the weight of the said engine or causing so much wear or strain upon the track.

The inventor says: I do not claim, broadly, the application of electricity or magnetism, to cause adhesion of wheels of locomotives; neither do I claim a helix, applied to a locomotive wheel, as this has before been done, but, it is believed, proved nearly or entirely valueless; whereas, in my invention, I have succeeded, by the use of a curved helix, as set forth, in obtaining the point of the greatest magnetic effect at the point of contact between the wheel and the track, therefore I *claim* a curved helix applied to the wheels of a locomotive engine, in substantially the manner specified, whereby the point of greatest magnetic effect is the point of contact between the wheels and track. And, in combination with the helix aforesaid, I claim adjusting the helix in the manner and for the purposes specified.

No. 23,649.—BENJAMIN DOUGLAS, of Middletown, Conn., for Himself, and as administrator of the estate of WM. DOUGLAS, deceased, late of the same place.—*Improvement in Pumps.*—Patent dated April 12, 1859.—This invention consists in the manner of attaching the pump barrel to the base and platform on which it is designed to rest, and to the top of the water-pipe, so that the same may be attached and detached from the platform and pipe by merely turning a single screw bolt or nut A.

The inventor says: What is claimed is the combination of the lugs B and C, within the flange  $x^2$ , and the conical set nut A, substantially as described, for fastening the lower end of the pump cylinder.

No. 23,650.—JONATHAN AMORY, of West Roxbury, Mass.—*Improvement in Steam Boiler Furnaces.*—Patent dated April 19, 1859.—The invention consists in certain modifications of what is known as "Baker's Furnace," patented May 30, 1846, by means of which the combustion of fuel therein is better effected, and the invention better adapted to be used in locomotive and other boilers having internal fire places, and to other similar conditions of use.

*Claim.*—The method of increasing the combustion and protecting the combustion curves, substantially as described.

No. 23,651.—ABRAHAM BARTHOLF, of New York, N. Y.—*Improvement in a Device for Converting Alternate Circular into Direct Circular Motion.*—Patent dated April 19, 1859.—This invention consists in a certain novel mode of applying and arranging a dog and lever, and a spring in combination with a wheel, or other body, to which the direct motion is imparted,



whereby as the lever is moved in one direction the dog is caused to bite upon the surface and move the wheel or body to which it is applied, and as it is moved in the other direction the dog is caused to slip over the surface.

*Claim.*—The dog C, spring D, and lever E, combined and arranged relatively to each other and applied to the wheel A, or its equivalent, substantially as described.

No. 23,652.—A. C. BARSTOW, of Providence, R. I.—*Improvement in Burial Cases*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* constructing a metallic burial case with the ogee shaped ends, as described, whereby great reduction in weight and economy in the manufacture is secured, and at the same time all the space required afforded.

I also claim forming the metallic case with the overlapping strengthening ribs, as described.

No. 23,653.—MELLEN BATEL, of Albany, N. Y.—*Improvements in Furnace for Heating Tires.* Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—As an improved article of manufacture, a furnace for heating tire, composed of an annular body A, fire space B, central tube C, with cover or damper D therein, to regulate the draft, extension E, rod F, crane G, top H, and otherwise constructed as shown and described, for the purpose specified.

No. 23,654.—T. L. BAYLIES, of Richmond, Ind.—*Improved Anchor Tripper.*—Patent dated April 19, 1859.—Within the slot *d* a tripper bar B is placed. This bar may be of rectangular form, and of such a length that when in a horizontal position it will extend the whole length of the slot *d*, and across the loop or eye. Transversely through the stock A the shaft C passes. This shaft has a lever D attached to one end of it, and on this shaft two cams, *j* and *k*, are placed. The cams *j* and *k* are so placed on the shaft C that when the lever D is drawn in the direction indicated by the arrow *l*, the cam *j* will act against the underside of the tripping bar, and, owing to the position of the slots *f h*, will raise the tripping bar B obliquely upward in a horizontal position.

*Claim.*—The arrangement and combination of the tripping bar B, shaft C, and cams *j k*, substantially as and for the purpose shown and described.

No. 23,655.—ABNER M. BEARDSLEY, of Elkhart, Ind.—*Improved Machine for Filing Saws.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the swinging frame of the file carriage upon the adjusting plate E, so that it can be turned over and supported upon the bed plate A, in the manner and for the purposes described and shown in the drawings.

Second. The arrangement of the check pieces N, upon the adjusting plate E, between the arms of the swinging frame, for the purpose of bracing the latter against the thrusts of the file carriage, while said frame is free to rise and fall, as described.

Third. The arrangement of the gauging screw M, in the cross piece H of the swinging frame, by which the teeth are filed to a uniform depth, without interfering with the rising of the file carriage, to conform to the taper of the file, as described.

Fourth. The arrangement of the seats *a a*, at each end of the bed plate A, whereby the implement may be supported directly upon the clamp of the saw, for the purposes described.

No. 23,656.—DOUGLAS BLY, of Rochester, N. Y.—*Improvement in Artificial Legs.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—I am aware that straps from the shoulder have been used, both elastic and otherwise, for the purpose of retaining the artificial limb in its place, and this I do not claim.

But I *claim* the use of an elastic strap, or apparatus, from the shoulders, or upper part of the body, when attached to the artificial leg in such a manner that its contractile power is exerted in connection with the backward motion of the shoulders, to produce the forward motion of the foot, substantially as set forth.

No. 23,657.—BENJAMIN BRADBURY, of Abington, Ill.—*Improvement in Washing Machines.*—Patent dated April 19, 1859.—*a a* are the two bottom pieces, *b b* are four legs, which are let into the bottom pieces as near one end as possible; they are halved together at the top and the bottom, and fit on the sides of the box *c*; *c* is a box in which the clothes are washed, on each side of the horizontal washboard *d*, and between them and the upright boards *o*. The bottom pieces of the box are fastened to the side and end boards, across the top are nailed two boards, leaving a space to put in and take out the clothes, which space is covered by the cover *n*, leaving a space at each side of the pendulum lever *e e* to work at each end.

*Claim.* The arrangement described of the levers *h e e*, and pitman *f*, moving the dashers *d*, over the concave of the box C, the whole constructed and operating as specified.

No. 23,658.—CHARLES K. BRADFORD, of Lynn, Mass.—*Improvement in Faucets*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The faucet, constructed as described, to be operated by applying pressure directly



to the head of the case, said case for this purpose being provided with an outside elastic diaphragm forming the head thereto, and combined with a valve rod, arranged in relation to the case internally, so that the ends of said rod terminate respectively at, and are secured to, the valve and diaphragm, as set forth.

No. 23,659.—WILLIAM H. BRAMBLE, of Springfield, Ohio.—*Improved Bedstead*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of an under and upper section, united to each other by springs and links, so that the upper section may have a free vertical and horizontal motion, substantially as described.

Second. I claim, in combination with a bedstead made of two sections, as described, the making of the posts of the upper section shorter than the supports of the under section, so that said upper section when placed on the lower one, shall be entirely clear of the floor, as set forth.

Third. I claim the combination of the loose slats, springs, and webbing, when said webbing runs longitudinally or lengthwise of the bedstead, in the manner and for the purpose stated.

No. 23,660.—JOHN BROUGHTON, of New York, N. Y.—*Improvement in Governors for Steam Engines*.—Patent dated April 19, 1859.—This improvement relates to oil cups or lubricators for greasing the bearings of shafts and other running or working parts of machinery, in which it is desired to discharge the lubricating material from the oil cup on the part or parts to be greased at regular or irregular intervals, and in any given quantity or quantities.

The inventor says: I *claim* effecting the connection between the ball arms G G and the central rod J by means of two levers H H and two links K K, the whole being applied and operating substantially as set forth.

No. 23,661.—PETER G. BROWN, of Schenectady, N. Y.—*Improved Lubricator*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the reservoir A, provided with a discharging aperture *c*, valve F, having a receiving aperture *d* in it, and air chamber H, or the equivalents thereof, when said air chamber is arranged to control or assist the discharge, substantially as specified.

I likewise claim giving to the valve, constructed and arranged as above described, which conveys the oil from the reservoir to the discharging aperture, an intermittent revolving motion, in one and the same direction, for and by the action of the handle I, or its equivalent, in either direction of the travel of the latter, or in reverse directions thereof, essentially as set forth.

No. 23,662.—GEORGE CLAY, of New York, N. Y.—*Improved Lock*.—Patent dated April 19, 1859.—The nature of this invention consists in the peculiar construction and arrangement of the parts for united operation in a lock.

A A represents the front and back sides of the lock, which are formed of two plates *a a*, a suitable space *b* being left between them. The front and back sides of the lock are secured a proper distance apart by transverse rods or bars. B is the bolt, placed in the case as usual, the lower edge of the bolt having a recess made in it to receive the bit of the key, so that the bolt may be operated by the turning of the key.

*Claim*.—The specified construction and arrangement of the following parts for united operation in a lock, viz: Right and left double walled case A *t t*, sliding right and left key-hole guard plates *d d e<sup>1</sup> e<sup>1</sup>*, right and left forked bars *e e s s*, main and auxiliary tumblers D D *f<sup>1</sup> f<sup>1</sup>*, and bolt D *a*, all for the purpose set forth.

No. 23,663.—WILLIAM E. COOPER, of Dunkirk, N. Y.—*Improvement in Railroad Car Brakes*.—Patent dated April 19, 1859.—In a small frame attached to the ceiling of the car are secured two pulleys *h h*. The bell cord E passes over one of these pulleys, then around the pulley in the movable block, and then over the other pulley. The bell cord passes from one car to another, but is connected in every car with the cord which leads down to the brakes. Thus the whole series of brakes are connected together from one end of the train to the other, and when the cord E is drawn at any point in the car all the brakes are acted upon simultaneously.

*Claim*.—The arrangement of the bell cord E, pulleys *h h* and *m*, and movable pulley block F, with the brake cord I, the same being connected and operated substantially in the manner set forth, for the purpose of setting all of the brakes in the entire train simultaneously and from any point within the train, as is fully described.

No. 23,664.—RIENZA DANIELS, of Almena, Mich.—*Improvement in Journal Boxes*.—Patent dated April 19, 1859.—The nature of this invention consists in constructing each of the friction rollers of a series of ring sections, and uniting said sections together, so that they lie in the same line, by means of a screw rod and nut, and, in combination with this mode of con-



structing a friction roller, it consists in constructing each of the journals of an axle of a series of similar ring sections and uniting the same together, so they lie in the same line by means of a screw tapped arm and shoulder of the axle.

*Claim.*—The axle *c d*, furnished with a screw tapped arm *c<sup>1</sup>*, and having toothed and plain sections *a a a*, *E*, *b b*, of a journal arranged and clamped upon it, in combination with the internally toothed journal box *A B B*, and with rods *m m*, toothed and plain sections of frictional rollers *D D* arranged and clamped on them, all in the manner described and for the purpose set forth.

No. 23,665.—*B. WELLS DUNKLEE*, of Boston, Mass.—*Improvement in Cooking Ranges.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement of the two induction flues *A B*, the gauge throats, their plates or bars, and the flues around and between the two ovens, a single damper, and its openings being placed over the middle flue, and with respect to the two flues, as specified.

No. 23,666.—*GEORGE ESTERLY*, of White Water, Mich.—*Improvement in Harvesting Machines.*—Patent dated April 19, 1859.—This invention consists in a novel way of operating and applying a raking attachment to a grain and grass harvester, and in a peculiar construction of the latter, whereby the two devices are adapted to each other and made to operate conjointly in a perfect manner to perform the desired work.

The inventor says: I *claim*, first, the adjusting of the rake *Q* by means of the socket *O*, suspended by journals or trunnions *s*, and secured in the desired position by set screws *v* and bars *u*, or their equivalents, in combination with the adjustable platform *L*, whereby the rake and platform may be adjusted to suit the height at which the grain is cut.

Second. The segment plate *U*, with the curved flanch *J*, for the purpose of carrying the rake backwards, as described.

Third. The use of the pendant rod or bar *f*, provided with the rollers *g h*, in combination with the flanch *j*, for the purpose specified.

I do not claim the guard finger *T*.

But I claim, fourthly, attaching the guard finger *T* to the bearing *W*, in the manner described, whereby it may be adjusted for the purpose specified.

No. 23,667.—*JOSIAH ELLIS*, of (near) Warrington, England.—*Improvement in Machines for Quarrying Stone, &c.*—Patented in England, December 6, 1855; Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A portable apparatus, designed for cutting grooves in rocks or other mineral substances, for the purpose of quarrying the same in blocks, and consisting of supports *B B*, which are fastened to the rock and sustain an adjustable bed plate *D* and screw shaft *E*, upon which bed plate and screw shaft a tool stock and adjustable cutter is made to traverse between two previously drilled or open spaces which form the extremities of the proposed cut, substantially as described and represented.

No. 23,668.—*ROBERT G. EUNSON*, of New York, N. Y.—*Improved Water Cooler for Steam Engines.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The inventor says: I *claim* the use or employment of a decalorator, such as is described, or its equivalent, when the series of very small, horizontal tubes are so arranged, in respect to the current of water outside of the tubes, that the centre of each tube, in one row, shall be opposite or nearly opposite to the centre of the space between the tubes in the next row, in combination with supporting and directing tube plates, such as are described, and for the purposes set forth.

I also claim the use or employment of tubes, arranged in rows as described, in combination with the tube plates and shell of the decalorator, when so arranged that the current of cold water is made to flow across the tubes, being directed by the tube plates from side to side or from top to bottom, and from bottom to top of the shell and around the tubes, being made to encircle them by its current, in consequence of their arrangement of rows as described, and at the same time progress lengthwise of the shell and tubes in a direction contrary to the stream of fresh water inside of the tubes, for the purposes set forth.

No. 23,669.—*DANIEL FITZGERALD*, of New York, N. Y.—*Improved Fireman's Ladder.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, applying the tanks *A B*, or their equivalent, to ladders, with or without water, to elevate and hold said ladders, substantially as described.

Second. Conveying the water through a long distance by an elongated pipe *E*, or its equivalent, connected with the apparatus, substantially as described.

Third. Managing the curved or jointed pipes *Q R* by means of the lever *H*, or its equivalent, in the manner described.



No. 23,670.—PERRY G. GARDINER, of New York, N. Y.—*Improvement in Moulds for Steam Castings*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, Constructing the mould with a cup or reservoir for holding all the melted metal for casting, closed and opened at the entrance of the sprue, by the movable plug or stopper as described.

Second. The spherical hollow chamber *a* and air escape passage *d*<sup>2</sup>, and self acting plug *f*, to permit the rarified air to pass from the mould, and to escape, and to shut off the external air from the mould, operating in the manner and for the object described.

Third. I claim the combination and arrangement of the two cups, the sprue, the figure O, the tool or casting, and air vents or passages, so as to form a bent tube by which the casting is filled from the bottom, and the external air excluded as described.

Fourth. I claim the use of the moulds in a state of intense heat, never less than 500° of Fahrenheit, and generally at a much higher temperature, for the purpose of producing, as nearly as practicable, a vacuum within the mould; but I do not claim the mere heating or warming of the moulds to produce a smooth casting, that having been a common practice heretofore.

No. 23,671.—P. F. GEISSE, of Wellsville, Ohio.—*Improved Oven for Cooling Castings*.—Patent dated April 19, 1859.—The nature of this invention consists in so constructing and governing the operation of a cooling oven, as that the wheels—of which as many as desirable are placed in its pit at a high temperature—may be allowed to gradually cool in such a manner that the rate of contraction in every part of each one of them may be uniform, and the act of final contraction be induced to commence at the centres of the wheels and extend gradually to their peripheries.

*Claim*.—The pipe *d* connecting the eyes or hubs of the wheels with flues E and plate *c*, for causing the current of air to pass through the eyes only of the hubs, in cooling, in combination with heating oven A and pits B, operating as described and for the purposes set forth.

No. 23,672.—ISAAC H. GIFFING, of New York, N. Y.—*Improved Mode of Attaching Casters to Trunks*.—Patent dated April 19, 1859.—The nature of this invention consists in providing a sufficient space between the plate and roller, so that a band or strap of metal may be passed freely between the plate and roller; also making a flange continuously along the whole length of both sides of the plate, in order to prevent the plate from twisting, and also for the purpose of additional strength.

*Claim*.—The method described of constructing and attaching casters to trunks.

No. 23,673.—JAMES C. GILBERT, of Leed's Junction, Me.—*Improvement in Yoke Ring Attachment for the Pole of Ox Carts*.—Patent dated April 19, 1859.—The object of this invention is to enable a person to readily attach to, or detach from, an ox cart pole the ring of a yoke; the nature of the invention consisting in a peculiar arrangement of a "backing bearer," and an engaging notch of a spring slider, with respect to, and so to operate with, a draft hook applied to the underside of such pole or tongue.

*Claim*.—The described arrangement of the backing bearer *f* and engaging notch *c* of the spring slider D, with respect to, and to operate with the draft hook C, substantially in the manner specified.

No. 23,674.—OTHNIEL GILMORE, of Raynham, Mass.—*Improved Machine for Smoothing the Soles of Boots and Shoes*.—Patent dated April 19, 1859.—The improved smoothing wheel constituting this invention is adapted to the smoothing of or reducing any boot or shoe sole having a projecting heel. It is constructed with a circular annulus or rim A A, one side of which is made convex in section as shown at *a*, and is flanked by acute angular edges *b c*, and particularly with its inner edge acute angled and having a heel recess B, or one large enough to receive the heel, while the shank of a shoe is resting on the grinding surface *a*.

*Claim*.—The improved manufacture of a sole smoothing or reducing wheel, made with the convex grinding annulus *a*, concentric heel recess B, and a cute angled edges *b c*, arranged substantially as described.

No. 23,675.—PORTER A. GLADWIN, of Bristol, Mass.—*Improvement in Attaching Cords to Window Sashes*.—Patent dated April 19, 1859.—The nature of this invention consists in attaching a spring to the edge of the sash and securing a cord thereto, so that the tension of the spring pulley will also produce the sidewise tension of the sash springs against the jamb of the window, and thereby equalize or graduate the action of the spring pulley.

*Claim*.—The employment of the slotted tension spring or plate D in combination with the cord G and pulley C, in the manner as and for the purpose described.

No. 23,676.—WILLIAM P. GOOLMAN, of Dublin, Ind.—*Improvement in Windlasses*.—Patent dated April 19, 1859.—The object of this invention is to provide means for taking up the



slack from the winding drum, so that the cable may be wound upon it with unvarying rapidity and power.

The inventor says: I *claim*, first, in the described combination with a winding drum or capstan of any suitable form, the application of a reel D, operated by the traction of the entering cable, to take up the slack from the said drum or capstan, as explained.

Second. In combination with the said reel and capstan, I claim the adjustable idle pulley G, operating as set forth, to maintain the needful traction of the cable against the reel, or vary it as may be found needful.

No. 23,677.—GEORGE P. GORDON, of New York, N. Y.—*Improvement in Printing Presses*.—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of one or more sets of revolving grippers, with the finger stops, or their equivalents, for the purpose of piling the sheets of paper in an even and regular heap or pile, substantially as described.

Second. I claim the combination of a vibrating feed board, with the rotating or revolving platen, for the purpose of feeding the sheets of paper regularly and with precision at each rotation of the platen.

Third. I claim the combination of a rotating reciprocating bed with a revolving platen; all of which is fully described.

No. 23,678.—JACKSON GORHAM, of Bairdstown, Ga.—*Improved Bench Plane Stock*.—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing the plane stock of a central wooden portion  $a a^1$ , secured between metal side plates  $b b$ , provided with flanges  $h h$ , the part  $a^1$  being permanently secured between the plates  $b b$  and the part  $a$ , rendered adjustable between said plates by set screws  $a a$ , substantially as and for the purpose set forth.

No. 23,679.—EDWARD GOTTHEIL, of Galveston, Texas.—*Improvement in Cotton Gins*.—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the method of feeding the cotton bolls to the rollers  $b$ , by means of a blast issuing from a slotted or perforated tube, or its equivalent, substantially as set forth.

I do not claim creating a blast of air to issue from the periphery of the brush cylinders, by means of wings within them, by their own velocity.

But I claim, secondly, the arrangement of the two cylindrical brushes  $d$ , in combination with the rollers  $b$ , when the former are so constructed that a blast from an independent source may be forced through slots or perforations in their peripheries, substantially as and for the purposes set forth.

Third. I claim the comb  $e$ , in combination with the blast pipe  $z$ , for gathering the lint off the upper brush roller and discharging it into its receptacle, in the manner set forth.

No. 23,680.—JOSIAH M. GRUMMAN, of Brooklyn, N. Y.—*Improved Surveyor's Chain*.—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the method of making civil engineers' and surveyors' chains of a peculiar form of link, as described and shown.

Second. The arrangement of spring balance and level in the same tube or covering, with the arrangements for adjusting, as described and shown.

Third. The method of allowing for the variation of the temperature by a scale of variation on the chain with the adjusting slide and clamp, as described and shown, so that the chain may be virtually shortened or lengthened to meet the temperature.

Fourth. The use of the spring catch, by means of which the balance and level is detached from the end link and attached to any other link in the chain at the pleasure of the operator.

Fifth. The method of attaching the thermometer to the end bar of the chain, as described and shown.

No. 23,681.—ISAAC W. HAKES, jr., and A. H. HAKES, of Norwich, Conn.—*Improvement in Bustles*.—Patent dated April 19, 1859.—The spring E helps to sustain the form of the springs D D, and by moving it higher up or lower down the springs D D serve to throw the bow lower down or higher up, to suit the taste of the wearer. The springs F G, by being shortened or lengthened, serve, by drawing the sides of the bustle more or less towards each other, to throw out the bustle more or less in a backward direction.

*Claim*.—As an improved article of manufacture a "bustle" provided with front holding straps  $a a^1$  and spring E, when otherwise constructed, as shown and described.

No. 23,682.—B. F. HARRINGTON and U. B. BURRIS, of Missouri city, Mo.—*Improvement in Cooling and Feeding Material to Mills*.—Patent dated April 19, 1859.—The nature of this invention consists in the arrangement of spiral buckets and chambers, for the purpose of conveying air and grain between the stones of a grinding mill.



The inventors say: We *claim*, first, the spiral chambers E E, for the purpose of creating currents of air for keeping the stones cool, substantially in the manner described.

Second. The combination of the spiral buckets with the spiral chambers, when both are constructed and arranged in the manner and for the purpose fully set forth.

No. 23,683.—ALEXANDER L. HOLLEY, of New York, N. Y.—*Improvement in Chairs for Railroads*.—Patent dated April 19, 1859.—The nature of this invention consists in preserving the continuity of the rail ends by means of brackets, so attached to the fish or splice pieces, and to a tension plate, that the weight of the wheels of the train on the rail keeps the said splices tightly in their places without the aid of bolts and nuts, or keys or rivets.

*Claim*.—The combination of the splice C and the bracket D, (the said splice and bracket being either the same piece or separate pieces,) with the foot of the rail *e*, acting as a tension piece, or with a separate tension piece B, in the manner and for the purpose substantially as described.

No. 23,684.—ALEXANDER L. HOLLEY, of New York, N. Y.—*Improvement in Variable Cut Off Gear for Steam Engines*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Such a combination of the motion of an eccentric, or its equivalent, with the motion of a steam piston for moving a valve as will effect a variable cut off of the induction steam without interfering with a free exhaust, substantially in the manner described.

No. 23,685.—BENNET HOTCHKISS, of New Haven, Conn.—*Improvement in Variable Cut Off for Steam Engines*.—Patent dated April 19, 1859.—This improvement consists in the method of tripping the valve stem by the use of an inclined plane on the end of a collar which is adjusted by the operation of the governor on a sliding bar, by means of a diagonal slot, in such a manner that the admission of steam into the cylinder will be cut off at any desired portion of the stroke of the piston in accordance with the velocity of the governor.

*Claim*.—The combination of the sliding bar E with the sliding collar F, when constructed, arranged, and made to control the time of the cut off by the operation of the governor or regulator only, substantially as described.

No. 23,686.—WILLIAM H. HOVEY, of Springfield, Mass.—*Improvement in Corn Shellers*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the arrangement and combination of the endless elevator E, the spout B, the spring presser G, and the shelling cylinder F, in the manner described.

I also claim the arrangement and combination of the grated trough D, with the elevator E, and the mechanism for removing the kernels from the cobs and separating both kernels and cobs, as described, such mechanism consisting mainly of the presser G, the shelling cylinder F, and the grid or bar H, arranged and coöperating as specified.

I also claim the combination and arrangement of the guide hopper or receiver L, with the shelling mechanism, the grated trough D, and the elevator E, in the manner and for the purpose specified.

No. 23,687.—JAMES J. JOHNSTON, of Allegheny, Pa.—*Improvement in Corn Shellers*.—Patent dated April 19, 1859.—The nature of this invention consists in the combination and arrangement of shelling disks, with a guard plate, guide, and spring, or press plate, operating together.

*Claim*.—The combination and arrangement of the disks or shelling wheels *c* and *d*, with the guard *j*, guide *b*, and spring or press plate *k*, constructed and operating in the manner and for the purpose specified.

No. 23,688.—GEORGE KENNY, of Milford, N. H.—*Improvement in Combined Stump Extractor and Press*.—Patent dated April 19, 1859.—When this machine is to be used for lifting weights or extracting stumps, the wire ropes, or chains A A, are unhitched from the hooks *b b*, on shaft *a*, and the whole frame *v v v* is withdrawn, together with the pressing box *w*, and pressing box *y*, and the machine is then worked in combination with the canting frame B B.

The inventor says: I *claim*, first, the combination of the main frame *u u*, anchor frame *r r*, canting frame B B, with the shaft *a*, and the devices for working it, the whole being constructed and combined substantially as and for the purpose set forth.

I also claim the main frame and windlass device above described, in combination with the removable pressing frame and box, substantially as and for the purpose set forth.

No. 23,689.—SAMUEL KIMBALL and WILLIAM SAWYER, of Boxford, Mass.—*Improvement in Apparatus for Drying Shoe Pegs and Grain*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* the arrangement of the steam pipes *fff*, &c., with the main cylinder C, covered with wire gauze or perforated sheet metal, in whatever manner the steam



may be introduced into said pipes, in combination with the floats  $K K^1 K^2 K^3$ , constructed and operating in the manner set forth.

Also the arrangement of the steam pipes  $fff$ , &c., with the main cylinder  $C$ , covered with wire gauze or perforated sheet metal, without the floats  $K K^1 K^2 K^3$ , constructed and operating substantially in the manner set forth.

No. 23,690.—A. C. LANING, of Wilkesbarre, Pa.—*Improvement in Pumps*.—Patent dated April 19, 1859.—This invention relates to an improvement in reciprocating pumps, and is designed to render the same capable of being used in an inclined or horizontal position equally as well as in a vertical one.

*Claim*.—The stationary pipe or tube  $A$ , valve chamber  $B$ , and reciprocating cylinder  $C$ , combined and arranged substantially as and for the purpose set forth.

No. 23,691.—DAVID LOCKE, of Lexington, Mo.—*Improvement in Brick Machines*.—Patent dated April 19, 1859.—This invention consists in having the tempered clay placed in suitable layers, or platforms slightly elevated above the surface of the ground, the layers being made of a thickness corresponding to the thickness of the bricks to be formed, and of any desired width or length, and using, in connection with the layers of tempered clay, a machine mounted on wheels, and so arranged that it may be moved over the layers and made to cut the layers of clay into brick.

*Claim*.—The elevated layer of tempered clay  $d$ , arranged or formed substantially as shown, in connection with the travelling plates or cutters  $p q$ , and pressure plates  $r$ , arranged to operate substantially as and for the purpose set forth.

No. 23,692.—H. H. LOW, of Galena, Ill.—*Improved Shingle Machine*.—Patent dated April 19, 1859.—This invention relates to an improvement in that class of shingle machines in which a circular saw is used to cut the shingles from the bolt, and is an improvement on a machine patented March 16, 1858.

*Claim*.—The inventor says: I do not claim a vertical reciprocating frame  $E$ , containing the bolt from which the shingles are sawed, for such device has been used, and may be seen in the machine formerly patented by me and previously alluded to.

But I *claim* operating the vertically reciprocating and balance frame  $E$ , from the saw or power shaft  $B$ , through the medium of the pulleys  $c e$ , and gearing  $g h i j$ , arranged with the slide bar  $I$ , arm  $H$ , and the springs  $n n^1$ , and spring stop  $J$ , substantially as and for the purpose set forth.

No. 23,693.—JOHN R. MARSTON, of New York, N. Y.—*Improvement in Cob and Grain Mills*.—Patent dated April 19, 1859.—This mill is made in the ordinary form of others for the same purpose. When the sliding cone  $b$  requires to be graduated, so as to grind coarser or finer, the nut on the set bolt  $j$  is slackened, the set screw  $p$  can then be tightened or loosened, as may be required; the nut on the bolt  $j$  is tightened so as to keep the cob cutter in its proper place, the stationary cutter shell  $g$  being retained in its position by means of the revolving cutter  $f$  and the collar  $i$ , both of which are firmly secured to the shaft  $e$  by a set screw or key.

*Claim*.—The set bolt  $j$ , with its nut, or its equivalent, the slot  $h$ , in the shell of the cob-cutter, and the collar  $i$ , on the shaft, for the more practicable and reliable mode of retaining the cutters of the cob-mill in their proper places, substantially as and for the purposes set forth.

No. 23,694.—JAMES F. MONROE, of Fitchburg, Mass., and E. P. MONROE, of New York, N. Y., assignors to E. P. MONROE, aforesaid.—*Improved Egg Beater*.—Patent dated April 19, 1859.—This invention consists in arranging in an adjustable frame two beaters, one inside the other, which receive motion in opposite directions by means of two pinions which gear into a large bevel wheel, and on opposite sides of the same, so that, by rotating the bevel wheel by means of a handle, the beaters receive the required motion.

*Claim*.—The two beaters  $I$  and  $J$ , constructed of wires  $i$  and  $j$ , and arranged in the adjustable frame  $A$  in such a manner that the same, by means of pinions  $F$  and  $G$ , and by the bevel wheel  $D$ , receive a rapid rotary motion in opposite directions, substantially as and for the purposes specified.

No. 23,695.—JOHN D. MURPHY, of Baltimore, Md.—*Improvement in Iron Carriage Wheels*. Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I am aware that combined cast and wrought iron wheels have been constructed before, and I therefore wish to be distinctly understood as disclaiming the invention and construction of such wheels, broadly considered.

But I *claim* a combined wrought and cast-iron wheel, when the several parts composing said wheel are constructed in the form, and arranged and combined in the order, as and for the purposes shown and described.

I also claim having the entire rim  $d$  of the tread of the wheel open at one place, as shown



at  $d^1$ , until after the hub is cast, in combination with the mode of inserting and fastening the spokes in the rim or tread of the wheel  $d$ , as and for the purposes described.

No. 23,696.—ISAAC W. NORCROSS and FREDERICK M. NORCROSS, of Lowell, Mass.—*Improvement in Skates*.—Patent dated April 19, 1859.—The nature of this invention consists in a mode of arranging and applying springs to the runner and foot stand of the skate, each spring constituting a part of and continuation of the runner, and being fastened to either the toe or the heel of the foot stand and disposed with regard to it as shown in the engraving.

*Claim*.—An improved mode of arranging and applying the springs B, each being a continuation of the runner E, and to extend laterally and longitudinally with reference to and to be fastened at the toe and heel of the foot stand, as shown in the drawings and as specified.

No. 23,697.—WILLIAM G. OLIVER, of Buffalo, N. Y.—*Improvement in Applying Electricity in Dental Purposes*.—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The inventor says: I am aware that electricity has been applied as an anæsthetic agent in dental operations, and do not, broadly, claim the application of such an agent.

But I claim the employment, in producing local anæsthesia in dental operations, of an apparatus in which only non-metallic conductors are brought in contact with the parts operated upon, as set forth.

No. 23,698.—GEORGE W. PARSHALL, of Middlefield, N. Y.—*Improvement in Railroad Car Couplings*.—Patent dated April 19, 1859.—The nature of this invention consists in constructing a coupling by which the cars can be all detached simultaneously, if required, and if a car runs off the track, to detach itself from all the others.

*Claim*.—The construction and combination of the head piece M, tongue R, wheel O, and pin D, arranged and operating as described and set forth, for the purpose specified.

No. 23,699.—JOSEPH R. PAYSON, of Covington, Ky.—*Improvement in Sash Cord Fasteners*. Patent dated April 19, 1859.—The nature of this invention consists in constructing a metal fixture or sash cord fastener for receiving and holding securely the knotted end of the cord, at the same time admitting of its being readily cast off in removing the sash.

*Claim*.—The cylindrical ring  $a$ , in combination with the opening  $b$ , neck  $c$ , and eye  $d$ , substantially as described, and for the uses and purposes mentioned.

No. 23,700.—SAMUEL PEIRCE, of Cambridgeport, Mass.—*Improvement in Weighing Scales*.—Patent dated April 19, 1859.—The fulcrum block C has an axis  $a$  which serves as the fulcrum of the scales, the knife edged extremities thereof resting in sockets or bearings  $b b$  in upright standards D D, secured on a suitable base E. The two slides A B are employed in such a manner that by drawing them out successively or together different degrees of weight are indicated by scales marked thereon, and by the same device, in connection with a fulcrum block C, the scales are accurately adjusted.

*Claim*.—The combination and arrangement of the two poise slides A B and the fulcrum block C, substantially in the manner and for the purposes specified.

No. 23,701.—JAMES L. PERRY, of Mansfield, and MELZER BURT, of Norton, Mass.—*Improved Fluid Measure*.—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The fluid measure, constructed substantially in the manner and to operate with respect to a barrel or reservoir, as specified, that is to say, as made of a close vessel A, induction and eduction faucets and a tell-tale valve and valve openings, or equivalent, combined and arranged essentially as set forth, the valve serving to indicate when the case may be full of liquid, the induction faucet allowing the flow and interruption thereof of liquid into the case, and the eduction faucets determining the amount of flow out of the case, as described.

No. 23,702.—PHILANDER PERRY, of Troy, N. Y.—*Improvement in Mills for Grinding, Crushing, &c.*—Patent dated April 19, 1859.—This invention is designed to be used by farmers, and is intended to combine in a compact machine several agricultural implements in one, so that all may work efficiently, either separately or simultaneously. A description of the machine is too long for a place in this volume.

The inventor says: I do not claim, broadly, or irrespective of arrangement, the placing of two pairs of grinding stones or plates on one shaft, for that has been previously done.

But I *claim* the specified arrangement for effecting the combination, in one machine, of the described grinding mill, cob-crusher, corn-sheller, and straw-cutter, for the purpose set forth.

No. 23,703.—BRADFORD S. PIERCE, of New Bedford, and MASON R. PIERCE, of Mansfield,



Mass.—*Improvement in Machines for making Drain Pipes.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the arrangement of the mixing apparatus, pressing and core relieving devices above the platform for conveying the moulds, in the manner and for the purpose specified.

Also the arrangement of the core socket upon the revolving disk to receive the core and the mould, with a provision for discharging the core through the platform, in the manner and for the purpose specified.

No. 23,704.—WILLIAM S. PRATT, of Brooklyn, N. Y.—*Improvement in Journal Boxes.*—Patent dated April 19, 1859.—In making this improvement the inventor says: I construct five cylinders D which I place in a recess between the cylinders C in a line between their centres; in the ends of the cylinders D, is placed a centre pin. I then construct the ring E with a recess through its centre; said ring receives the pins or centres of the cylinders D, said ring revolving around the centre B, cylinders D keeping cylinders C at an equal distance from each other, and transmitting the pressure of the centre B equally to cylinders C.

*Claim.*—The rollers D D placed between the rollers C C, in the position and for the purposes specified.

No. 23,705.—H. PURLIER, JESSE HARLAN, and E. C. CHEEK, of Cincinnati, Ohio.—*Improvement in Car Couplings.*—Patent dated April 19, 1859.—This invention relates to certain improvements in car couplings, by means of which cars may be rendered self-coupling, and at the same time be coupled while in motion.

*Claim.*—The employment of the tripping-pin *b d* in combination with the latch lever *f g*, arranged and operating substantially as described, and for the purpose set forth.

No. 23,706.—WASHBURN RACE and S. R. C. MATHEWS, of Seneca Falls, N. Y.—*Improvement in Hydrants.*—Patent dated April 19, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The combination and arrangement of the parts herein described, consisting of the cap K, having within its socket the spring *j*, or its equivalent, stem attachment H, interior tube D, conical valve F, and closed seat G, whereby the valve is kept in place by the force of the spring *j*, and operated free from the external pressure of the water, substantially as and for the purpose set forth.

No. 23,707.—SAMUEL RAY and MOSES R. SHALTERS, of Alliance, Ohio.—*Improvement in Harvesting Machines.*—Patent dated April 19, 1859.—This invention consists in a peculiar manner of attaching the finger bar to the main frame of the machine, whereby the bar, when not in use, is rendered capable of being adjusted or folded up by the side of the main frame in two different positions, in order to facilitate the ready transportation of the machine. It also consists in a peculiar arrangement of the driver's seat, whereby a requisite degree of elasticity is given to the same.

The inventors say: We *claim*, first, attaching the finger bar E to the machines by means of the plate G, one end of which is pivoted to the machine, as at *l*, and the other end connected with the finger bar by joints K K, the above parts being in connection with a jointed connecting rod *i* to admit of the folding and turning of the finger bar, substantially as described.

Second. Placing the driver's seat J on the springs *r*, fitted in the hollow standards *p p q*, substantially as and for the purpose set forth.

No. 23,708.—TAPPAN REEVE and M. B. SWEZEY, of Brooklyn, N. Y.—*Improved Folding Seat.*—Patent dated April 19, 1859.—This invention is designed for a supplemental seat attachment to be applied to the ends of pews or settees adjoining the aisles or passage ways in churches or public rooms, the seats be so constructed and arranged that the same may be unfolded and made to occupy a portion of the aisle or passage ways when the permanent seats are all filled or occupied.

*Claim.*—The seat B attached to the end piece A of the pew or settee by the pin *b* of the bar *c* and the slot *a* in the end piece, and provided with the hinged back F and support E, the whole being arranged substantially as and for the purpose set forth.

No. 23,709.—WILLARD RHOADS, of Baltimore, Md.—*Improvement in Snow Ploughs for Railroads.*—Patent dated April 19, 1859.—The nature of this invention consists in the construction of snow ploughs on railroad track clearers, with a flat projecting flange extending from the point along the bottom of the sides of the clearer attached, horizontally and at right angles to the sides of the clearer, and working, when in use, parallel to the rails of the track, the faces of the clearer being vertical and furnished with a series of pressing wings.

*Claim.*—The projecting flange *a* in combination with the vertical sides *b*, in the construction of the railroad track clearers.



No. 23,710.—SILAS C. SALISBURY, of New York, N. Y.—*Improvement in Machines for Tempering and Moulding Plastic Materials.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The inventor says: I *claim* the employment of a series of two or more cylinders and the intervening guard blocks, in combination with a cylinder of larger diameter provided with flanges on its ends, so that the periphery of the larger cylinder, with its flanges and the opposing surfaces of the series of cylinders and guard blocks, shall constitute the walls of a channel in which the plastic material, on its passage to the die or mould, is worked, tempered, and pressed, as set forth.

I claim giving to the surface of the cylinder *b* a greater velocity than the surface of the large cylinder *A*, for the purposes set forth.

I claim forcing the plastic material into the die between the cutting edges *s s* by the pressure of a coat or layer of plastic material, formed on and adhering to the periphery of the large cylinder, as set forth.

No. 23,711.—JACOB RUPERTUS, of Philadelphia, Pa.—*Improvement in Revolving Fire-Arms.* Patent dated April 19, 1859.—This invention consists in a safety tube, which serves to convey the fire from the priming to the several chambers, to prevent any escape of the fire in a lateral direction from the vent of one chamber to that of the next, and consequent accidental discharge of any of the chambers, and to lock the cylinder with its chambers in line with the barrel.

The inventor says: I *claim*, first, The safety tube *E*, constructed, applied, and operating substantially as and for the several purposes specified.

Second. Producing the necessary movements of the safety tube *E* by means of a forked or toothed lever *I*, spring *J*, or its equivalent, and a tooth *u* on the tumbler, the whole being applied and operating substantially as described.

No. 23,712.—CORNELIUS SCHOFIELD, of Trumbull, Conn.—*Improvement in Attaching the Rails of Carriage Seats.*—Patent dated April 19, 1859.—This invention consists in supporting the rail by which the top of a carriage is attached to the seat by means of arms, the ends of which form semi circular recesses, which fit on the rod that constitutes the rail, and only two of those arms form jaws, which extend far enough beyond the rail for a screw to pass through in front of said rail, so that the same may be removed by taking out these screws and by springing the rods constituting the rails out of the several recesses in which they rest.

*Claim.*—The arrangement of the arms *a*, the ends of which form semi circular recesses *d*, in combination with the arms *C* and thumbscrew *k*, for the purpose of supporting the rail and securing the same to the seat, in the manner substantially as set forth.

No. 23,713.—CHARLES SCHOTT and JAMES C. BALDWIN, of Nashville, Tenn.—*Improvement in Excavating Machines.*—Patent dated April 19, 1859.—This invention consists of a two wheel cart with a crooked axle *C*, with two cross bars *L L* fastened on the same, forming the shaft for the animal, also supporters for bucket *A* and shaft *H*. The bucket is made fast on the shaft, and has on one side a pinion *B*, which works the lever *D* by means of corresponding gearing with pinion *B*, so that by a pressure of the lever *D* with the foot the excavator can be loaded or unloaded by the driver without moving from his seat.

*Claim.*—The combination and arrangement of lever *D* with its connection with bucket *A*, for loading and unloading, in the manner set forth.

No. 23,714.—C. A. SCHULTZ, of New York, N. Y.—*Improvement in Steam Valves.*—Patent dated April 19, 1859.—The principle of this invention is to take off the steam pressure of slide valves for steam engines, which is done by having the described attachments made to a common slide valve.

*Claim.*—The combined arrangement of the spiral springs and their inclosing columns, with the plate *C*, as and for the purposes described.

No. 23,715.—I. W. SENER, of Fredericksburg, Va.—*Improvement in Tea and Coffee Pots.*—Patent dated April 19, 1859.—This invention consists in a modification of the Waite and Sener coffee pot, known as "The Old Dominion," for the purpose of preventing accidents from too great pressure of steam which may occur in that utensil when the siphons, from any cause, may become obstructed.

*Claim.*—The safety apparatus herein before described, the same consisting in the combination of the tube *G*, and the cap *H*, and valve *J*, constructed and operating as and for the purpose specified.

No. 23,716.—S. B. SEXTON, of Baltimore, Md.—*Improvement in Stoves.*—Patent dated April 19, 1859.—This invention consists in a certain combination of parts constituting an improvement in cylinder stoves, constructed with a covered fuel chamber reaching nearly to



the grate, so as to furnish a continued supply of fuel to support combustion in the fire chamber below and exterior to said fuel cylinder.

*Claim.*—The covered fuel cylinder H, in combination with the chambers A B B<sup>1</sup>, flues C and D, and dampers *a* and *b*, together with the rear casing R, constituting a cold air chamber, the arrangement being as set forth.

No. 23,717.—A. SHANNON, of New York, N. Y.—*Improvement in the Treatment of India Rubber.*—Patent dated April 19, 1859.—The nature of this invention consists in a peculiar process for preparing the rubber, whereby a combination takes place between the rubber and the cork, forming one homogeneous, light, elastic, waterproof, and durable article.

*Claim.*—The method herein set forth, of treating caoutchouc so as to combine therewith cork, or its equivalent, substantially as set forth.

No. 23,718.—BENJAMIN R. SMITH, of Philadelphia, Pa.—*Improved Instrument for Ascertaining the Direction of Sounds in Fogs, &c.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A reflector made of suitable material, and of such a form or shape that it will collect all the rays or waves of sound entering it, to a focus, when pointed towards the direction from whence sound comes, for the purpose of ascertaining the direction of the source of such sound, and conversely of throwing off from the reflector, in parallel lines, if need be, the sound of a bell or whistle, which may be placed at the focus of the said reflector, substantially as described.

No. 23,719.—WILLIAM SMITH, of Pittsburgh, Pa.—*Improvements in Coal Oil Retorts.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I am aware that shafts exposed to heat have been made hollow, and water or air conducted through them, for keeping them cool: I, therefore, do not claim this broadly.

But I *claim* the making of the agitating arms *h*, hollow, and to communicate with the hollow shaft D, for the purpose of cooling them, by means of the current of air or water passing through the said shaft, substantially as set forth.

No. 23,720.—WILLIAM H. SMITH, of Newport, R. I.—*Improvement in Stoves.*—Patent dated April 19, 1859.—This invention consists in arranging the pipes through which the several compartments communicate with the flue, in such relation to the compartments that the hot air is forced down into the space surrounding the ash box, which space is so divided by suitable partitions that the hot air which descends on one side of the ashbox has to circulate round the same and in its front, in order to get to the tube which communicates with the flue.

*Claim.*—The arrangement of the partitions F F<sup>1</sup>, in combination with the partitions K, and the openings *a a*<sup>1</sup>, for the purpose of forcing the hot air to circulate around and in front of the ashbox, substantially as and for the purpose specified.

No. 23,721.—ERASTUS STEBBINS, of Chicopee, Mass.—*Improvement in Stop Cocks.*—Patent dated April 19, 1859.—R is a seat for the collar I; S is the valve chamber; the metallic washer G, elastic washer H, and metallic conical, or concave shaped collar I, constitute one of the peculiar features of this improvement; L is the screw nut; T is the chamber of the nut; M are openings through the shell of the nut, which is raised thereby to and from the seat P; N is an elastic substance, or washer, secured to the end of the nut L by a screw or nut O.

The inventor says: I *claim* the arrangement and combination of the collar I, flexible washer H, metallic washer G, as and for the purpose described.

Also, the chambered nut or valve L, having apertures M, as and for the purpose described.

No. 23,722.—NATHAN P. STEVENS, of Keene, N. H.—*Improvement in Brakeheads for Railroad Cars.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, suspending the brakeheads D to the ends of the transverse brake bar A, by the journals and boxes, substantially in the manner and for the purpose set forth.

Second. I *claim* forming cogs or protuberances on the peripheries of the journal sleeves C, and interposing strips of rubber G between them and the ends of the grooves in the journal box cap, in which the said cogs or protuberances move, for causing a greater pressure to be extended on the lower than on the upper portions of the shoes E, as described.

No. 23,723.—GEORGE D. STILLSON, of Rochester, N. Y.—*Improvement in Excavating Machines.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.



*Claim.*—In combination with an endless belt of digging hose, a presser wheel, that acts independently of the weight of the machine, for driving them into the ground, as described.

No. 23,724.—ROBERT STOTT, of Baton Rouge, La.—*Improvement in Governors for Sugar Mills.*—Patent dated April 19, 1859.—The object of this invention is to secure a uniform pressure on the cane with variable feeding, this being obtained from the action of the upper roller.

*Claim.*—In combination, the caps S S, the bolts V, the plates X and Z, when acted upon by the employment of a weight, or its equivalent, through an eccentric movement, made and arranged substantially as and for the purpose set forth.

No. 23,725.—GEORGE C. TAFT, of Worcester, Mass.—*Improved Wrench.*—Patent dated April 19, 1859.—In this invention the screw rod *b* is one piece, with the ferrule *d* extending from the projection *c* of the said ferrule, and screwing into the female screw *o* of rosette *a*, which latter is one piece with the screw rod *f*.

*Claim.*—The rosette *a*, with a female screw *o*, in combination with the stationary screw *b*, traversing male screw *f*, and sliding jaw *g h*, with its female screw *p*, substantially as and for the purposes set forth.

No. 23,726.—WILLIAM P. TROWBRIDGE, of Washington, D. C.—*Improved Apparatus for Deep Sea Sounding and Method of Conveying and Paying Out Line for Other Purposes.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the mode of conveying and extending a line across or through a given space by means of a weight or projectile, the line being compactly coiled within a tube or case, which is attached to the weight or projectile, and moves along with it, and is discharged from the case or holder as the weight or projectile advances, while one end of the line is retained at the starting point substantially as described.

I do not limit my claim to the particular manner of coiling the line described, or to any one mode of giving motion to the same, which may be the force of gravity, the propelling power of a rocket or cannon, or other motive power.

No. 23,727.—A. P. TUTTON, of Reading, Pa.—*Improvement in Railroad Car Brakes.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Connecting the two shoes E E between the wheels B at each side of the truck by means of racks B *b* and a pinion F, whereby the shoes, when brought in contact with the treads of the wheels are made by the action of the wheels to move simultaneously in opposite directions, and bind or wedge between them the wheels, to stop the same, substantially as described.

No. 23,728.—MICHAEL VAN DEBOGERT, of Binghamton, N. Y.—*Improved Washing Machine.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, subjecting the articles to be washed to the combined action of the fluted or roughened surface of the tube and cylinder, the two surfaces moving, in part in opposite and in part in the same direction with each vibration of the cylinder, as set forth.

Second. I claim the arrangement of the means for gearing and ungearing the wheels as recited, whereby I am enabled to give vibrating motion to both of the rubbing surfaces, as described.

No. 23,729.—RICHARD VAN VELTHOVEN, of Philadelphia, Pa.—*Improvement in Grates for Furnaces.*—Patent dated April 19, 1859.—This invention consists in a hinged frame with grate bars, forming the rear of a furnace grate, in combination with certain devices for raising and lowering the said hinged frame, the whole being arranged so as to enable an attendant to rapidly discharge the cinders and refuse from the back of the grate into the ash pit.

*Claim.*—The frames G and G<sup>1</sup> with the bars I, forming the hinged rear of a furnace grate, in combination with the releasing and retaining cam K, operated by the rod O, or its equivalent, and the bracket J, with its projecting chain or equivalent, the whole being arranged substantially as and for the purpose set forth.

No. 23,730.—JACOB V. A. WEMPLE, of Chicago, Ill.—*Improvement in Harvesters.*—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The guard rod W to separate the falling grain from that which lies on the platform, while the rake is passing down, and lay hold thereof, and also to prevent the grain from falling on the rake, arranged and operated substantially in the manner described.

No. 23,731.—I. W. WETMORE, of Erie, Pa.—*Improvement in Railroad Chairs.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Notching the caps of the adjacent ends of H or T rails as at *f*, and the adaptation



of a chair A to surround the ends or joint within the shoulders of the notches, the chair forming the bearing surfaces for its length, and its leaves being bent under the base of the rail, and resting on the tie, substantially as set forth.

No. 23,732.—CULLEN WHIPPLE, of Providence, R. I.—*Improvement in Machines for Combing Fibrous Materials*.—Patent dated April 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, arranging the series of gill combs *a a a a* with a hot chest or its equivalent, in such a manner that said combs can be alternately sheathed and protruded from between heated plates, in the manner substantially as described, and for the purposes specified.

Second. I claim the combination of the stationary heated chest T with the movable jaw D, the two when so combined operating to hold the fibrous substance firmly while the front end is combed.

Third. I claim arranging the series of fine screen combs *b b* with the heated chest T, substantially in the manner described, and for the purposes specified.

Fourth. I claim the arrangement and combination of the revolving cylinder C for first combing the front end of the sliver, the series of fine screen combs *b b* for combing the back end of the sliver and the nippers *k* for drawing the sliver through the screen combs and delivering it upon the apron, the whole combination as arranged operating to draw and comb the wool, or other fibrous material, in a straight line, and to deliver it in a position to be formed into a continuous sliver substantially as described.

No. 23,733.—EDWARD WHITELEY, of Boston, Mass.—*Improvement in Steam Boilers*.—Patent dated April 19, 1859.—This invention consists in a peculiar construction of the boiler, in which the fire box is within the boiler, the latter surrounded by a series of vertical water tubes leading from the upper to the lower part of the water space, and so arranged within a chamber or passage around the outside of the boiler that the products of the combustion after they escape from the fire box shall circulate around and amongst the tubes.

*Claim*.—The water tubes *f* within the space E surrounding the boiler, arranged and operating in the manner substantially as set forth.

No. 23,734.—W. L. WILLIAMS, of New York, N. Y.—*Improved Machine for Splitting Fire Wood*.—Patent dated April 19, 1859.—This invention consists in certain improvements in the mode of feeding blocks of wood to the knife or knives, which are described by the claim and engravings.

The inventor says: I am aware that endless feeding chains have been previously used for feeding blocks of wood to be split to the splitting knives, and I do not claim, broadly, such device, irrespective of the lateral movement described, for chains for this purpose may be seen in my patented machine previously alluded to. The knife D has also been used and may be seen in the above-mentioned machine. I therefore do not claim the knife D; but I *claim*, first, the employment or use of the endless feeding chains I I, when arranged as shown, or in any suitable way, so as to have the usual rotating movement around their pulleys *h h<sup>1</sup>*, and also the lateral movement for the purpose specified.

Second. The endless feeding chains I I, in combination with the yielding rollers *j j*, for the purpose of permitting the lateral movement of the chains as set forth.

Third. The yielding pawls *h<sup>2</sup> h<sup>2</sup>* in connection with the yielding rods *b<sup>1</sup> b<sup>1</sup>* in shafts *e<sup>1</sup>* and spurs *f*, arranged substantially as described, to permit the yielding of the blocks of wood while split, as described.

No. 23,735.—JAMES WILSON, C. GREEN; and WILLIAM WILSON, Jr., of Wilmington, Del.—*Improved Double Seaming Machine*.—Patent dated April 19, 1859.—This invention consists of two horizontal axles A A<sup>1</sup>, upon the ends of which are placed corrugated heads B B, C C. The lower heads B B are conical, having their smallest diameter pointing inwardly; the upper heads C C are also conical; but their smallest diameter points outwardly. Behind the upper and lower heads are forming rollers H H, which are employed to keep the cylinder round.

*Claim*.—The combination of the disks E and D, and the burring pulley H, the bearing down pulleys I, the double burring pullies K, and the finishing pulley L, in the manner and for the purpose substantially as described.

No. 23,736.—JAMES WILSON, C. GREEN, and WILLIAM WILSON, Jr., of Wilmington, Del.—*Improved Machine for Corrugating Sheet Metal*.—Patent dated April 19, 1859.—The inventors say: Hitherto it has been possible to double seam one end of a metallic keg by inserting a mandrel or other instrument suitable for the purpose. The object of this invention is to enable both heads to be double seamed, which by the old process was impossible, unless a large opening was left in one head.

*Claim*.—The arrangement of the upper and lower heads, the forming rollers H H, together



with the rollers which support the cylinders to be corrugated at the requisite angle, substantially as described.

No. 23,737.—D. A. WOODBURY, of Rochester, N. Y.—*Improved Variable Cut Off Gear for Steam Engines.*—Patent dated April 19, 1859.—This invention consists in a certain arrangement of a rocker fitted with a variable slide, and of two connecting rods attached to the said slide in combination with an eccentric or its equivalent, and with arms on the shafts of two cut off valves, whereby is obtained a cut off gear which is variable either by a hand adjustment, or serves as a regulator of the speed of the engine under the control of a governor.

*Claim.*—The arrangement of the rocker J, and its variable slide I, and the inclined or toggle like connecting rods H H<sup>1</sup>, in combination with the eccentric M, or its equivalent, and the arms G G<sup>1</sup> on the valve shafts, substantially as described.

No. 23,738.—GILBERT YATES, of West Dresden, N. Y.—*Improved Mode of Opening and Closing Farm Gates by Hand.*—Patent dated April 19, 1859.—The front ends of two connecting pieces H H<sup>1</sup> are pivoted to the arms of piece I. The ends of these arms are bent down, as seen at *i i*, so as to limit the lateral play of the piece I when it is turned on its pivot *b*. The rear ends of the connecting pieces are pivoted to the front ends of the two levers or arms G G, while the rear ends of the latter turn on a stationary pivot *a* in the rear of the post B.

*Claim.*—The combination of the levers or arms G G<sup>1</sup> with the connecting arms H H<sup>1</sup>, vibrating, connecting, and unlatching piece I, and cords *c* I<sup>1</sup> I<sup>2</sup>, when arranged and combined with the gate and posts, substantially as and for the purposes set forth.

No. 23,739.—GEORGE W. ZEIGLER, of Tiffin, Ohio.—*Improved Automatic Fan.*—Patent dated April 19, 1859.—In this invention, the weight of the occupant of the bed, acting on the levers, causes the cord to unwind and turn the wheel, the flanges of which, coming in contact with the arm, cause the pendulum, with which it is connected by a rod, to vibrate, and thus the brush swings over the bed. It also has a weight attached to each end, which assists the motion.

*Claim.*—The combination of the levers B B, supporting the bedstead with the escapement wheel F, lever E, pendulum and fan, together with the parts connecting the same, for operating the fan from the weight of the occupant of the bed, as described.

No. 23,740.—FRANCIS BASCHNAGEL, of Wenham, Mass., assignor to the BEVERLY RUBBER COMPANY, of Beverly, Mass.—*Improvement in Restoring Waste Vulcanized Rubber.*—Patent dated April 19, 1859.—The claim explains the nature of this invention.

*Claim.*—The process described; that is, boiling waste vulcanized rubber in water, after it has been reduced to a finely divided state, for the purpose of restoring the same to a plastic, gummy, or elastic state, fit to be used again in the manufacture of India rubber fabrics and substances, as set forth.

No. 23,741.—THOMAS BAXTER, of Petersburg, Va., assignor to WILLIAM H. BAXTER, of the same place.—*Improvement in Hydraulic Presses.*—Patent dated April 19, 1859.—The nature of this invention consists in casting the barrel of the cylinder separate from the head, thereby allowing the thickness to be much less in consequence of all longitudinal strain being overcome, and the quality of the iron cast being more dense. Wrought iron bands are shrunk on the casting to increase its strength.

*Claim.*—Making the cylinders of hydraulic presses in a manner substantially as described.

No. 23,742.—RICHARD BENNETT, of Redditch, England, assignor to J. F. MILWARD, of New York, N. Y.—*Improvements in Needle Wrappers.*—Patent dated April 19, 1859; Patented in England, May 7, 1857.—This invention consists in the employment of an inner wrapper, having attached to it a piece of cloth, or other fabric or material, through which the needles are stuck each in a separate hole, and which is capable of holding them so as to prevent any longitudinal movement, and in providing the outer wrapper with an attached loop, through which the inner one containing the needles is passed, and by which it may be held while the wrapper is open.

The inventor says: I *claim* the employment, in combination with the outer wrapper A, of an inner wrapper *b*, with an attached piece *e*, through which the needles are stuck, in the manner described.

I also claim the employment, in combination with such inner wrapper, of a loop *a*, secured to the outer wrapper A, substantially as specified.

No. 23,743.—TRUMAN COOK, of Washington, D. C., assignor to A. THOMAS SMITH, of the same place.—*Improvement in holding Keys for Strap Connections for Engines.*—Patent dated April 19, 1859.—The nature of this invention consists in a combination of parts whereby the key is held at any place of required adjustment, as if immovably fixed to the gib, and at the same time occupies no room available for any other purpose.



*Claim.*—The notches A F in the key, as shown, the hole C in the gib, the notch D at the side of the said hole, the bolt J with its peculiarly formed head B, and the combination and arrangement of these parts, substantially upon the principle and in the manner set forth.

No. 23,744.—SHERMAN McLEAN, of Royalton, N. Y., assignor to the AMERICAN TRADES COMPANY, of New York, N. Y.—*Improved Saw Jointer.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and adjustment of the file in the tool or file carrier, so constructed that when the flat side of the long arm of the tool is pressed against the side of the saw blade it will present the file exactly at right angles to the angular edges of the teeth, and being passed over them, will square and make uniform their edges, the saw blade being placed, when the instrument is in use, between the long and short arms of the saw jointer, as described.

No. 23,745.—H. W. ROLAND and E. FORBIS, of Newport, Ohio, assignors to Themselves and WASHINGTON WITHEROW, of the same place.—*Improvement in Mole Ploughs.*—Patent dated April 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Pivoting the carriage A to the beam B, near its forward end, as represented, and in combination therewith the curved colter *i*, pivoted to the beam B, and friction rest *c*, arranged and operating in the manner set forth.

No. 23,746.—JOHN P. SCHENKL, of Worcester, Mass., assignor to Himself and E. A. DANA, of Boston, Mass.—*Improvement in the Chambers of Ordnance and other Fire-Arms.*—Patent dated April 19, 1859.—The operation of this invention is described as follows: The initial charge in space *a* being first ignited by the vent fire and exploding, imparts motion to the rod *p*, sabot *s*, and projectile S, which is instantaneously followed by the explosion of the main powder charge in space *g g*, fired by the flame following the rod *p*, by which process the *vis inertiae* of the projectile has been overcome before the explosion of the main charge takes place.

The inventor says: I *claim* the combination of an intercepting rod or leader *p* with the secondary barrel or auxiliary charge chamber, and a projectile adapted to the gun or piece of ordnance.

No. 23,747.—O. M. STILLMAN and S. WILCOX, Jr., of Westerly, R. I.—*Improved Thermostat for Steam Boilers.*—Patent dated April 19, 1859.—The patentee thus describes the operation of his invention: Upon starting the engine, the steam passes from the boiler through the separator to dome C, from which it passes through pipe G to E and circulates among the heated flues, as indicated by the arrows, and passes out at G<sup>1</sup> fully superheated.

*Claim.*—Regulating the flow or the products of combustion to the superheater by the difference in pressure between the superheated steam and that of saturated steam, substantially in the manner described, and for the purpose set forth.

No. 23,748.—R. W. BELSON, of Philadelphia, Pa.—*Improvement in Stoves.*—Patent dated April 26, 1859.—Over the top oven plate is arranged an air-heating chamber *a* of semicircular form, which chamber turns upon a hollow axis *b* and also upon the collar *c*. The air is admitted to chamber *a* through the hollow axis *b*, and as it is taken over the top of the stove it is considerably heated prior to its entrance into *b*. The straight edge *e* of chamber *a* is perforated with numerous holes for introducing the heated air among the gases arising from the fire.

The inventor says: I *claim* the semicircular heater *a*, turning upon the hollow axis *b*, near one side of the heater, arranged and combined with the stove, as set forth.

Also, combining said heater, by means of collar *e*<sup>1</sup>, with the air chamber in rear of the fire back, as set forth.

No. 23,749.—R. W. BELSON, of Philadelphia, Pa.—*Improvement in Stoves.*—Patent dated April 26, 1859.—The chamber *a* and the arms *c* are designed to receive and heat the air prior to its introduction among the gaseous products of combustion, to cause their complete consumption. The air is admitted to the chamber and thence to the arms by the pipe *b*, which extends to within a short distance of the back plate *e* of the stove. The damper *t* is made hollow, and one part *s* of its axis hollow; and the air being introduced through the hollow axis the damper becomes rarified, and rising directly into the chimney pipe increases the draft of the stove.

The inventor says: I *claim* the arrangement of the air heater *a*, sliding over the oven top and connected with the air passage *b*, in the manner and for the purposes set forth.

Also, making the damper *t* and its shaft hollow, in the manner and for the purposes set forth.

No. 23,750.—A. S. BLAKE, of Waterbury, Conn.—*Improvement in Animal Traps.*—Patent dated April 26, 1859.—To one end of the bar A the spring D is attached. One end of this spring is perforated and the jaws *e e* pass through it. The spring has a tendency to keep the jaws



in a closed state, and when the jaws are distended or opened they are retained in such position in consequence of the catch *b* fitting over one of the jaws, the trap being sprung by the animal, either treading on the plate or rubbing the bait thereon.

*Claim.*—A trap having its spring *D* attached below its jaws *ee*, and the spring brought within or nearly within the diameter of the jaws, as and for the purposes shown and described.

No. 23,751.—ALBERT D. BRIGGS, of Springfield, Mass.—*Improved Screw Wrench.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The application of the sleeve *G* to the nut *F* and the handle *D*, so as not only to be capable of turning with and rotating the nut, but of moving longitudinally on the handle and with the nut, in accordance with the movement of the movable jaw *E*, on the shank *A*.

No. 23,752.—GEORGE A. BRIGHAM, of Marlborough, Mass.—*Improvement in Dishes for Waxing Threads.*—Patent dated April 26, 1859.—*I* is a guard extending up from the upper end of *G* around the spool to catch any drops that may be carried to the spool and thrown off by its motion. In its operation the thread *C* is passed from the guide *B* under the wires *D* and *D*<sup>1</sup> to become thoroughly saturated, and then up by the rubbers in the common way to the spool *H*. Any drops carried up by the rubber are caught by the guard and returned to the dish *A*.

*Claim.*—The combination of the guard *I*, the dripper *G*, and the guides *B* with the two wires *D* and *D*<sup>1</sup>, to be placed in the dish to hold the thread in the manner and for the purposes set forth and described.

No. 23,753.—JOHN L. BROWN and A. C. GREENLEAF, of Indianapolis, Ind.—*Improvement in Sugar Mills.*—Patent dated April 26, 1859.—The following is the operation of this mill: The cane being fed into the mill through the hopper *P*, passes between the rollers *E* and *I*, the machine being operated by the lever *B*. The roller *I* is adjusted by either tightening the rods *K K*, *N N*, or operating the set screws *oo*. The eccentric levers *L L* are so constructed as to retain about the same distance between the bearings and the fulcrum of the same, when their angles are varied, thus equalizing the pressure. By adjusting the weights *M*, the required amount of pressure may be applied to the crushing roller *I*.

*Claim.*—The combination and arrangement of the rods *K K*, *N N*, levers *L L*, and bearings *J J*, with the set screws *oo*, when constructed and operated, substantially as and for the purposes set forth.

No. 23,754.—WILLIAM W. BURGOYNE, of Washington, D. C.—*Improvement in Steam Engines.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the employment of the following elements in combination for the accomplishment of the described object, to wit: A water jacket *D D*<sup>1</sup> open to the atmosphere, inclosing the fire chamber, piston chamber, and smoke stack, a steam evaporating plate *B* forming the crown plate of the fire box, a supply pump *H* for jetting in the water upon the evaporating plate, and a piston *F*, which is hung or arranged so as to reciprocate in the path of a circle or in a straight line when operated upon by the evaporating steam, and in its movement operate the driving shaft of an engine, substantially as and for the purposes set forth.

Second. The manner described of making steam between an intensely heated plate, piston, and isolated or comparatively cold sides of the piston chamber, substantially as and for the purposes set forth.

No. 23,755.—JAMES L. CATHCART, of Georgetown, D. C.—*Improved Marine Governor for Steam Engines.*—Patent dated April 26, 1859.—This invention consists in combining with the steam pipe a valve and automatic governor in such a manner that the same action which raises the propeller, or one of the side wheels out of the water, shall gradually close the valve that admits the steam to the engine, and *vice versa*.

*Claim.*—Regulating the supply of steam to marine steam engines by means of a pendulum arranged and operated in the manner substantially as described and for the purposes set forth.

No. 23,756.—GEORGE CHAMBERLIN and W. CHAMBERLIN, of Olean, N. Y.—*Improvement in Harvesting Machines.*—Patent dated April 26, 1859.—The nature of this invention relates to certain improvements in the arrangement and combination of cutters, gathering and discharging fingers, with the reel in a reaping machine having a revolving cutting apparatus.

*Claim.*—The combination and arrangement of gathering fingers *I* and knives *H* with the reel *L*, arms *M*, receiver *M*<sup>1</sup>, and discharges *N*, when the several parts are constructed and operated as specified.

No. 23,757.—DAVID CUMMING, of Sorrel Horse, Pa.—*Improvement in Devices for Starting*



*Railroad Cars.*—Patent dated April 26, 1859.—This invention consists in an improved device for starting cars.

The inventor says: I *claim*, first, In combination with the ratchet wheels D, the ratchet bars E, arranged and operating as described, for the purpose set forth.

Second. Arranging the ratchet bars E with the sliding frame to which the power is applied, so that said bars will be capable of slight play up and down when in clutch with their wheels, and will run entirely out of contact with said wheels without the aid of other mechanism as described and for the purposes set forth.

No. 23,758.—M. O. DAVIDSON, of New York, N. Y.—*Improvement in the Mode of Connecting and Supporting Railroad Rails.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The use of a rail having its lower web cut away for about fifteen inches at the ends, in combination with the use of a bridge rail splice of a form suitable to receive and support securely the stem of the rail after its lower web has been cut away, and of a length of about thirty inches, or of the distance from centre to centre of cross ties at the ends of the rails, substantially in the manner and for the purpose set forth.

No. 23,759.—THOMAS F. DEBRULER, of Rockport, Ind.—*Improvement in Cotton Presses.*—Patent dated April 26, 1859.—The inventor says: My improvements consist of a machine for compressing substances, wherein I employ two separate segments of circular rack gearing, arranged eccentrically on pivots or axles relative to each other, so that as the ends of the segments of one gear rack moving on a local pivot point, describe the arcs of parallel but different sized circles, the ends of the other gear rack, moving on a sliding pivot point, describe slightly curved lines which cut or cross each other in opposite directions.

The inventor *claims* the construction and arrangement of eccentrically operated gear racks  $h h h$  and  $h^2 h^2 h^2$ , with the connecting rod or yoke  $x x y y$ , Figs. 1 and 2, as described.

Also, the combination of the said devices with the plunger or follower  $n n n$ , substantially as set forth and described.

And also, the construction and arrangement and combination of the traversing pinion  $P^2$  with the sliding carriage  $q q r r s s$ , and driving lever or arms  $w w w w$ , substantially as set forth and described.

No. 23,760.—HENRY DUBOSQ, of Philadelphia, Pa.—*Improved Mode of Connecting Strung Pearl Jewelry.*—Patent dated April 26, 1859.—This invention consists in connecting the plates by means of metallic bars extending across the back of each mother of pearl plate, and riveted thereto on either side of the centre, and then connecting the ends of the bars with each other by an intermediate metallic link.

*Claim.*—Connecting the mother of pearl, or plates of other material used to form the foundation on which the pearls are strung, substantially as described and for the purpose set forth.

No. 23,761.—SELAH DUSTIN, of Detroit, Mich.—*Improved Low Water Alarm for Steam Boilers.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—In combination with a steam cylinder located inside of a steam boiler, and having two openings in it, a float and rod carrying or operating two valves in equilibrium, and having no packed joints, substantially as described, by means of which are avoided all undue pressure and friction, and the float rendered more sensitive to any variation of the height of the water in the boiler, thus to obtain a more reliable indication, or signal, than by any of the heretofore essayed plans, as set forth.

No. 23,762.—WILLARD C. ELLIS, of Springfield, Mass.—*Improvements in Breech Loading Fire-Arms.*—Patent dated April 26, 1859.—The nature of this improvement consists in the means of providing for the removal of the cartridge shell from the barrel after the explosion and cocking, &c.

The inventor says: I *claim* the sere E, having the double action of firing the pistol and unlocking the hook F.

The lever P in this, or any other form substantially the same, in combination with the lugs on the hammer, as shown in the engravings, or with lugs on the sides of the pistol frame.

The cocking of the pistol by the act of breaking down the barrel, in the manner substantially as described.

No. 23,763.—BENJAMIN FITTS, of Worcester, Mass.—*Improved Method of Adjusting the Knives of Rotary Cutter Heads for Planing Wood.*—Patent dated April 26, 1859.—What constitutes the characteristic feature of this invention is placing the bolts F under the knife with the collar or head, as set forth, thus allowing the knife to be placed in the most favorable position for cutting, at the same time keeping the bolts within the circle K.



*Claim.*—Placing the bolt F F, fig. 2, or its equivalent, under the knife, to operate or adjust the knives as set forth and described.

No. 23,764.—TRUMAN FREEMAN, jr., of Providence, R. I.—*Improvement in Rotary Pumps.*—Patent dated April 26, 1859.—The nature of this invention consists in the method of operating the pistons of rotary pumps.

*Claim.*—The combination of the pistons H and the dogs Q, constructed as described, and arranged for conjoint operation with the cam I and pin K, substantially in the manner specified.

No. 23,765.—LOCKWOOD GAIL and JOHN H. GAIL, of West Falls, N. Y.—*Improved Washing Machine.*—Patent dated April 26, 1859.—The operation of this machine is as follows: The proper quantity of clothes are placed in the tub. The rubber is then put into the tub and rests on the clothes. A sufficient quantity of water should be put in with the clothes. By working the lever E a reciprocating motion will be given to the rubber, causing the rollers C to roll over and upon the clothes in the tub.

*Claim.*—The arrangement of the vertical post F and lever E, with the rubber, the whole being constructed, arranged, and operated in the manner substantially as described.

No. 23,766.—PERRY G. GARDINER, of New York, N. Y.—*Improvement in Springs for Railroad Cars and Carriages.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The construction of a spring, by confining the ends of the exterior blades *a a* in bearings in the ends or heads of a tension bar C, without rivets, bolts, hinges, pins, or screws, arranged and operating in the manner and for the purposes described.

No. 23,767.—J. W. GOODELL, of East Wallingford, Vt.—*Improvement in Steam Spading Machines.*—Patent dated April 26, 1859.—This is more especially designed to operate on a large scale, and to supersede steam ploughs. The desired object is attained by the employment or use of a series of wheels attached to a common shaft or axis, the wheels being provided with spades and cleavers, and in certain cases used in connection with revolving wings or blades.

The inventor says: I *claim*, first, the wheels H, provided with spades I, in connection with the cleavers J and the rotating plates *h*, arranged for joint operation, substantially as and for the purposes set forth.

Second. The attaching of the frame A, which contains the wheels H, to a traction engine by means of a universal joint B, in connection with the gearing E D and shaft C, substantially as shown, whereby the frame and wheels H are allowed to conform to the inequalities of the ground, and the working parts driven direct from the engine.

No. 23,768.—EDOUARD GUÉRIN, of Paris, France.—*Improvement in Self Acting Apparatus for Working Railway Brakes.*—Patent dated April 26, 1859.—In this invention, among other pieces of mechanism, is used for the purpose of pushing back a train, a vertical lever L, provided with a balance weight P, which actuates the rod T, the latter suspended to the frame by the piece S. The other extremity of this rod is attached to the forked piece D.

*Claim.*—The forked piece D, vertical lever L, provided with balance weight P, rod T, and collar M, when arranged substantially as and for the purpose set forth.

The inventor says: I reserve to myself the right of varying, or changing the forms, dimensions, and proportions of accessory matters employed.

No. 23,769.—STEPHEN R. HUNTER, of Cortlandt, N. Y.—*Improvement in Seeding Machines.*—Patent dated April 26, 1859.—This invention consists in combining with a broadcast seed distributing device, a rotary drag or harrow, constructed in a novel way, applied to the machine and arranged so that the drag or harrow is made to conform to the inequalities of the surface of the ground, its rotation being insured by the forward movement of the machine, and the seed covered in a proper manner directly after being dropped.

*Claim.*—The seed distributing cylinder K, with adjustable shell L, in combination with two or more seed boxes I J, and rotary harrow H, substantially as and for the purpose set forth.

No. 23,770.—DAVID KNOWLTON, of Camden, Me.—*Improved Steering Wheel.*—Patent dated April 26, 1859.—The nature of this invention consists in making a metal rim or circle and providing it with sockets for the wooden arms or spokes of the wheel, so that if one of the arms should be broken it could readily be removed without injury to the other parts, and its place supplied with a new spoke or arm without delay.

*Claim.*—The metal rim or circle, provided with sockets for the wooden arms or spokes of the wheel, substantially as described.

No. 23,771.—WILLIAM E. LOCKWOOD, of Philadelphia, Pa.—*Improvement in Ladies' Collars*



*and Cuffs*—Patent dated April 26, 1859.—This invention consists in the new manufacture of embossed cuffs, collars, and other articles of wearing apparel, made of a fabric composed of paper and thin muslin pasted together, whereby a close imitation of, and a cheap substitute for, linen cuffs, collars, &c., are obtained.

*Claim.*—As a new article of manufacture, embossed cuffs, collars, and other articles of wearing apparel, made of a fabric composed of paper and thin muslin, or its equivalent, pasted together as set forth.

No. 23,772.—NATHAN B. MARSH, of Cincinnati, Ohio.—*Improved Water Metre.*—Patent dated April 26, 1859.—The nature of this invention consists in constructing a water metre of two end measuring chambers on each side, united by a pair of stationary cylinders, and having, in connection with them, independent interior reciprocating cylinders, divided transversely by septa, and having their stroke adjustable from the exterior. It further consists in a certain construction of parts, whereby the end flanges of the stationary cylinders are made to carry the reciprocating cylinders and the one gasket or packing at each side is made to secure the reciprocating cylinders against leakage, &c.

The inventor says: I *claim*, first, the combination of the two side or end measuring chambers A A<sup>1</sup> B B<sup>1</sup>, middle piece or stationary cylinders C C<sup>1</sup>, independent reciprocating exterior cylinders F F<sup>1</sup> having septa g g, adjusting rods E E<sup>1</sup>, and valve box with its valves and passages, the former actuated by the reciprocating exterior cylinders essentially as set forth, and the latter forming inlet and outlet communications with and from the measuring chambers; all for operation together, substantially as described.

Second. Supporting the reciprocating interior cylinders F F<sup>1</sup> on projections formed by the extension inwards of the end flanges b b of the stationary cylinders C C<sup>1</sup>, and packing the said reciprocating cylinders by the gaskets ff, which make tight the joints of the stationary cylinders with the measuring chambers; said gaskets being cupped, or bent internally, as shown and described.

No. 23,773.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in Treatment of Vulcanized Rubber.*—Patent dated April 26, 1859.—This invention consists in the use of olive oil in compositions of soft vulcanized India rubber, and gutta percha not vulcanized.

*Claim.*—The use of olive oil in compositions of gutta percha and India rubber, substantially in the manner and for the purposes described.

No. 23,774.—RICHARD MONTGOMERY, of New York, N. Y.—*Improved Machine for Corrugating Sheet Metal.*—Patent dated April 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the bevel wheel h and bevel pinions i i with the sleeve n, projection k<sup>1</sup> k, m<sup>1</sup> m, and fork p, with the corrugated rolls H H<sup>1</sup>, and the device for raising and lowering the corrugated roll H, constructed and arranged in the manner described, whereby a sheet of metal once entered between the rolls can be worked back and forth and gradually and evenly corrugated at one heat and by one attendant, as set forth.

No. 23,775.—HIRAM W. MOORE, of Jersey City, N. J.—*Improved Mode of Chilling Rims for Locomotive Wheels.*—Patent dated April 26, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—A hollow chilled rim, whose inner and outer rims are riveted at the sides or ends thereof, but also united throughout the annulus by means of braces extending from one to the other for the purpose of strengthening the tread of the wheel and preventing it from cracking or breaking in, substantially as described.

No. 23,776.—ENOCH E. MULLINER, of New York, N. Y.—*Improvement in Reefing Sails.*—Patent dated April 26, 1859.—This improvement consists in a division of the sail, whereby the surface of the canvas presented to the wind is stronger than if it were a single sheet, owing to the necessary employment of foot and top ropes of the respective parts D E where they unite.

*Claim.*—The combination of the divided sail D E or F G with reef pennants c, roller clews b, pulleys d, and yard or boom C I, as and for the purposes shown and described.

No. 23,777.—CHARLES NEAMES, of New Orleans, La.—*Improvement in Fastening Slats on Sugar Cane and Bagasse Carriers, &c.*—Patent dated April 26, 1859.—The nature of this invention consists of a hinged clasp made of malleable iron, or any other metal that will answer the purpose in a mechanical manner, whereby the same results may be obtained, one end of the clasp closing down on the wood slat, the other end taking hold of the link of the chain, by which it secures the two endless chains and wood slats, constituting the carriers or bands, and retaining them in their relative position.

*Claim.*—The arrangement and combination of the two jaws H and I, hinged together at L by means of hinge pin L<sup>1</sup>, as and for the purposes shown and described.



No. 23,778.—SAMUEL NICHOLSON, of Boston, Mass.—*Improvement in Rails for Street Railroads*.—Patent dated April 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my improved rail, or combination of the flat rail or tread bar A and the continuous metal bearing or carrier B, applied together so as to be supported by a wooden sill, substantially as specified.

I claim making each bearer, not only with a grooved upper surface, but with a projection or lip at the bottom for the purpose of producing uniformity of strength in the section of the rail, and of entering a corresponding groove on the stringer C, and supporting the rail and its spikes or bolts against lateral strain.

No. 23,779.—SPENCER THOMAS PARMELEE, of Edinburgh, Scotland.—*Improvement in the Manufacture of Elastic Belting*.—Patent dated April 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Submitting the belting, while within the heating or vulcanizing chamber, to pressure between the smooth surfaces of an endless metallic band and one of two revolving metallic cylinders round which the said band passes, substantially as set forth.

No. 23,780.—A. W. PAYNE, of Morris, N. Y.—*Improvement in Sharpening the Calks of Horse Shoes*.—Patent dated April 26, 1859.—This invention consists in placing within a suitable stock or frame a rotary steel burr or cutter, one or more, and a bearing plate or plates, whereby the desired work may be done with facility and in a proper manner.

*Claim*.—The rotary burrs or cutters B B<sup>1</sup>, one or more, in connection with the bearing plates C C, placed within a suitable stock or frame A, and arranged substantially as and for the purposes set forth.

No. 23,781.—JAMES RUNDERFORD, of New Haven, Conn.—*Improvement in Waterproof Leather Hose*.—Patent dated April 26, 1859.—The claim explains the nature of this invention.

*Claim*.—The new or improved manufacture of riveted leather hose, made with a waterproof lining applied to its inner surface and extending between the joint or lapping where the rivets are inserted, substantially as described.

No. 23,782.—DAVID RAMLER, of Union Deposit, Pa.—*Improvement in Machines for Raking Hay*.—Patent dated April 26, 1859.—The object of this invention is to obtain a horse implement whereby the hay can be raked direct from the spread state in which it was dried or cured into cocks, thereby avoiding the manual labor of "cocking" the hay from windrows into which the ordinary horse rakes can only gather it.

*Claim*.—The adjustable side bars A A, provided with the rake heads J J and teeth *o*, in connection with the rake head or shaft B, provided with teeth *p*, the above parts being arranged and combined substantially as shown, and used with or without the dividers *b*, to operate as and for the purposes set forth.

No. 23,783.—ISAAC REAMER and HENRY MILLER, of Conrad's Store, Va.—*Improvement in Corn Harvesters*.—Patent dated April 26, 1859.—The claim and engraving give an idea of the nature of this invention.

The inventors say: What we *claim* as our invention is, first, the combination with the vertically adjustable upper guides G G<sup>1</sup>, of the vertically adjustable reel D, for action together, as set forth.

Second. The reel D, constructed with tangentially set tie bars, or guides *k k*, as described, in combination with a platform on which the stalks fall parallel with the line of travel, substantially as and for the purpose set forth.

Third. The combination with the frame A and knife C<sup>2</sup>, of the under adjustable frame A<sup>1</sup>, substantially as and for the purpose set forth.

Fourth. The manner shown and specified of connecting the platform E with the frame of the machine, for the purpose set forth.

Fifth. Providing the platform E with a slide back extension board *n*, in the manner and for the purpose set forth.

Sixth. The arrangement with oblique, or diagonal set spring blade, or cutter, of a fixed obliquely set carrying wheel C, in the manner and for the purpose set forth.

No. 23,784.—JOHN C. REED, of Providence, R. I.—*Improved Stove Polish Mixer and Scraper*.—Patent dated April 26, 1859.—This stove polish mixer and scraper is formed of cast iron, and consists of the following parts: A, a receptacle for containing the polish; B, a scraper, or knife, formed of steel, for scraping the polish from a block of the same; C, a bowl or mixer for mixing the same after it has been so scraped.

*Claim*.—The combination of the receptacle A, scraper B, and mixer C, when arranged and operated as described.

No. 23,785.—JACOB RINEK, of Easton, Pa.—*Improvement in Machines for laying Hemp*



*around Wire and Making Rope.*—Patent dated April 26, 1859.—This invention consists in a revolving yoke, having a hollow spindle and a bobbin containing wire, in combination with certain perforated plates and a system of bobbins, some containing strands of hemp, the whole arranged so as to form an effective machine for making hemp and wire rope combined.

*Claim.*—The revolving yoke *E* with its hollow spindle *e* and one or more rollers *h*, arranged on and turning in the yoke, as set forth, when the said yoke and its appendages are combined with and arranged in respect to the two sets of bobbins *a a* containing the strands of hemp, the perforated guide plates *I* and *J* and tube *m*, substantially as set forth.

No. 23,786.—ISAAC A. SERGEANT, of Springfield, Ohio.—*Improved Spring Bed Bottom.*—Patent dated April 26, 1859.—This invention relates to the provision of a combined yielding frame, with a longitudinal arrangement of cords of simple construction, easy adjustment, and enduring elasticity; a provision, in connection with the one named, for adaptation to the purposes of a recumbent couch; also an arrangement for the temporary fixture of the yielding or upper portion of the bottom.

The inventor says: I *claim*, first, the arrangement of the stretcher frame *C C<sup>1</sup> C<sup>2</sup>* and rails *B* and *D*, secured and supported as described, for the purpose set forth.

Second. The supporting legs or stays *F* and racks *G* in the described combination with the stretcher frame *C C<sup>1</sup> C<sup>2</sup>*, for the purpose set forth.

Third. The described arrangement of straps *d* and knobs *e*, for the purpose explained.

No. 23,787.—GEORGE SCHUH, of Madison, Ind.—*Machine for Addressing Newspapers, &c.*—Patent dated April 26, 1859.—This improvement relates to that class of machines which are intended to substitute the process of printing for that of writing the addresses on papers intended to be mailed.

The inventor says: I *claim* the combination with the hopper *C*, which contains the documents to be addressed; of the sliding gate *K* provided with a heel or step, and operating to close the hopper discharge, and at intervals open the same in such manner as to permit of a single document being deposited from the pile in the hopper in front of said heel for after traverse with the gate, substantially as and for the purposes specified.

I also claim the combination of the inclined feeding channel *E<sup>1</sup>*, main type channel *E*, and raised discharge channel *g*.

I further claim, in connection with the feed bolt *E<sup>2</sup>*, the angle lever *X<sup>2</sup>*, or its equivalent, to aid the type in its course from the feed channel to the main channel of the machine.

Likewise, I claim the employment of form boxes *H*, for use as described, at either end of the machine.

Also, the combination with the traversing type, or "form," of a notice bell, or its equivalent, for operation by the type at intervals as described.

Likewise the combination with the bolster *L*, operating essentially as described, of the springs *S<sup>1</sup> S<sup>2</sup>* for relieving the type from the paper and holding it on the bolster and type shifter *G<sup>1</sup>*.

And lastly, the document discharging fly *x<sup>1</sup>*, when operated by the sliding gate *K*, essentially as described.

No. 23,788.—PATRICK SHARKEY, of Brownsville, Miss.—*Improvement in Cotton Scrapers.*—Patent dated April 26, 1859.—This invention consists in arranging the scrapers one forward of the other on guide blocks, or runners of different lengths, in such a manner that the scraper of the short runner shall always have a tendency to move with the scraper of the long runner, without offering any resistance to the movement in a right direction of the same. Also, in the arrangement of a sleigh runner shaped gauge with the short scraper.

The inventor says: I *claim*, first, arranging the scrapers *F G* one forward of the other on guide blocks or runners *D E* of different lengths, substantially as and for the purposes set forth.

Second. The arrangement of a sleigh runner shaped gauge with the short scraper *E*, substantially as and for the purposes set forth.

No. 23,789.—THOMAS SHAW, of Philadelphia, Pa.—*Improvement in Sewing Machines.*—Patent dated April 26, 1859.—This invention consists in attaching to a spring a feed box, to which a vertical reciprocating motion is imparted by revolving rods, acting in conjunction with the said spring, and to which a horizontal reciprocating motion is imparted by revolving adjustable set screws and the same spring; the horizontal motion of the feeding bar being regulated by a set screw in a bracket on the base of the machine.

*Claim.*—The feed bar *Q* attached to and carried solely by the spring *s*, operated vertically by the combined action of the rods *F F* and the aforesaid spring, and horizontally by the combined action of the independently adjustable screws *i* and the same spring *s*, and regulated by the screw *R* on the stationary bracket *g*, the whole of the above parts being arranged substantially as set forth.



No. 23,790.—THOMAS SILVER, of Philadelphia, Pa.—*Improvement in Governors for Regulating the Speed of Steam Engines.*—Patent dated April 26, 1859; patented in England, May 23, 1857.—When the instrument is in action, whilst the shaft or spindle and momentum wheel A rotate with the same velocity, the sliding sleeve H will remain distended to the collar K, but upon the shaft being impelled by the increased speed of an engine with a greater rapidity than the momentum wheel, and carrying therewith the toothed wheels or sectors, the latter, impinging upon the toothed boss or pinion, are turned, the one to the right and the other to the left, drawing the collar H toward them and compressing the spring F and closing the throttle valve.

*Claim.*—The combination of a spring with a momentum wheel, and adjustable speed limiting vanes, the whole constructed with the combination of the peculiarly adjusted sectors, pinion, and links, as fully described and set forth.

No. 23,791.—WALTER C. SMITH, of Georgetown, D. C.—*Improved Detective Register for Doors of Railroad Cars.*—Patent dated April 26, 1859.—This invention consists in the combination of devices forming a registering seal, for indicating the number of times and places where the doors of freight cars have been opened.

*Claim.*—The detection of the opening and closing of car doors by means of the latch or key *m*, in combination with the two index or registering wheels *a b*, operated substantially as herein set forth.

No. 23,792.—JOSEPH E. STANWOOD, of Malden, Mass.—*Improved Gas Pipe Cutter.*—Patent dated April 26, 1859.—In using this pipe cutter, the pipe to be cut rests on the angular recess C of the claw B, the cutter wheel E being forced against the pipe while the whole instrument is turned about the pipe, so as to cause the wheel cutter to roll transversely around the same.

The inventor says: I *claim* the improved pipe or round rod cutter as provided with a rotary cutting wheel E, to operate in conjunction with the claw or pipe rest, as specified.

I also claim the arrangement of the cutting wheel carrier in a recess C, (formed in the claw block B,) in combination with the arrangement of the adjustable screws *d e* and handle rod F, with respect to said recess and the cutter wheel carrier, the whole being as specified.

No. 23,793.—FRANK STEINHART, of Dansville, N. Y.—*Improvement in Spring Car Couplings.*—Patent dated April 26, 1859.—This improvement in car coupling relates to spring jaw and self-connecting couplings, in which the spring jaws form one part of the coupling, and a spear-headed or wedge-shaped bolt the other part.

The inventor says: I *claim*, first, the combination of the radial fenders or their equivalents, arranged as described, with the jaws of the nippers B, for the purpose set forth.

Second. Constructing the bolt head *h* with an open back, and also with a longitudinal recess *i* in its back, for the purpose described.

No. 23,794.—ENOS STEVENS, of Barnet, Vt.—*Improvement in Machinery for Accumulating and Transmitting Power.*—Patent dated April 26, 1859.—The inventor says: I place a long endless chain, band, or rope E C around any motive or propelling wheel or shaft M, and also around any working or driven wheel or shaft W, and then on the propelling or drawing side or portion of said long endless chain or belt I place a sufficiently heavy weight C W T, suspended by a traversing pulley block attached to or made part of said weight, but I put only a guide pulley G P on the slack side or portion of said long endless chain or belt.

*Claim.*—The endless chain E C, forming the pendant loops E and C, supported by the wheels N and W, in combination with the weight C W T suspended from a pulley supported by the loop E, and the weight or guide pulley G P, and cord R, the whole arranged and operated substantially as described.

No. 23,795.—FRANCIS STOCK and JOHN STOCK, of San José, Cal.—*Improvement in Pump Boxes.*—Patent dated April 26, 1859.—This invention consists in a peculiar manner of arranging and constructing the parts of the upper box in connection with its valve, and the manner of attaching said box to its rod or pole.

*Claim.*—The arrangement of the parts *j k l* of the box D in connection with the bolts or rods *p p* and valve E, substantially as herein shown and described.

No. 23,796.—THOMAS STUBBLEFIELD, of Columbus, Ga., assignor to Himself and PETER NAYLOR, of New York city.—*Improvement in Stop Cocks.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of the lever D, cap l, valve stem *a*, and spring *c*, when the cap I is provided with a semi-circular opening into which fits the semi-circular end H of lever D, for the purpose of forming a tight joint without packing, substantially as herein described.

No. 23,797.—JAMES A. TAYLOR, of Cowlesville, N. Y.—*Improved Carpet Fastener.*—Patent dated April 26, 1859.—This invention consists in securing the carpet to the floor by



means of pins *b*, which pass through several folds of the carpet and the central part of which engages with hooks or eyelets *a* secured to the floor close to the base board.

*Claim.*—The hooks *a* and pins *b* arranged and operating in combination with the carpet, as described.

No. 23,798.—GEORGE C. TAFT, of Worcester, Mass.—*Improved Wrench.*—Patent dated April 26, 1859.—The guide rod *b* is one piece, with the ferrule *d*, extending from the projection *c* of the said ferrule into a corresponding hole *o* in the centre of rosette *a*, which latter is one piece, with the screw rod *f*.

*Claim.*—The screw threaded rosette *a*, with its hole *o*, in combination with the stationary guide rod *b*, rack *n*, traversing male screw *f* and sliding jaw *g h*, with its female screw *p*, substantially as and for the purposes set forth.

No. 23,799.—GEORGE TODD, of St. Louis, Mo.—*Improvement in Grinding Mills.*—Patent dated April 26, 1859.—This invention consists in placing the bearing ears which radiate from the rim of the stationary stone between double sets of springs, whose elasticity is governed and controlled by adjusting screws in such a manner that the desired position of the said stone can be readily obtained without danger of confining the stone in so rigid a position that it cannot at any time spring outwards a sufficient distance to discharge from the mill any unyielding substance that may find its way into the same.

*Claim.*—Securing the ears of the rim *f* of the stationary stone A between double series of upper and lower springs *m m* and *k k*, whose elasticity is governed and controlled by the series of adjusting screws *n n*, substantially in the manner and for the purpose herein set forth.

No. 23,800.—ALFRED R. TURNER, of Malden, Mass.—*Improvement in Pen Holders.*—Patent dated April 26, 1859.—The object of this invention is to so construct a pen holder as to allow the pen to be removed from the same without touching the fingers thereto, and at the same time insure the protection of the pen from injury when not in use, and its being firmly grasped and held in the pen holder when employed in writing.

*Claim.*—A pen holder constructed with the cover *b*, turning on a pivot or fulcrum, and acted upon by the bent spring, substantially as described.

No. 23,801.—J. B. WORTENDYKE, of Godwinsville, N. J.—*Improvement in Lamp Wicks.*—Patent dated April 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—A lamp wick composed of strands that have received a preparatory twist in one direction, are then spun in a contrary direction with and coiled upon a thread *c*, and are then twisted together, all as herein shown and described.

No. 23,802.—JOHN WOOD, of Brooklyn, N. Y.—*Improvement in Machines for Cutting and Folding Wadding and Paper.*—Patent dated April 26, 1859.—This invention is designed for cutting and folding wadding paper, or any textile or pliant substance which is manufactured in continuous sheets or rolls, and which require to be cut into pieces and folded for after use.

The inventor says: I *claim*, first, the receiving box V, provided with two compartments, and fly boards *a*<sup>1</sup>, connected with racks *c*<sup>1</sup>, and with ratchets *h*<sup>1</sup>, actuated by the arms *k* and cam J, in connection with the wheel X and adjustable pinion *o*<sup>\*\*</sup>, substantially as and for the purpose set forth.

Second. Operating the knife gate D and plate P, by means of the lever O, provided with sector racks *j*, which gear into the racks *k* of the gate D and bar *l*, so that the knife and plate will be actuated or made to perform their respective functions, alternately, as described.

Third. The arrangement of gearing G I K R, as shown and described, when used in connection with the lever *o*, for the purpose of operating the several parts automatically as and for the purpose set forth.

No. 23,803.—ABRAHAM YOST, of New York, N. Y.—*Improved Refrigerator.*—Patent dated April 26, 1859.—The ice holder being filled with ice and the covers closed tight, the external air rushes in through aperture *f* and around the passages *c c*, and when the dampers are all open it circulates through the compartments D D<sup>1</sup>, and out through apertures *d d*<sup>1</sup>, also through the drip pans E E<sup>1</sup>, into the compartments K K, and out through pipes L L.

*Claim.*—The combination and arrangement of compartments D K, dampers *b J*, and escape tubes L, substantially as and for the purposes set forth.

No. 23,804.—JOHN YOUNG, of West Galway, N. Y.—*Improvement in the Construction of Railroads.*—Patent dated April 26, 1859.—The nature of this invention consists in arranging and combining a rail with a supporting saddle at the ends or joints thereof, so as to prevent the spreading or swagging of the rails and ties.

The inventor says: I *claim* constructing a rail and saddle as described, whereby I am



enabled to hold securely, and render solid, the joints or ends of rails during the passage of cars, substantially as described.

I also claim combining with said rail and saddle, as described, the straining arch E, key D, and strip F, for the purpose set forth and specified.

No. 23,805.—FRANCIS BASCHNAGEL, of Wenham, Mass., assignor to the BEVERLY RUBBER COMPANY, of Beverly, Mass.—*Improvement in Restoring Waste Rubber*.—Patent dated April 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Restoring waste vulcanized rubber, by reducing the same by grinding or otherwise to a finely divided state, and then submitting the same, in a suitable vessel, to the direct action of steam.

No. 23,806.—K. BORREN, of New York, N. Y., assignor to PETER SCHNEIDER, of said New York.—*Improved Sofa Bedstead*.—Patent dated April 26, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim*, first, constructing a sofa bedstead, with an interior drawer, which may be pulled out and united with the sofa seat, so as to form a bed or couch, by the application of ways or grooves *a* to the inside of the sofa frame, substantially as described.

Second. The horizontal rods F of the sofa frame, in combination with the stay F of the interior drawer, for the purpose of more securely guiding the said drawer, substantially as set forth.

Third. Providing the drawer with two back pins *o o*, in the manner and for the purpose substantially as described.

No. 23,807.—HARRY H. EVARTS, of Chicago, Ill., assignor to Himself and PHINEAS E. MERRIHEW, of said Chicago.—*Improvement in Steam Valves*.—Patent dated April 26, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The arrangement of the ports, cavities, and passages in the valve, substantially as herein described, in combination with a corresponding arrangement of the ports in the seat, whereby a single valve is made to perform its functions for the two cylinders of the engine, as herein set forth.

No. 23,808.—LEVI T. HOWELL, of Burlington, N. J., assignor to Himself and DE WITT C. TAYLOR, of Philadelphia, Pa.—*Improved Hinge*.—Patent dated April 26, 1859.—This invention consists in a hinge, so constructed that when applied to a window shutter or door it may serve the purpose of holding the same back against the wall, and allowing the shutter or door to be readily released when it is to be closed.

*Claim*.—The projection *i*, on one half of the hinge, said projection being inclined on one side and abrupt on the other, in combination with the spring bolt D and its notch *e*, when the said bolt is so fitted to the other half of the hinge, as to have a limited vertical but no turning movement therein, and when the whole of the parts are arranged for joint action, substantially as and for the purpose herein set forth.

No. 23,809.—CLARK LANE, of Hamilton, Ohio, assignor to OWENS, LANE, DYER & Co., of said Hamilton.—*Improvement in Horse Powers*.—Patent dated April 26, 1859.—The loops of the rods being slipped over the sweeps, and the eyes on the rear end of the rods caught in the hooks H, the loops are strained into their appropriate places on the rack by simply springing the sweep back or forward, as the case may be.

*Claim*.—The construction and adaptation of the stay rods F G, with the hooked stand plates I I and racks D E, on the sweeps C, or their equivalents, in combination as set forth.

No. 23,810.—RALPH S. MERSHON, of Philadelphia, Pa., assignor to Himself and John M. HARPER, of said Philadelphia.—*Improved Regulator for Time Keepers*.—Patent dated April 26, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim* the application to watches and such time pieces as have their vibrations governed by a balance and hair spring of a compound regulator D, composed of two or more segments C, constructed and operating substantially as described. I also claim the combination of said compound regulator with a greater and lesser scale, the former fixed and the latter movable, but having a fixed indicator, and capable of being operated either in concert with, or independently of, each other, substantially as herein described.

No. 23,811.—JAMES E. QUINN, of Chicago, Ill., assignor to JOHN M. JOHNSTON, of said Chicago.—*Improved Joint for Gas and Water Pipes*.—Patent dated April 26, 1859.—The claim and engraving will explain the nature of this invention.

*Claim*.—The arrangement of the rings *e* and *f*, on the pipe *d*, in combination with the opening *c*, in the socket *b*, forming the cement chamber *h h*, for the purpose of joining pipes so as to be air and water tight, by using cements in place of lead commonly used; the whole arranged substantially as set forth.



No. 23,812.—GEORGE W. RICHARDSON, of Grayville, Ill., assignor to Himself and JOHN P. WILLIAMS, of White county, Ill.—*Improvement in Seeding Machines*.—Patent dated April 26, 1859.—D D are stationary bars, framed to the uprights B B, with a space sufficient between them to admit of another bar E, which is caused to vibrate by means of the reciprocating lever F. The seed slide X receives its vibratory motion from the lever F.

*Claim*.—The arrangement of the cam wheel H and lever F, with the seed slide X, and vibratory bar E, of the harrow D D, when the whole is constructed for operation conjointly, in the manner and for the purpose herein set forth.

No. 23,813.—LEONARD B. TINKHAM, of Lawrence, Mass., assignor to Himself and CHARLES RYAN, of said Lawrence.—*Improved Bed Bottom*.—Patent dated April 26, 1859.—The slats are placed on the springs D by inserting the head of the rivet through the eye *c* and drawing the neck into the slot *d*. The rivet on the opposite end is inserted in a similar manner by pressing the spring and allowing it to spring back. This keeps the necks of the rivets within the slots and the slats securely fixed to the springs.

*Claim*.—The combination of S formed springs, arranged so as to receive the movable rivet and retain the slats in place, with bars B and stirrups *a b*, when the same are arranged substantially for the purposes and in the manner specified.

No. 23,814.—JOHN L. NICOLAI, of Chicago, Ill., assignor to Himself, S. E. KNOTT, and R. F. FARRELL, of said Chicago.—*Improved Egg Beater*.—Patent dated April 26, 1859.—This invention consists in arranging a series of fingered beaters in the same frame in such a manner that by revolving one wheel the whites of the eggs and the yolk and the eggs and sugar, or other mixtures contained in several different vessels, can be exposed to the action of the beaters at the same time.

The inventor says: I *claim*, first, the within described beaters C, arranged with diverging fingers F, which are attached to disks E, to operate substantially as and for the purpose set forth.

Second. The arrangement of a series of beaters C, constructed as herein described, on rotary shafts C, so that the several beaters can be operated substantially as and for the purpose specified.

No. 23,815.—FANNING ALBERT, of Brooklyn, N. Y.—*Improvement in the Manufacture of White Lead*.—Patent dated May 3, 1859.—The lines C in the engraving represent a metallic or other cylinder, designed to revolve slowly in the direction of the arrow over and within the rectangular trough, or tub B; this tub is to contain the supply of pulp, or wet white lead, of a height sufficient, or more than sufficient to touch and attach itself to the lower periphery of the cylinder, the pulp being of such consistency that the cylinder will receive a very thin coating of it. Steam being introduced within the cylinder produces the heat necessary for drying purposes. Scraper *d* takes the lead from the cylinder as it becomes dry.

*Claim*.—The application of a rotating self feeding cylinder for the drying of wet carbonate of lead, substantially in the manner described.

No. 23,816.—W. R. ANDREWS and JOHN OSWALD, of Chicago, Ill.—*Improved Alarm Water Gauge*.—Patent dated May 3, 1859.—This invention consists of a novel arrangement of steam passages, in combination with a steam whistle and valve attached to the index spindle of a float, which rests upon the surface of the water in the steam boiler for the purpose of sounding an alarm when the water in the boiler gets below or above certain levels. It also consists of a mode of applying a spring in combination with the spindle of the float and index, for the purpose of preventing any solid matter passing between the valve and seat when there is no pressure of steam in the boiler.

*Claim*.—The disk valve E, its stem B, and spring I, applied in combination with the inclosing sockets F and G, the latter of which contains an annular passage *d*, communicating with a whistle, the whole being arranged and operating as set forth.

No. 23,817.—SILAS BARKER, of Hartford, Conn.—*Improvement in Faucets*.—Patent dated May 3, 1859.—The improvements in this invention are in the direct downward formation of the discharging orifice A, of the fluid passage B, whereby the horizontal direction of the fluid striking the solid end C, is compelled to flow vertically through the orifice A, into the vessel placed to receive it.

*Claim*.—The vertical discharging orifice A, as herein described, and the concave end cut off to the face slide E, in the manner and for the purpose substantially as set forth.

No. 23,818.—ALBERT BETTELEY, of Boston, Mass.—*Improvement in Elevators*.—Patent dated May 3, 1859.—The object of this invention is to check gradually, in falling, the momentum acquired by the platform or car of an elevator, by a yielding resistance, so as to preserve the lives of persons who may be within the car or upon the platform when any accident occurs that severs the connection between it and the power that controls it.



The nature of the invention consists in the mechanical means, or their equivalent, by which the above object is accomplished, and in the new combination of the invention.

The inventor says: I *claim*, first, the combination of the air reservoir with the movable car or platform of an elevator.

Second. Constructing the base of the car *c*, in a parachute form, for the purpose set forth.

No. 23,819.—AMOS S. BLAKE, of Waterbury, Conn.—*Improved Door Spring*.—Patent dated May 3, 1859.—The bar *A* is attached at its outer end to the lintel *b* of the door frame by means of a joint *c*, so that said bar may swing out freely from said lintel, and the outer end of the bar *B* is attached by a screw pin *d* to the upper part of the door *C*. To the bar *B* a spring *D* is attached near the pin *d*; the outer end of this spring is connected by links *e e* to the bar *A* near the joint *a*.

*Claim*.—The arrangement and combination of the spring *D*, links *e*, and arms *A B*, as and for the purpose shown and described.

No. 23,820.—JAMES BOSS, of Philadelphia, Pa.—*Improvement in the Manufacture of Watch Cases*.—Patent dated May 3, 1859.—The nature of this invention consists in the application of the well known operation of spinning up sheet metal for the purpose of manufacturing watch cases by the employment of a mandrel and spinning wheels instead of the usual method of turning them out of solid material.

The inventor says: I *claim*, first, the spinning up of watch cases by the employment of a mandrel and spinning wheels, constructed to operate in the manner substantially as set forth.

Second. Spun plated sheet metal watch cases, constructed as specified.

No. 23,821.—WILLIAM Z. W. CHAPMAN, of New York, N. Y.—*Improvement in Fastenings for Curtains of Carriages, &c.*—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A curtain knob fastening, constructed and arranged substantially as set forth, so as to be readily opened from the base or on either side of the curtain, as described.

No. 23,822.—CHANDLER CHENEY, of Milford, Mass.—*Improved Skate Fastening*.—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Securing the back part of the skate to the boot or shoe by means of the spring band in connection with the screws, or their equivalents, when constructed and operating in the manner and for the purpose substantially as set forth and described.

No. 23,823.—D. W. CLARK, of Bridgeport, Conn.—*Improvement in Sewing Machines*.—Patent dated May 3, 1859.—*A* is the base of the frame, which may be made in the usual manner. *B* is the table upon which the fabric to be sewed rests. The usual aperture for the passage of the needle is made in the table; also an opening through which the teeth of the feed wheel *C* pass, so as to touch the under surface of the cloth. The latter is pressed down upon the surface of the wheel by means of the usual spring or foot pad.

The inventor says: I *claim* as my invention, and as an improvement on my patent of August 31, 1858, the combination and arrangement of mechanism, as described, for the purpose of controlling the feed wheel, in the manner set forth.

No. 23,824.—WILLIAM N. CLARK, of Chester, Conn.—*Improved Water Cask Life Boat*.—Patent dated May 3, 1859.—This invention consists of a peculiar construction of water casks and life boat, which may be used, under ordinary circumstances, as a water cask, and in emergencies as a life boat.

The inventor says: I *claim*, first, making the staves upon the lower side of the water cask more curved than those are upon the upper side, in order to give the life boat a proper bearing and greater stability in the water, substantially as described.

Second. I claim the ballast floor *G*, water tank, and hatch, when they are used in connection with the water cask and life boat, substantially as set forth.

No. 23,825.—HENRY CLAYTON, of Tamaqua, Pa.—*Improved Smoke Stack for Locomotive Engine Houses*.—Patent dated May 3, 1859.—*C* is a vertical smoke pipe or stack, the upper end of which enters the cupola *B*, and the lower end of which extends down within the building a suitable distance, and has a series of flues *D* communicating with it.

The flues *D* are so arranged that each tube *b* will be in line with the smoke pipe of a locomotive when the latter is within the house and occupies its proper place.

*Claim*.—The arrangement and combination with the smoke pipes of locomotive engines of a sliding tube *b*, flue *D*, and stack *C*, substantially as and for the purpose shown and described.

No. 23,826.—JOHN H. COE and WILLIAM B. SNIFFEN, of Stratford, Conn.—*Improved*



*Skate Fastening.*—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim*, first, the employment of the curved adjustable slotted bars E F at the front of the foot or base plate A, combined, arranged, and adjusted in relation to each other, and secured together and to the said base or foot plate A in position to correspond with the length of the foot and form of the front part of the same, substantially in the manner and for the purpose described.

Second. We claim the combination of the right and left screw K and the clamps H with the heel part of the skate frame, so that both clamps are simultaneously moved, substantially as shown and described.

Third. We claim the combination of a hinged handle L, with the screw which operates the clamps, so that after the skate is fastened to the foot the handle may be folded out of the way of the ice, as shown and described.

No. 23,827.—PASCHAL B. COMINS, of San Francisco, Cal.—*Improvement in Bomb Lances.*—Patent dated May 3, 1859.—The dart or lance is made with wings to close up, so as to be put into a gun and fired out. As soon as it is discharged from the gun the springs throw out the wings, which regulate its course and make it go straight.

*Claim.*—The employment of wings formed of a flexible material in connection with metal springs, as described, when so arranged as to be folded on the cylinder (for containing the powder) between the head and wad, in the manner and for the purposes set forth.

No. 23,828.—MATTHIAS P. COONS, of Brooklyn, N. Y.—*Improvement in Apparatus for Generating Gas.*—Patent dated May 3, 1859.—The nature of this invention consists in the construction, combination, and arrangement of an apparatus for generating gas while, at the same time, it may be used for other purposes, and by which different qualities of illuminating gas may be generated from different classes of material at the same time, the whole apparatus being made portable and of easy transportation.

The inventor says: I *claim* the form and mode of arrangement of the retorts, as specified, for the purpose of combining a series of gas generating retorts, for extending or diminishing its capacity of generating gas indefinitely, in the manner specified.

I also claim the combination of a diaphragm surrounding a condensing chamber and escape pipe, the whole arranged and operated as set forth and described.

No. 23,829.—JOSEPH COX, of Philadelphia, Pa.—*Improvement in Cooking Stoves.*—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—I am aware that external air has been brought into the fire chamber to aid combustion, and therefore do not claim that as the scope of my invention.

But I *claim* the chamber *f* above the upper oven plate, communicating with the external air and fire chamber, substantially as described, whereby there is effected the double function of aiding combustion and equalizing the temperature of the upper portion of the oven.

No. 23,830.—ALEXANDER CRUMBIE and RUSSELL D. BRIGGS, of Brooklyn, N. Y.—*Improved Variable Cut Off for Steam Engines.*—Patent dated May 3, 1859.—In operating this invention the vibratory motion of the rockers C C<sup>1</sup> derived from the eccentric or its equivalent, causes the toes *h h*<sup>1</sup> to operate upon the lifters *a a*<sup>1</sup> and raise the rods or stems A A<sup>1</sup>, and open the valves until their respective tripping bars D D<sup>1</sup> while raised by the toes, and gradually assuming a less inclined position, have their points moved towards the rods or stems so far that they push back the sliding lifters *a a*<sup>1</sup> through the rods or stems till they push them off the toes, and thus liberate the valves and allow them to close.

*Claim.*—The arrangement and combination of the toggle rods D D<sup>1</sup>, slide E, rockers C C<sup>1</sup>, stems A, and lifters *a a*<sup>1</sup>, substantially as and for the purpose shown and described.

No. 23,831.—EDWARD CUNNINGHAM and WILLIAM B. CUNNINGHAM, of Powhatan Court House, Va.—*Improvement in Tobacco Presses.*—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Producing an improved hand press which is especially calculated to aid in compressing bunches of leaf tobacco into the proper shape for packing or “prizing,” the said press being composed of a narrow open box, which has a fulcrum piece and a false bottom combined therewith, and a removable lever adapted thereto, substantially as set forth.

No. 23,832.—MICHAEL A. DIETZ, of Brooklyn, N. Y.—*Improvement in Lamps.*—Patent dated May 3, 1859.—The nature and object of this invention consist in connecting, in a firm and tasteful manner, the deflector, so called, to the chimney band without the use of solder, rivets, or the like fastening, so that the connection will not be injured by the heat, or the deflector be thereby loosened, and the combustion of the lamp be rendered imperfect.

*Claim.*—Securing or connecting the deflector B to and into the chimney band A by means of a groove C, substantially as and for the uses and purposes set forth and described.



No. 23,833.—P. F. DODGE, of West Cambridge, Mass.—*Improved Lock for Piano Fortes.* Patent dated May 3, 1859.—The nature of this invention consists of a new method of moving the bolt of a lock, whereby the operating parts are simplified and rendered easy and cheap to manufacture.

*Claim.*—Actuating the bolt by means of the arm E, of the tumbler B, and the recess D, in the bolt A.

No. 23,834.—SPENCER B. DRIGGS, of New York, N. Y.—*Improvement in Piano Fortes.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—So arranging and applying the sound board and strings, and so constructing and applying the bridge or bridges of a piano forte, that the depths of the bridge or bridges at the bearing points of the several strings, and the distances of the several strings from the board, are all in the same proportion, or thereabouts, to the length of string, as described.

No. 23,835.—JAMES W. ELLIOTT, of Prattville, Ala.—*Improved Machine for Filing Gin Saws.*—Patent dated May 3, 1859.—The nature of this invention consists in certain improvements for properly adjusting the files to saws of different sizes, and revolving the saws as the filing progresses.

The inventor says: I *claim*, first, making said table adjustable at both ends, substantially as set forth.

Second. I claim the standard A, with the adjustable post A<sup>1</sup>, and slotted bar B, for supporting the cylinder of saws, substantially as described.

Third. I claim making the way H adjustable, both perpendicularly and laterally, for bringing the frame I to any desired position, substantially as described.

Fourth. I claim the use of the clamp screw N, in combination with the way H, for holding the frame I in position, as set forth.

Fifth. I claim a pawl *f*, held in place by the coiled spring *g*, and operated by the connecting rod *b*, rock shaft *h*, and levers or arms *c* and *d*, for rotating the saws, substantially as set forth.

Sixth. I claim the friction plates *k*, for holding and moving the saws, said plates being arranged and operated substantially as described.

Seventh. I claim the adjustability of the guides W, for the purpose of pressing the files more or less against the saws, at pleasure, as set forth.

No. 23,836.—WILLIAM H. ELLIOT, of Plattsburgh, N. Y.—*Improved Mode of Forming Curved Electrotype Plates.*—Patent dated May 3, 1859.—The nature of this invention consists in the employment of a peculiar compound flexible impression sheet, for the purpose of making curved electrotypes, and the use of certain devices for holding impression sheets in the required form while the metal is deposited.

The inventor says: I *claim*, first, the employment of ledges *i*, in combination with the form A, for the purpose of holding a compound flexible impression sheet or type matrix in the required form, with or without screws R, as specified.

Second. The employment of curved edges B<sup>1</sup>, in combination with the form A, when said edges are so arranged in relation to said form that the edges of the compound impression sheet shall be held firmly between them, for the purpose of retaining said impression sheet or type matrix in a cylindrical form, as set forth.

Third. The employment of air escapes F, in combination with the form A, box B, and the flexible impression sheet C, so as to provide for the escape of air from between the said impression sheet and form, as and for the purpose specified.

Fourth. The combination and arrangement of the concave form A with the adjustable wires D, for the purpose of holding the impression sheet in contact with the concave side of said form, as and for the purpose set forth.

Fifth. The employment of a curved impression sheet, of sufficient elasticity that it may be straightened out while the matrix is formed by the type, and then spring up again by its own power, to the form required, in combination with the curved form A, when used for the construction of a curved type matrix, as and for the purpose specified.

No. 23,837.—JOSEPH W. GARDNER, of Shelburne Falls, Mass.—*Improved Handle for Cutlery.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Attaching the handle D to the knife or other implement or tool, by means of a tang C, provided with a cylindrical projection E, and bolsters B, the tang and projections being fitted in a longitudinal kerf or cut and hole in the handle, the bolster bearing on the end thereof, and the tang secured in the handle by a rivet *a*, substantially as described.

No. 23,838.—THOMAS C. GLEASON, of Rochester, N. Y.—*Improvement in Machines for Cleaning Grain.*—Patent dated May 3, 1859.—This invention consists in certain improvements in machinery for cleaning grain.

*Claim.*—The arrangement of the screens I and K, vibrating longitudinally with the fan G,



removable apron M. and detachable smut cleaner T; the whole made to operate in conjunction, as specified, and for the purposes set forth.

No. 23,839.—THOMAS HAWKINS, of Mobile, Ala.—*Improvement in Valve Gear of Steam Engines.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the bearing and suspending plates, one on the toe and the other on the lifter, with a self-acting (or pendulum) catch for the purpose of holding open the steam valve at any desired point of the stroke, substantially as described.

No. 23,840.—THOMAS L. HAWKINS, of Sturgeon, Mo.—*Improved Wheelwrights' Machine.*—Patent dated May 3, 1859.—This machine, with its fly wheel M, gives power to the cutter head or saw L to drive through timber; the wheel K is designed to run the lathe N; this lathe is used expressly for the wagon manufacture, for turning hubs, &c. It is driven by a band running from the wheel K.

*Claim.*—The arrangement of the several parts, substantially as described and for the purpose set forth.

No. 23,841.—JOHN HOLMES, of Boston, Mass.—*Improvement in Ladies' Hoop Skirts.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, constructing a skirt of “knotted” or “net work,” and this I claim whether the meshes on the front and back of the skirt are alike or not.

Second. Enlarging the rear upper portion of a skirt, formed by a series of meshes, to form the bishop shape, by increasing the relative size or number of meshes on the rear upper portion thereof, as compared with those in the same course on the front of the skirt, substantially as described.

Third. The horizontal bustle supporting spring E, in combination with the compressing tape g, and the upper part of the skirt, as shown and described, and for the purposes set forth.

Fourth. The combination of the “netted skirt” with the hoops e e e, spring E, compressing tape g, and waistband A, substantially as shown and described.

No. 23,842.—ELWOOD IVINS, of Waterbury, Conn.—*Improvement in Hair Crimpers.*—Patent dated May 3, 1859.—In using this contrivance to permit the clasp B to be put on, the prongs require to be pressed towards each other, to enable them to enter the lips a a; but the clasp C being of an elastic character, can be stretched to make the lips a a<sup>1</sup> slip over the prong.

*Claim.*—As an improved article of manufacture, a hair crimp, composed of a fork A and clasp B or C, made as shown and described.

No. 23,843.—SAMUEL F. JONES, of St. Paul, Ind.—*Improved Egg Beater.*—Patent dated May 3, 1859.—In using this machine the cap B is lifted from the vessel A, the shaft C and the bar D being connected therewith, and the eggs to be beaten are placed in the mug or vessel. The cup B is then adjusted in the top of the mug or vessel A, and the bar D moved back and forth by hand, the cords g h giving a reciprocating rotating motion to the shaft C, and the beaters f acting on the eggs properly beating them.

*Claim.*—As an improved article of manufacture, an egg-beater, having a cup B, shaft C, strap a, tube e, slotted bar D, cords g h attached to the shaft C and to adjusting screws in the bar D, and otherwise made as shown and described.

No. 23,844.—URIEL JOSEPHS, of Quincy, Mass.—*Improvement in Skates.*—Patent dated May 3, 1859.—This invention consists in the device for attaching the skate to the shoe by means of struts or arms which rise from the skate, and enter a plate or its equivalent, attached to the boot or shoe in such a manner that the weight of the person shall have a tendency to make the fastening more secure; also, in the mode of constructing the runner with a deep furrow, in combination with the adjustable spring bearer placed within the said furrow by which the penetration of the skate into the ice is regulated.

The inventor says: I *claim*, first, the combination of the braces or struts B B<sup>1</sup>, with the plates C C<sup>1</sup>, either with or without the screw D, substantially as and for the purposes set forth.

Second. The combination of the bar F, with the runner, substantially as described and for the purposes set forth.

No. 23,845.—IRA KINMAN, of Freeport, Ill.—*Improvement in Measuring Faucets.*—Patent dated May 3, 1859.—This invention relates to certain improvements in measuring faucets, by which the operator is enabled to measure the quantity of liquor as it is drawn from the barrel or reservoir containing the liquor, and to indicate the quantity drawn.

The inventor says: I *claim*, first, the employment of an endless screw or its equivalent, in



combination with the rotating slide F, eccentric chamber E, arranged and operating in the manner and for the purposes substantially as set forth.

Second. I claim the register wheel P and index hand *i*, in combination with the stop S, when the same is operated by the stem of the endless screw A, so as to indicate the quantity of liquor drawn through the faucet, substantially as described.

No. 23,846.—WILLIAM KIRKPATRICK, of Lancaster, Pa.—*Improved Shingle Machine*.—Patent dated May 3, 1859.—The nature of this invention consists in attaching to Orr's reciprocating plate an additional plate with a second roller and shaving knife, so as to have both sides of the shingle finished after the piece has been split from the bolt, and also in arranging the ends of the pieces to which the frow is fastened, so that it shall be able to accommodate itself to twisted timber without connection with the plate.

The inventor says: I *claim*, first, the added plate A<sup>2</sup>, constructed as described, and when acting in combination with the wrought-iron piece D *d* and spring S, substantially as described.

Second. I claim the guide piece *c c c c*, as arranged and for the purpose specified.

Third. I claim the combination of the rod O with the pieces *g g* and *a a*, by means of which the frow may accommodate itself to the winding grain of the timber, as already specified.

No. 23,847.—DAVID KNOWLTON, of Camden, Me.—*Improved Windlass*.—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The winch shaft G, provided with barrels J J, and connected to the windlass by gears as described, and so arranged that the windlass may be worked by the winch shaft, or the winch shaft and barrels may be worked independent of the windlass, substantially as and for the purpose described.

No. 23,848.—L. LEFEBVRE, of Donaldsonville, La.—*Improvement in Steam Boilers*.—Patent dated May 3, 1859.—The nature of this invention consists in the construction of boilers by fluting both boilers and flue longitudinally, and strengthening the same with hoop braces placed at intervals, and in combining this construction of the boiler with a corrugated or fluted surface of the exterior flue, whereby the products of combustion are brought into intimate connection with all parts of the fire surface.

*Claim*.—The longitudinally fluted boiler, braced as described, in combination with the conformable under surface of the exterior flue B<sup>1</sup>, substantially as and for the purpose set forth.

No. 23,849.—A. W. LLOYD, of Otis, Mass.—*Improvement in Pumps*.—Patent dated May 3, 1859.—In operating the pump, the tube F, in connection with the piston G, causes a quantity of water to be raised at every descent of the piston, the labor of the piston during its upward movement is thereby lessened, as a column of water in the induction pipe D does not require to be raised directly its whole height, a portion of the column which passes the valve E having been previously elevated by the downward movement of the piston.

*Claim*.—The arrangement and combination of the side tube F, pipe D, valve E, and piston G, as and for the purpose shown and described.

No. 23,850.—JOSEPH C. LYONS, of Auburn, and H. F. PHILLIPS, of Seneca Falls, N. Y.—*Improvement in Grinding Mills*.—Patent dated May 3, 1859.—The nature of this invention consists in arranging the grinding cone and corn cracker of a grinding mill in such relation to each other that the former can be operated independent of the latter.

*Claim*.—The described arrangement and combination of the grinding cone F and the corn cracker J, when the former is arranged on a shaft C, which receives a longitudinal motion by means of a hand wheel D, and from which motion is conveyed to the corn cracker by means of wheels *k* and *l*, substantially in the manner and for the purpose specified.

No. 23,851.—HENRY MARCELLUS, of Amsterdam, N. Y.—*Improvement in Harvesting Machines*.—Patent dated May 3, 1859.—This invention consists in the employment or use of a corrugated finger bar, with cutting projections, in connection with detachable fingers.

*Claim*.—The corrugated finger bar, cast with the cutting projections *e*, in combination with the detachable fingers B, constructed and applied in the manner and for the purpose specified.

No. 23,852.—CHARLES MILLER, of Belleville, Ill.—*Improved Rotary Engine*.—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* a patent for all the parts specified in combination, being and constituting a rotary steam engine, as asked for in my petition herewith presented.

No. 23,853.—WARREN P. MILLER, of Marysville, Cal.—*Improvement in Locomotive Machines for Propelling Ploughs, &c.*—Patent dated May 3, 1859.—The nature of this invention



consists in providing the machine with portable tracks of a certain formation, which, going around and over the leading and driving wheels, are laid down on the ground as the machine moves forward, so as to form safe, solid, and firm tracks on soft or sandy roads, and thereby prevent the wheels of the vehicles which pass over the track from sinking into the earth.

*Claim.*—The combination of the endless chain or track, with the leading and driving wheels C C, and supporting trucks E E, the whole constructed and operated substantially as and for the purposes set forth in said specification.

No. 23,854.—AARON PARKER, of Coventry, N. Y.—*Improved mode of Attaching Harness Breeching to Wagon Thills.*—Patent dated May 3, 1859.—The nature of this invention consists in providing a safe fastening of the hold-back strap to the thills, which becomes a self unfastener when anything may break, or the tugs be unhitched.

*Claim.*—The mode of attaching the hold-back straps to thills of vehicles, by having a metal ring to slide under a spring snap, in such manner that it will unfasten of itself when the traces are unhitched, as set forth.

No. 23,855.—DUBOIS D. PARMELEE, of New York, N. Y.—*Improvement in Vulcanizing Caoutchouc.*—Patent dated May 3, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim*, first, the method described of treating caoutchouc, gutta percha, and their compounds, for the purposes set forth, by employing agents, in an aeriform or gaseous state, combined with a solvent in a liquid state.

Second. In combination with a solution prepared in the manner specified to operate on caoutchouc, gutta percha, or their compounds, as set forth, I claim preparing the said caoutchouc, gutta percha, or their compounds, by blending or incorporating therewith sulphur, substantially as described.

Third. I claim dissolving sulphur in the proportions set forth, or thereabouts, in the solution prepared as specified, when the same is used in combination with rubber, gutta percha, or their compounds, previously free from sulphur.

No. 23,856.—NELSON PARMETER, of Gardner, Mass.—*Improvement in Cements.*—Patent dated May 3, 1859.—The inventor says: In making this cement, sandstone, pipe-clay, and plaster of Paris are each pulverized and sifted. Lime is slaked and sifted. These four materials, together with some salt, are then placed in a kettle over a fire and water is added to it. The mixture is to be constantly stirred and kept boiling in a state of consistency similar to common mortar when used for building purposes.

*Claim.*—An improved fire proof cement, composed of said ingredients in the proportions and in the manner substantially as set forth.

No. 23,857.—GEORGE B. PHILLIPS, of Albany, N. Y.—*Improved Wrench for Gas Fitters.*—Patent dated May 3, 1859.—This improvement consists in a wedge shaped jaw, arranged to slide so as to wedge, gripe, or tighten on the article to be turned, in order to hold it fast and firm while it is turned, and in a nut containing sections of threads of a female screw, arranged to traverse a bar containing sections of threads of a male screw, so that the nut may be turned and locked to the bar, or traverse as may be desired. Also a nut with a female screw fitted to a male screw on the before mentioned nut, so as to traverse the slide and tighten the jaw after the before mentioned nut is locked to the bar of the wrench.

The inventor says: I *claim* the jaw D, arranged to slide substantially as described, so as to wedge, gripe, or tighten, and hold the article to be turned as described.

I claim the nut K, arranged to slide freely on the bar A, so that it may be locked to the bar, when desired, in combination with the bar, when both are constructed substantially as described.

And, in combination with the nut K, I claim the tightening nut I, arranged substantially as described.

No. 23,858.—THOMAS PLACE, of Alfred Centre, N. Y.—*Improvement in Adjustable Pile Drivers.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, attaching the frame A to the axles *a c*, by means of the bolt *b* and rack plate B and guides *e*, to admit the lateral adjustment of the monkey guides C C<sup>1</sup>, substantially as described.

Second. Screwing the monkey guides C C<sup>1</sup> in the frame A by means of the universal joint *h* and the sliding joint *i*, arranged with the lever D and rack catch *l*, or their equivalents, to admit of the lateral inclining of the guides, as well as the forward and backward movement of the same, for the purpose set forth.

Third. The combination of the frame A and guides C C, when constructed and arranged to operate conjointly and to admit of the adjustment, as described.

Fourth. The arrangement of the button or stop *g*<sup>1</sup>, levers J H I, and catch *j*<sup>1</sup>, substantially as shown for automatically releasing the shaft *a* from the windlass G, as and for the purpose set forth.



No. 23,859.—JOHN PLANT, of Washington, D. C.—*Improvement in Latch Hinges*.—Patent dated May 3, 1859.—The nature of this invention consists in so constructing a hinge when used with a latch for retaining it open, that great additional strength and efficiency shall be given.

*Claim*.—The hinges *a b*, when provided with projections *c c* and latch *g*, and constructed and operating in the manner and for the purposes substantially as set forth.

No. 23,860.—H. W. RANDLE, of Burnsville, Ala.—*Improvement in Cotton Presses*.—Patent dated May 3, 1859.—The nature of this invention consists in providing a vertically moving windlass between the levers for the winding of the rope drawing said levers together, so that the power exerted to operate the levers shall always act horizontally.

The inventor says: I do not claim a spirally grooved shaft, without longitudinal motion for taking up the cord; but I *claim* the vertical screw shaft *W*, as described, in combination with the levers *L L*<sup>1</sup>, cords *D D*<sup>1</sup> *D*<sup>2</sup>, and the follower, substantially as and for the purposes set forth.

No. 23,861.—JOSEPH RIDER, of Newark, Ohio.—*Improvement in Revolving Fire-Arms*.—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the cocking dog *E*, with its notches *c d*, applied in combination with the hammer and trigger and with a stationary stop *e* to operate substantially as set forth, to effect the cocking of the hammer and firing.

Second. In combination with the above, providing the same cocking dog with a notch *f* in its extremity, to be operated upon by a tooth *g* on the trigger, substantially as described, to operate the piece entirely by the trigger for rapidly repeated firing without cocking.

Third. Combining the locking lever *G* with the cocking dog *E* by means of a tooth *i* upon the lever, and a tooth *h* upon the dog, the tooth being formed to operate substantially as specified.

Fourth. The construction and application of the trigger guard in combination with the locking levers, to serve three purposes, viz: as the guard, as the lever for operating the rammer, and as the spring for operating the locking lever or its equivalent, substantially as described.

No. 23,862.—JOSEPH ROSENKRANS, of Avoca, N. Y.—*Improvement in Cider Mills*.—Patent dated May 3, 1859.—This invention consists in a certain arrangement of means for reducing the apples into small pieces, and also in an arrangement of the pressing means in relation to the grinding means.

The inventor says: I *claim*, first, the arrangement of the cutting cylinder and the tearing cylinder within the hopper, the one acting upon a plane and the other upon a curved surface, and the tearing cylinder so geared as to have rapid rotation as regards the rotation of the cutting cylinder.

Second. I claim the arrangement of the grinding cylinders and pressing cylinders with the endless apron, chute, and hopper, when they are geared as set forth.

No. 23,863.—WASHINGTON RUDDACH, of Baltimore, Md.—*Improvement in Mail Bags*.—Patent dated May 3, 1859.—The nature of this invention consists in the manner of securing the staples by plates to the mouth of the bag, the outside plate having a joint in the centre, the fastening slide also having the central joint, of a T form at one end; and also of introducing rivets between the stitchings of the seam.

*Claim*.—The arrangement in the manner and for the purpose hereinbefore specified, of the jointed plates *B C*, staples *D*, jointed slide *F*, with projection *F*<sup>1</sup>, when applied to bags with riveted and stitched seams.

No. 23,864.—STEPHEN P. RUGGLES, of Boston, Mass.—*Improved Punching and Stamping Press*.—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—So combining in a press for punching, stamping, &c., a coarse and fine threaded screw, with the power that drives the press, as that the coarse screw may be in action when speed or motion is required, and the fine screw when power is required; the former ceasing its action and the latter coming into action according to the resistance against the punch or die, substantially as described.

No. 23,865.—SAMUEL B. SHINN, of Philadelphia, Pa.—*Improvement in Corn and Cob Cutters*.—Patent dated May 3, 1859.—This invention consists in the peculiar construction of the cutter head *A*, with or without the knives *B* and crushers *C*.

*Claim*.—The peculiar construction of the cutter head *A*, as specified with or without the combination of the knives *B* and crushers *C*, arranged and operating in the manner and for the purpose set forth and specified.

No. 23,866.—OLLOF SHOSTROM, of Altona, Ill.—*Improved Washing Machine*.—Patent dated



May 3, 1859.—The operation of this machine is as follows: The clothes being secured under the rib 7, motion is communicated to the endless apron and washboard by means of the crank Y. It will be observed that motion is imparted to the washboard by means of a belt passing down from the larger to the smaller pulley; thus at once operating the arm lever *m*, to which is attached the washboard. By bringing the upper ends of the slat levers near each other the clothes may be rubbed as hard as may be desired.

*Claim.*—The combination and arrangement of slats *c*, levers D, serrated plates F, with rods *h*, false bottom G, endless apron 5, lever 3, and pawl 4, the several parts being constructed and operated substantially in the manner and for the purpose set forth.

No. 23,867.—JONATHAN P. SIMMONS, of Baldwinsville, N. Y.—*Improvement in Coffee Roasters.*—Patent dated May 3, 1859.—In using this machine the coffee is placed therein, and the case set over a suitable fire. The handle of the ring is slowly or occasionally turned; the effect of the revolutions of the ring is, each time, to sweep all the grains of coffee which lie in contact with the surface of the case away therefrom, raise and drop them upon the upper surface of the mass of coffee, thereby keeping it in constant motion, so that it may be uniformly roasted.

*Claim.*—The combination of the revolving ring with the spherical case, constructed, arranged, and operating substantially as specified.

No. 23,868.—D. F. SMITH, of Manchester, N. H.—*Improvement in Spinning Flyers.*—Patent dated May 3, 1859.—This invention consists in a certain construction of the compressor and method of applying its stop, by which important advantages are obtained.

*Claim.*—The construction of the arm and stem of the compressor of one piece, and the stop of a separated piece, so applied as to confine the stem in the ears on the flyer tube, as specified.

No. 23,869.—JOSEPH D. SMITH, of Lancaster, Ohio.—*Improvement in Harvesting Machines.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the mechanism for adjusting the cutting apparatus, consisting of the rack bars *a a*, hinged to the cutting apparatus shaft *e*, provided with pinions *b b*, and ratchet wheel and pawl *c d*, when employed in combination with the adjustable wheel *i*, in the manner and for the purposes specified.

Second. The employment of the ball journals *m m* of the reel shaft, in combination with the off side horizontally turning timber *n* of the reel frame, substantially as and for the purposes set forth.

Third. The combination of the secondary standard *q*, arranged on the sickle bar, with the hinged laterally adjustable brace *r*<sup>1</sup>, in the manner described and for the purpose set forth.

Fourth. The combination with the upward curved edge *f*<sup>1</sup> of the sickle bar *f*, of the overhanging upper lip *v*, and under back extension flanch *w*, of the sickle guard or tooth *u*, in the manner and for the purpose set forth.

Fifth. The spring catch *z*<sup>1</sup>, arranged on the sickle back *y*, in combination with the stop-notch *z*<sup>2</sup>, formed in the pitman *z*, for the purpose of fastening the sickle or cutter back *y* to the pitman *z*, in the manner set forth.

No. 23,870.—WILLIAM H. SMITH, of Newport, R. I.—*Improvement in Rotary Planing Machines.*—Patent dated May 3, 1859.—This invention consists in having the cutter head or disk provided with a circular concentric recess, in which a circular bearing plate is placed, said plate being attached to a shaft which is fitted loosely in the arbor of the cutter head, and having an adjusting screw attached to its outer end.

*Claim.*—The combination of the rotating cutter head C with the central adjustable bearing plate D, arranged substantially as and for the purpose set forth.

No. 23,871.—GEORGE W. SWIFT, of Oxford, Miss.—*Improvement in Portable Horse Powers.*—Patent dated May 3, 1859.—To operate this machine, the power is attached to the end L of the lever A, and moved to the left hand, where by the rotation of roller B upon the ground around the anchor G, an accelerated motion is given to band wheel F, by cord or chain H, the latter being straightened, when it becomes necessary, by driving wedges in the mortise I on the inside of the anchor next to the roller B and cord H, tightened by moving the machine to be driven from the band wheel.

*Claim.*—The arrangement of band wheel F, shafts A and C, idlers D and E, roller B, and cord or chain H; the whole constructed and operating substantially as and for the purpose set forth.

No. 23,872.—ISAAC P. TICE, of Baltimore, Md.—*Improved Machine for Cutting Wooden Curved Mouldings.*—Patent dated May 3, 1859.—This invention consists in the employment of an adjustable bed and a flexible metal guide plate, used in connection with a rotary cutter,



pressure and feed rollers, whereby work forming circles, and parts of circles, of varying diameter, may be cut and beaded for architectural and other purposes.

*Claim.*—The adjustable bed, formed of the blocks *g*, in connection with the flexible guide plate *C*, rotary cutter head *F*, and the feed and pressure rollers *D E*, or their equivalents, substantially as and for the purpose set forth.

No. 23,873.—HEZEKIAH D. TREADWELL, of Elmira, N. Y.—*Improvement in Signals for Firemen.*—Patent dated May 3, 1859.—By this invention, when it is desired to exhibit any signal, the bearer pulls the proper cord downward till its stop passes through the catch plates, and thus retains the signal in sight. In passing through its pair of holes *e* and *f*, the stop forces the vibratory plate *D* against the spring *d*, sufficiently to bring the two holes opposite to each other.

*Claim.*—The combination of the catch plates *C D* and conical stops *c c c*, or their equivalents, on the cords *b b b*, working through a series of holes in the catch plates, arranged substantially as set forth.

No. 23,874.—WILLIAM WALKER, of Pontiac, Mich.—*Improvement in Water Wheels.*—Patent dated May 3, 1859.—This invention consists in having the front, or water parts of the buckets made movable or adjustable, in such a way that in case of stones, sticks, or foreign substances of any kind entering the scroll, the buckets will be allowed to yield, or give, and be prevented from being broken. The invention consists, also, in the employment or use of a series of adjustable plates or straps, applied to the wheel in such a manner that the issues, or discharge orifices between the buckets, may be enlarged or contracted, as circumstances may require.

The inventor says: I do not claim the employment or use of curved buckets, or those having surfaces composed of two planes placed at right angles with each other; for a bucket of such form, or its equivalent, has been previously used.

But I *claim*, first, the employment or use of the adjustable plates *f* attached to the inner posts of the plates *e* of the buckets *G*, substantially as and for the purposes set forth.

Second. Providing the buckets *G* with adjustable plates *g*, arranged substantially as shown, to prevent injury to the buckets by the entrance into the scroll of hard foreign substances, as described.

No. 23,875.—CHARLES WILHELM and ANNA CATHERINE WILHELM, of Philadelphia, Pa.—*Improvement in Lamp Shades.*—Patent dated May 3, 1859.—A  $A^1 A^2$  represent a metallic frame, composed of tin or other metal; a series of openings or apertures, *C D E*, &c., are made around the circumference of the shade. The series of pictures  $C^1 D^1 E^1$  are placed between sheets of a mica of size corresponding to the picture.

*Claim.*—The combination of the metallic shade  $A A^1 A^2$  with the paper pictures  $C^1 D^1 E^1$ , between sheets of mica, as described.

No. 23,876.—STEPHEN WILCOX, jr., of Westerly, R. I.—*Improved Air Engine.*—Patent dated May 3, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the within described arrangement of the changing cylinder *B* and working cylinder *D*, and the valve or valves by which piston *b* is made both to change the air from the cold to the hot end of the cylinder, and to receive a fresh volume of air from the next stroke, with the advantages set forth.

Second. Automatically regulating the temperature of the interior of the heating furnaces by the employment of the parts *H* and *L*, arranged relatively to the heating surfaces of the cylinders *A* and *B* and to the damper *n*, or its equivalent, in the flue *O*, as described.

Third. Giving the regenerator an increasing area from the cold to the hot side, substantially as and for the purpose set forth.

Fourth. Working the single valve *M* in combination with the two pistons *a* and *b*, as described, so as to thereby accomplish the threefold purpose of induction, eduction, and equilibrium valve, substantially in the manner and with the advantages set forth.

No. 23,877.—WILLIAM E. WORTHEN, of New York, N. Y.—*Improvement in Metallic Laths.*—Patent dated May 3, 1859.—This invention consists of a sheet of corrugated metal pierced with holes, and also in combining with corrugated sheets thus pierced, tubes, or strips of metal, or rods slipped into such holes.

*Claim.*—A corrugated pierced sheet of metal, substantially such as specified, either with or without rods or tubes passed through the apertures, substantially in the manner and for the purposes specified.

No. 23,878.—W. A. WOOD, of Hoosick Falls, N. Y.—*Improvement in Harvesting Machines.*—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Effecting an oblique delivery of the cut grain from the platform where it falls by a series of carrying belts of different lengths, substantially as described.



No. 23,879.—AUGUST WULZE, of St. Louis, Mo.—*Improvement in Machines for Making Pearl Barley*.—Patent dated May 3, 1859.—This invention consists in a new arrangement and combination of mechanical devices for the purpose of operating a machine for pulling and scouring barley.

*Claim*.—The construction and arrangement of the described machinery, that is to say, the arrangement and combination of the frame or wheel H, pinions *t* and *u*, and wheels *l*, with each other, in the manner described, and with the pulleys,  $x^1$  *x* and  $y^1$  *y* and *a*, as set forth.

No. 23,880.—ALBERT ALBERTSON, of New York, N. Y., assignor to CURTIS C. BEAN, of said New York.—*Improved Cork Machine*.—Patent dated May 3, 1859.—This invention consists in a device for preventing corks from rotating while under the action of a rotary cylindrical cutter; also, in a plan for rotating corks by friction on their periphery while under the action of a longitudinal cutter.

The inventor says: I *claim*, first, the stationary cylinder D *d*, or any substantially equivalent device, when employed to grip a cork by its periphery, so as to effectually prevent its rotation while cut by a rotary cylindrical cutter.

Second. The feed rollers H H, with or without the band G, arranged and adapted to rotate a cork by friction upon its periphery, while under the action of a longitudinal cutter.

No. 23,881.—F. P. CAVANNAH, of Pioneer Mills, N. C., assignor to Himself and R. H. NORTHROP, of said Pioneer Mills, and W. A. McCOLLOCH and E. C. AIKEN, of Albany, N. Y.—*Improved Amalgamator*.—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement and combination of the elevated quicksilver channels *f g* near the rim of the oscillating amalgamating pan E, as and for the purpose shown and described.

No. 23,882.—NATHAN A. DYAR, of Medford, Mass., assignor to Himself and RUFUS KENDRICK, of Cambridge, Mass.—*Improvement in Cements for Roofing*.—Patent dated May 3, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—As a new article of manufacture, the waterproof roof covering described, the same consisting of a central layer or web of cloth, or its equivalent, covered on both sides with adhering layers of waterproofing, the outer side of one of which is covered with a layer of paper fixed thereto by contact with the waterproofing while it is in a warm and plastic state, while upon and embedded in the outer side of the other layer of waterproofing, while in the state just described, is a layer of sand, or its equivalent, forming the uppermost or weather surface of the article.

No. 23,883.—MOSES G. FARMER, of Salem, Mass., assignor to WILLIAM F. CHANNING, of Boston, Mass.—*Improved Mechanism for Operating Steam or Air Signal Whistles by Electro-Magnetism*.—Patent dated May 3, 1859.

The inventor says: The nature of my invention consists in the application of what I call an electro-magnetic escapement to a suitable mechanism operating an air pump, by which a current of condensed air is forced through an air whistle, organ tube, or other wind instrument, for the purpose of giving an alarm at a distance through the agency of the electric telegraph.

*Claim*.—The combination of an electro-magnetic escapement with the mechanism described for operating a steam or air whistle, as set forth.

No. 23,884.—THEOPHILE AUGUSTE ROUSSEAU, of Belleville, near Paris, France, assignor to EDOUARD ALEXANDER, of Paris, France.—*Improvement in Reed Organs*.—Patent dated May 3, 1859.—The nature of this invention refers to an improved construction of portable organs, in which the blast is given by means of either treadles or crank, and a key board of the desired size and stops. It also consists in the application to portable organs of certain valves worked by treadles or "knee pieces," so called from their being worked by the knee, and suitably connected to said valves.

The inventor says: I *claim*, first, the arrangement of the wind chambers *h* and registers or stops *b*, in combination with the reeds *g g*, as set forth, whereby each key  $a^1$  operates as many valves as there are stops in the instrument, but only those notes are caused to sound where the register *b* is open, as set forth, thus rendering the fingering easy, whatever may be the number of stops.

Second. I claim the arrangement of the valves *e e* and knee pieces *ff*, in the manner and for the purposes specified.

Third. I claim the manner specified of arranging the various plans or stories of the instrument, as shown in Fig. 1, and hinging the same together for affording access to the different parts, as set forth.

No. 23,885.—WILLIAM SHEPHERD, Jr., of Brooklyn, East District, N. Y., assignor to THOMAS HOLMES and VAN WYCK FOSTER, of said Brooklyn.—*Improvement in Valves for Steam Engines*.—Patent dated May 3, 1859.—This invention consists in the com-



ination of a cover attached to and operated by the valve which directly controls the admission of steam to the cylinder, with ports entering the valve cylinder in such a way as to furnish a cushion of steam to restrain the valve at the end of the stroke and prevent its slamming.

*Claim.*—The combination of the steam ports  $ff^1$  with the cover G, operated by the action of the valve C, substantially as described and for the purpose set forth.

No. 23,886.—MILTON ALDEN, of Auburn, N. Y.—*Improvement in Cultivators.*—Patent dated May 10, 1859.—This invention consists in connecting the thills, which are made of one piece with the handles, with the frame by means of braces, in such a manner that the thills pass over the growing crops, and that the same are in a horizontal position, or nearly so, when attached to a horse, and the frame is so arranged that the shares can be adjusted in the same, according to the width of the different rows, and that a larger or smaller number of shares can be secured in the same.

*Claim.*—The described arrangement and combination of the adjustable shares B, the frame A, and the raised thills C, which are made out of one piece with the handles D.

No. 23,887.—WILLIAM H. AULD, of Brighton, Iowa.—*Improved Machine for Sawing Shingles.*—Patent dated May 10, 1859.—This invention consists in the employment or use of two circular saws in connection with a reciprocating bolt carriage, arranged for joint operation.

The inventor says: I *claim* the adjustable saws C C, in connection with the reciprocating bolt carriage L.

I also claim the arrangement of the notched racks  $ll$ , gearing  $kk$ , weight  $r$ , pins  $ss$ , levers  $vv$   $a^1$ , and bars  $xb^1$ , attached to the bolt carriage, in connection with the stops  $a$ , for automatically feeding the bolt M to the saws C C.

No. 23,888.—CHARLES BAMBERG and ROMAN BLASER, of Chicago, Ill.—*Improvement in Machines for Separating Stones, &c., from Clay.*—Patent dated May 10, 1859.—This invention consists in the employment of a conical screen of knives, in connection with a separator, the above parts being placed within a suitable box, and arranged relatively to each other and without discharge spouts.

*Claim.*—The conical rotating screen C, in connection with the separator F, placed within suitable boxes A G, constructed and arranged to operate relatively to each other.

No. 23,889.—JACOB BATCHELDER, of Salem, Mass.—*Improvement in Sole Cutting Machines.*—Patent dated May 10, 1859.—The levers  $ee$  are hung to cranks  $nf$ , two of these cranks on each side of the machine, the cranks  $n$  being pivoted to the levers at  $n^1$ , and to the frame  $v$  of the machine at points  $n^2$ , the latter being the fulcra of the cranks. A screw  $r$  passes through the centre of the board  $w^1$ , and by turning the screw its end can be made to project more or less beyond the board and towards the table  $w$ .

The inventor says: I *claim*, first, the particular and relative arrangement of the levers  $ee$  and  $e^1 e^1$ , with the cranks  $np$  and  $ff^1$ , for giving the required motions to the cutting knives.

Second. The use and arrangement of the adjustable and intermediate gauge board  $w^1$ , whereby each alternate sole can be cut of equal or unequal width.

No. 23,890.—JOHN BEAN and BENJAMIN WRIGHT, of Hudson, Mich.—*Improvement in Straw Cutters.*—Patent dated May 10, 1859.—This invention consists in an arrangement of the knife worked by the forked pitman to perform two functions at the same time; namely, to cut the straw and operate the feed rollers by means of a crooked lever and rock shaft.

*Claim.*—The arrangement and combination of the knife C, lever D, and rock shaft E.

No. 23,891.—SIDNEY A. BEERS, of Brooklyn, N. Y.—*Improvement in Railroads for Streets.*—Patent dated May 10, 1859.—The nature of this invention consists in the construction of upright self sustaining rails of cast or other iron, with the head or track expanded in width, so as to form a car and carriage track, in combination of such width and form as may be desirable for such purpose when laid in public streets or highways.

*Claim.*—The construction of upright self sustaining rails of cast or other iron, with car and carriage track combined, to be laid in public streets and highways, and for no other purpose.

No. 23,892.—HAMILTON T. BEGGS, of Liberty, and JAMES ALLEN, of Lynchburg, Va.—*Improvement in Brick Machines.*—Patent dated May 10, 1859.—This invention relates to a machine for making brick out of dry or wet clay, and consists in the combination of several parts of a machine for that purpose.

*Claim.*—The combination of the bevel wheel C, cast with the cells P therein, for the reception of the moulds D, the plungers E, with the friction rollers and axles F, circular inclined plane ring  $g$ , and guard  $h$ , and top plate B, when these several parts are constructed and arranged for joint operation.



No. 23,893.—EDWARD BEHR, of New York, N. Y.—*Improved Skate Fastening*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Drawing or tightening the toe and heel straps G E, of the skate around the foot of the wearer, by means of the screw rods F I, and nuts *d i*, fitted in the stock A, one end of the straps being attached to the stock A, and the opposite end to the nuts by means of the cords *b f*, or their equivalents.

No. 23,894.—A. J. BENTLEY and WILLIAM H. ALLEN, of New York, N. Y.—*Improved Ships' Stop Block*.—Patent dated May 10, 1859.—The nature of this invention consists in constructing a block with two tapering sides and of a suitable width, and placing within the same two wedges having grooves on their inner surface, which grooves are made to clasp the rope, passing longitudinally through the block and between the grooves, and hold it firmly by means of friction rollers so situated within said block that when the wedges are relieved by a cord connected with the same two helical springs will respectively force the wedges up tight against the rope and rollers, and any further attempt to draw the rope through the block will cause the wedges to bind the same tighter.

*Claim*.—The arrangement of rollers and wedges D D.

No. 23,895.—L. F. BINGHAM and N. O. PIERCE, of Chicago, Ill.—*Improvement in Corn Planters*.—Patent dated May 10, 1859.—The inventors say: We construct a planter by placing two revolving wheels on an axle of any desired dimensions, on the front of which we place ploughs or markers, at equal and desired distances apart, seen at C, in such a manner that they may be hoisted and lowered at pleasure.

*Claim*.—The arrangement of the rotating planter A, square tube 10, beam O, lever N, "spat down" or leveller 12, and scraper.

No. 23,896.—A. W. BRINKERHOFF, of Upper Sandusky, Ohio.—*Improvement in Corn Planters*.—Patent dated May 10, 1859.—This invention consists in constructing the frame of the planter with a wheel in the centre, having pins on the side on which rests a weighted lever connected by a rod with a rock shaft extending across the frame. To each end of this is attached the roller having a cavity, into which the seed is fed from the hopper above it, so that in the revolution of the wheel the weighted lever falls on the next pin and is raised by it and falls on the next, thus moving the rock shaft and turning forward the roller, the grain is emptied into the furrow; the roller then turns up again and receives the next grain, and so on.

*Claim*.—The adjustable coverer D and opener P, in combination with lever L, the weighted lever A operating the rollers, and rod B.

No. 23,897.—JAMES BROWN, of London, England.—*Improvement in the Manufacture of Paper and Paper Pulp*.—Patent dated May 10, 1859; patented in England June 10, 1857.—This invention consists in incorporating or combining glycerine with pulp from which paper is to be made, or with paper at any stage of its manufacture, or in coating paper, after its manufacture, with glycerine.

*Claim*.—The treatment of paper and paper material with glycerine, substantially as described, to be employed for printing or other purposes.

No. 23,898.—C. M. BRYAN, of Wright City, Mo.—*Improvement in Ploughs*.—Patent dated May 10, 1859.—This invention consists in the peculiar arrangement of the parts, or the method of attaching and applying the mould board, whereby the mould board may be readily adjusted or shifted on the plough and at the same time firmly secured to it, so as to prevent the possibility of the casual movement of the mould board.

*Claim*.—Attaching the mould board D by means of the bolts *h h i i* passing through the cleets *b b*, at the inner side of the mould board, and into the landside E and handle *c*<sup>1</sup>, the bolts *g d*<sup>1</sup>, and the brace bar *d*.

No. 23,899.—ELISHA J. BURRALL, of Geneva, N. Y.—*Improvement in Machines for Sowing Fertilizers*.—Patent dated May 10, 1859.—This invention partakes of the character of a rotary sieve, out of which the lime or other material to be spread or sown broadcast is shaken by the revolutions of the receptacle holding the same, whereby the openings are kept clear and free, and any lumps too large or hard to be broken by the agitation are retained in said receptacle and emptied out when desired.

*Claim*.—The arrangement of the revolving cylinder *a*, division *k*<sup>1</sup>, and adjustable perforated slides 3 3.

No. 23,900.—DEXTER H. CHAMBERLAIN, of West Roxbury, Mass.—*Improvement in Machines for Splitting Leather*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Inclosing the cutting blade C with an external casing throughout its entire length.



No. 23,901.—ROBERT I. COLVIN, of Lancaster, Pa.—*Improvement in Convertible Carriage Shafts*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the attachment of removable shafts by means of adjustable braces I I and the hinged caps Z Z of the pole crab N.

Second. The curved or segment bars A, forming a transverse horizontal slot in which the shafts are supported at their rear end, both when separated in the ordinary way and when united together as a pole.

Third. The hinged and pivoted thill attachment for accommodating the width of the same to the different positions of the clips upon the axle.

No. 23,902.—NATHAN COPE and WILLIAM HODGSON, of Cincinnati, Ohio.—*Improvement in Butterfly Valves*.—Patent dated May 10, 1859.—This invention consists in certain means of controlling the movement of the valve to prevent its opening the wrong way and further than is desired, which also provide for its opening in either direction, as may be desired.

*Claim*.—The arrangement and combination of the curved slotted plate E, valve box B, stops F F<sup>1</sup>, and slotted valve lever G.

No. 23,903.—JAMES B. CRIST, of Evansville, Ind.—*Improvement in Grain Separators*.—Patent dated May 10, 1859.—This invention consists in a peculiar arrangement of a fan, blast spout, riddle, and screen, and discharge passages, whereby the desired work, to wit: the cleaning of grain, or separating it from all foreign substances, is performed in an expeditious manner.

*Claim*.—The arrangement of the blast passage G, fan B<sup>1</sup>, screen I, and riddle K, with chute L attached, placed within the case or box A and in relation to the spouts or discharge passages *d e f* N.

No. 23,904.—EDWARD DAVIDSON, of Batesville, Ark.—*Improvement in Ploughs*.—Patent dated May 10, 1859.—F is a supplemental landside, and G a supplemental share, the front ends of which are connected and have the lower end of a coulter H attached to them. The share G is a blade of steel of proper width, and is directly in front of share E, and the landside F is directly below and in the same place with the landside C; the upper end of the coulter H passes through the bar *e* and the beam, and is secured in a proper position by a key *m*.

*Claim*.—The combination of the bar *e*, stirrup *c*, rod *f*, with the adjustable supplemental landside F, share G, and the stationary share E and landside C.

No. 23,905.—HIRAM T. DEWEY, of Sandusky, Ohio.—*Improved Fence Post*.—Patent dated May 10, 1859.—This invention consists in combining with and attaching to the lower portion of ribbed fence and other posts horizontal ribbed plates, flanges, or arms, at such a distance from the lower ends of the same as will cause them when the posts are planted to be situated about a foot below the surface of the ground, in such a manner as will enable the plates, flanges, or arms, when properly buried and packed in earth, to assist in sustaining the posts in an erect position.

*Claim*.—The combination of the ribbed post A and horizontal flange plate C, when jointed to each other.

No. 23,906.—WILLIAM C. DOSS, of Lavaca, Texas.—*Improvement in Cultivators*.—Patent dated May 10, 1859.—This invention consists of a triangular frame with five shares or ploughs and a scraper; three of said five shares have mould boards attached by means of screws, and should be used for hilling plants and keeping the ridge up as desired; the scraper is used for scraping cotton, &c.

*Claim*.—The arrangement of the triangular frame A A B, of shares J K with mould boards that may be taken off at pleasure, scraper N, and cultivators L M.

No. 23,907.—B. WELLS DUNKLEE, of Boston, Mass.—*Improvement in Furnaces for Heating Buildings*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* combining with the fire pot and its dome one or more gas circulating pipes G, arranged with respect to the same, and in the hot air chamber of the case E.

I also claim the arrangement of the hot air discharge pipes *c c* and the wings *d* of the arch of the fire dome.

I also claim, in connection with the air register to the front of the ashpot, an air pipe *v* carried through the air chamber and into the rear part of the ashpit.

I also claim the combination and arrangement of the hot valve *p* and the plate or door *r* with the flue *n* and pipe H, and the opening *t*.

No. 23,908.—LEWIS EIKENBERRY, of Easton, Pa.—*Improved Method of Compensating for Expansion and Contraction of Metallic Fences*.—Patent dated May 10, 1859.—This invention



consists in making provision for expansion and contraction in an iron fence by having its palings loosely pivoted together to form lattice work, or other similar open work, and its panels with its palings arranged to turn on their points of connection throughout, and thus enable the fence to maintain its usual length while it increases in height.

*Claim.*—The method of making provision for expansion and contraction in an iron lattice or other open work fence.

No. 23,909.—STEPHEN ELLIOTT, of Richmond, Ind.—*Improvement in Straw Cutters.*—Patent dated May 10, 1859.—This invention consists in the arrangement of boards E, cross piece F, rods I and G, and lever H, with boards B and D, canvas C, rods R and S, and lever Q.

*Claim.*—The arrangement of boards E, cross piece F, rods I and G, and lever H, with boards B and D, canvas C, rods R and S, and lever Q.

No. 23,910.—ANDREW ELLISON, of Boston, Mass.—*Improved Smoothing Iron.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Attaching the handle plate A, to the separate heater or block B, by means of the guide *b*, and slot D, the angular recess E, the lips *c c*, and the latching devices *a F*.

No. 23,911.—SAMUEL V. ESSICK, of Moultrie, Ohio.—*Improvement in Machines for Loading Hay.*—Patent dated May 10, 1859.—This invention relates to certain improvements in machinery for loading hay, by means of which hay may be taken from the ground and deposited upon a cart.

*Claim.*—The adjustable frame *d*, the rake *j*, the rakers *h* and *m*, and the conveyors *g* and *l*.

No. 23,912.—JOHN L. FIELD, of Syracuse, N. Y.—*Improved Method of Strapping Wood in Bending.*—Patent dated May 10, 1859.—The nature of this invention consists in a device whereby the metallic strap after passing one curve upon a piece of timber may be connected with a strap placed upon another side of the same piece for the purpose of bending it in another direction, and thereby continuing the endwise pressure through the various curves to which the piece may be subjected.

*Claim.*—The method of connecting metallic straps for bending timber, when the parts are so arranged as to operate in connection with the forming frames.

No. 23,913.—DAVID S. FISHER, of Mauckport, Ind.—*Improvement in Seed Planters.*—Patent dated May 10, 1859.—When the machine is set in motion the band *h* on the driving wheel B communicates motion to the pulley E, and thus to the shaft D, the cams, the seed-slide, and the hoe.

*Claim.*—The combination and arrangement of the spring hoe J, the adjustable spring roller I; with the seeding and regulating apparatus.

No. 23,914.—J. H. FRENCH, of Syracuse, N. Y.—*Improvement in Harrows.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination and arrangement of three triangular harrows in such a manner as to form one triple triangular harrow, by connecting the angles with flexible joints or couplings, which admit of the free vibration of the parts, and their ready adaptation to the inequalities of the ground.

Second. I also claim constructing triangular harrows of metallic bars or flat strips of metal, by folding over the same at the angles in such a manner that the draft strain of the teeth upon one side shall counteract that upon the other, and forming the couplings at the same operation by folding in links or hooks at the angles, no bolts being required to secure them, in consequence of the self bracing of the parts.

No. 23,915.—R. B. GILBERT, of Sutherland Springs, Texas.—*Improvement in Corn Planters.*—Patent dated May 10, 1859.—This invention consists in the peculiar arrangement of parts in the construction of corn planters.

*Claim.*—The arrangement of the share *a* coverers *i j*, conductor *c*, cylinder *d*, and hopper *e*, wheel *g*, and scraper *p*, for joint operation.

No. 23,916.—RICHARD GORNALL, of Baltimore, Md.—*Improvement in Mail Bags.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The employment, with a mail bag constructed with a socket G and furnished with a lock or other safe fastening, of the plates B B, which terminate in nearly complete tubes D D, and with the jointed rod or bolt H, provided with a hasp or other similar attachment.

No. 23,917.—HENRY GORTNER, of Irville, Ohio.—*Improvement in Rat Traps.*—Patent dated May 10, 1859.—This invention relates to an improved trap of that class that are self-setting,



and consists in the use of a treadle and bait platform arranged in connection with a supplemental platform and revolving disks, and a box, whereby a simple, cheap, and durable trap is obtained.

*Claim.*—The rotating disks C C, connected by the plates *b b*, in connection with the treadle platform C<sup>1</sup>, plates *c c*, and bar *d*, and the supplemental platform D, the whole being fitted to the box A.

No. 23,918.—BENJAMIN T. HARRIS, of Brooklyn, N. Y.—*Improved Mechanism by which Employés Register their Time.*—Patent dated May 10, 1859.—This invention consists of a revolving cylinder carrying a sheet of paper, on which an impression is made by the workman in such a position that the time of making such register is accurately marked, thus denoting the time of leaving, or arriving at work.

The inventor says: I *claim*, first, the manner of mounting the cylinder D on the spring barrel *f*, and with the connecting coupling 3.

Second. I claim the binding plate *d*, fitted and acting to retain the ends of the paper to the cylinder D.

Third. I claim the arrangement and manner of constructing the slides *i i*, and impression points *m m*.

Fourth. I claim the rollers *l* and their pawls *o* and *p*, in connection with the slides *i i* and openings *k* in the front plate.

No. 23,919.—SAMUEL E. HARTWELL, of New York, N. Y.—*Improvement in Corn Planters.* Patent dated May 10, 1859.—This invention consists in an arrangement of spades, planting, dropping, and covering devices, whereby the corn is dropped, planted, and covered by means that receive motion from pressing down and then lifting the apparatus.

*Claim.*—The arrangement of the slide *d*, shoe *c*, and hoe *i*, connecting and acting in the manner and for the purposes substantially as specified.

No. 23,920.—SAMUEL HENRY, of Chenoa, Ill.—*Improvement in Seeding Machines.*—Patent dated May 10, 1859.—This invention consists in the use of a reciprocating distributor in connection with an adjustable slide applied to a seed box.

*Claim.*—The slide bar or seed distributor G, with slide H, fitted therein and placed relatively with the seed box F.

No. 23,921.—MOSES G. HUBBARD, of Penn Yan, N. Y.—*Improvement in Harvesting Machines.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the conformation of the intermediate fingers of a reaping and mowing machine, having a conical form with a straight outline from point to heel, so as to present a straight, gradual taper on the underside as well as above.

I also claim the safety flanch *s* for securing the pitman connection.

No. 23,922.—CHARLES W. KENNEDY and RICHARD T. BROWN, of Williamsburg, N. Y.—*Improvement in Machines for Breaking Coal.*—Patent dated May 10, 1859.—The plate H is armed with spikes *j*, and they are so placed or disposed in the plate as to be in line with the centres of the spaces between the spikes *a* of the drum E when the faces of the latter are directly underneath the plate H.

The plate H is perforated around near its edges, and the spikes *k* of the plate I fit therein. The plate I is directly over the plate H, and the spiral springs *l* are placed around the corner spikes to sustain the plate I.

*Claim.*—The arrangement and combination of the polygonal spiked drum E, spiked crushing plate, and spiked clearing plate I.

No. 23,923.—LEWIS KIRK, of Reading, Pa.—*Improvement in Railroad Car Brakes.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the hand-wheel J, and the rod K in combination with the pump B, so that, by depressing the rod K, the pump is placed in working order, and can be operated by means of the hand-wheel J<sup>1</sup>.

Second. The arrangement of the spring catch *k*, which is attached to the piston rod *d*<sup>3</sup>, of one of the pump cylinders, in combination with the bell crank *l*, or its equivalent, which is operated by means of an eccentric *m*<sup>1</sup>.

Third. Arranging the coupling M on a rod *p*, in such relation to the spring catch *k* and the cock E, that by exercising a pressure on the coupling, the rod *p* is turned sufficiently to open the cock E, and to depress the spring catch *k*.

No. 23,924.—THOMAS J. LAMBIN, of Baltimore, Md.—*Improvement in Mail Bags.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the placing of the staples or buckles on the flap of the bag or



pouch, so that when the flap is turned down, said staples or buckles will pass through the grumnets.

I also claim the manner of forming the seams of the bag or pouch, so that they cannot be cut open and resewn from the outside of the back without instant detection on looking at the seam, as its whole character must be changed in any such attempt or effort.

\* No. 23,925.—JABEZ LEWIS, of New Orleans, La.—*Improved Apparatus for Conducting Water to Cisterns.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Making the change in openings from the box A, or its equivalent, by the employment of a weight containing water supplied from a roof, when the weight can lose the water it contained, and thus reduce its force of gravity to allow another change to be made, by which the water is conducted in separate directions from and to the cistern.

No. 23,926.—CHARLES L. LINNELL, of Truro, Mass.—*Improved Jib Boom for Vessels.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The application of the after jib boom to the bowsprit by means, not only of the slide rod applied to the bowsprit, but the slider connected with the boom.

No. 23,927.—BENJAMIN TOLMAN, of Pembroke, Mass., assignor to Himself and A. T. RAMSDELL, of Pembroke, aforesaid.—*Improved Spokeshave.*—Patent dated May 10, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—An improved spoke shave, constructed with an adjustable knife and an adjustable throat gauge, arranged and applied to the stock and so as to move with respect to one another.

No. 23,928.—WILLIAM S. LOUGHBOROUGH, of Rochester, N. Y.—*Improved Bench Plane.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the screw 2, which takes effect in the projection R, spring or yielding cap C, bit B, and screw 1, for the purpose of varying the cut of the bit, and at the same time and proportionally, the space of the throat, the base of the bit B being the fulcrum upon which it swings when said changes are made, the said combination being applicable for the adjustment of the bit in all kinds of planes.

Second. The adjustable parallel fence F, constructed with diagonal slots D, for the set screws Y, said fence being applicable to match planes, and also the stop P, with the slot running up diagonally from the face, the set screw K and the guide pin N keeping it in position, said stop being applicable to panel ploughs and dadoes.

No. 23,929.—SAMUEL D. LOUNT, of Summerville, Mich.—*Improved Rotary Engine.*—Patent dated May 10, 1859.—In this invention the steam passes into chest D, through E, and down the passage G, and through the orifice *b*, and acts against the pistons L, the saddles M of which are made to work snugly against the inner side of the case A by means of the spring *c*. The steam is exhausted through the passages F and H, and as it passes through *b* acts against two pistons passing directly between two pistons, but the principal pressure is exerted against the lower piston on account of its having a greater exposed surface.

*Claim.*—The arrangement and combination of the rotating head I, provided with sliding pistons, and placed eccentrically within the case A, the saddles M applied to the pistons and the valves N O.

No. 23,930.—ROBERT MARCHER, of New York, N. Y.—*Improved Apparatus for Laying Metal Leaf on Mouldings, &c.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the method of laying leaf metal on mouldings and other surfaces by means of a roller.

And I also claim operating the roller in laying leaf metal on surfaces by the force of capillary attraction.

And I also claim the combination of the rails, the table for holding the book of leaf metal, and the means for holding the article to be gilded or silvered, or the equivalents of the said elements, in combination with the roller.

And, finally, I claim the combination of the roller and rails, or equivalent guide ways, with the rebate or equivalent gauge.

No. 23,931.—T. MAYHEW, of Poughkeepsie, N. Y.—*Improvement in Railroad Switches.*—Patent dated May 10, 1859.—This invention consists in the employment of an adjustable or movable platform, arranged in connection with certain gearing, a switch bar and springs, whereby the attendance of the switchman is rendered imperative at every adjustment of the switch, and while the train is passing over it, and the return of the switch to its usual position after being temporarily moved is more fully insured.



*Claim.*—The employment or use of the adjustable platform E, in connection with the switch bar B and gearing  $d h^1 h^2 h^3 h^4$ , springs  $c e$ , and stops  $i g$ .

No. 23,932.—WILLIAM McALLISTER, of South Reading, Mass.—*Improvement in Wind Mills.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The series of narrow sails 1 2 3 4, attached to vertically sliding rods  $a b c d$ , and united by means of the cords  $s s$ , and operating in combination with the adjusting ropes I.

No. 23,933.—JAMES C. MOLTRUP, of Bucyrus, Ohio.—*Improvement in Ploughs.*—Patent dated May 10, 1859.—This invention relates to certain improvements in ploughs, by means of which the same plough may be made to cut a wide or narrow, deep or shoal furrow, and without increasing the weight or cost of the plough.

*Claim.*—Giving the beam B B<sup>1</sup> longitudinal and vertical motion by means of the bearing plates  $d^2$ , slots  $c c^1$ , short rear bolt  $b$ , and long vibrating front bolt  $f$ .

No. 23,934.—JAMES MONACH, of Rahway, N. J.—*Improvement in the Manufacture of Felt Hats.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The corrugation of the brims of felt or soft hats by the employment of dies on both sides of the brim, whereby the corrugation is attained without stretching the brim, both the surfaces being finished at one operation.

No. 23,935.—ELI MOSHER, of Flushing, Mich.—*Improvement in Plant Protectors.*—Patent dated May 10, 1859.—The box A is not provided with any bottom, but has a top B, of gauze or netting of any kind, that will admit the sun, air, and moisture, and exclude the insects. The gauze B is cut in rectangular form, and two of its sides are permanently attached to two of the sides  $a^1 a^2$  of the box, the fabric being tacked or otherwise secured the whole length of the sides  $a^1 a^2$ , at their upper parts.

*Claim.*—The arrangement and combination of the folding sides  $a a^1 a^2$ , cover B, and fastening cord  $b$ .

No. 23,936.—JAMES MULLIGAN, of New York, N. Y.—*Improvement in Roasters.*—Patent dated May 10, 1859.—This invention relates to a peculiar construction of a movable journal, applicable to the top plate of a stove or range, whereby the cylindrical coffee roaster is sustained while revolved over the open fire. A cover is provided which, inclosing said roaster, confines all smoke and fumes, passing the same back into the fire.

*Claim.*—The detachable journal bearings  $b b$ , constructed so as to be clamped to the edges of the openings in the stove or range and receive the spit  $c$ .

No. 23,937.—JOHN MUNSON, of San José, Cal.—*Improvement in Pump Boxes.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim constructing the pump boxes of the rings  $a$ , bands  $e$  provided with the uprights  $g g$  and the traverse plates  $h$ , when the boxes, thus constructed, are provided with the valves  $l$  fitted thereon.

I further claim securing the lower box C in the bottom of the cylinder A by means of the traverse plate  $h$  on said box and flanch  $a$  secured to the inner side of the cylinder.

No. 23,938.—WILLIAMSON NICHOLS, of Floyd county, Ga.—*Improvement in Ploughs.*—Patent dated May 10, 1859.—By this invention a plough is so regulated that when in operation the ploughman can either plough to or from whatever is worked.

*Claim.*—The arrangement of the forked beam G, segmental head F, holes  $g$ , bolts 4 and 5, clevis  $f$ , stock H, handle L, rivet  $c$ , and holes 1 2 3.

No. 23,939.—R. B. NORVELL, of Huntsville, Ala.—*Improvement in Bridles.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The cord F, attached to a bridle or halter by passing the same through the bit rings or halter rings and over the pulley  $c c^1$ , or their equivalents, and under the throat of a horse or other animal.

No. 23,940.—JAMES NUTTALL, of New Orleans, La.—*Improvement in Iron Ties for Cotton Bales.*—Patent dated May 10, 1859.—The ends of the band to be joined are marked A B, and the part where the attachment is made marked  $a b$ . The clasp  $c$  which confines the hooks in figure 3, being purposely omitted, the form of the hooks as caught in plate  $s$  can be seen, being each separately hooked in the mortise  $m$  in the plate.

*Claim.*—The combination of the plate  $s$  and movable clasp  $c$ , when made use of in confining the hooks  $a$  and  $b$ , as a fastening for iron ties for cotton bales.



No. 23,941.—HENRY A. NUTTING, of South Amherst, Mass.—*Improved Clothes Frame*.—Patent dated May 10, 1859.—The claim and engraving will explain the nature of the invention.

*Claim*.—A clothes frame composed substantially of the rod or stem *c*, the two hubs A B, and the two sets of arms D E.

No. 23,942.—ISAAC B. PALAMOUNTAIN, of Tarboro, N. C.—*Improvement in Cultivators*.—Patent dated May 10, 1859.—On each side of the centre bar, and at different heights from its base are cast boxes or projections *c* with dovetail grooves *b* therein, having a suitable rearward declination. These grooves are exactly on opposite sides of the bar, one pair of which being at the base of standard F, above the share, and the others occupying positions in rear of and below, and below the top of the share.

*Claim*.—The arrangement of the beam A, stock B, centre bar B, standard F, wings G G and J, share D, and seat H, for joint operation.

No. 23,943.—GEORGE S. REYNOLDS, of East Bethel, Vt.—*Improvement in Horse Hay Rakes*.—Patent dated May 10, 1859.—The inventor says: I construct my rake by locking on and bolting to the axle *s* several blocks of wood *a*, leaving spaces *k* between, which forms separate boxes *k* for the several arms *b b* to play in, thereby giving each a more independent position.

A frame *r* is attached to the board *f*, the top of which supports the hand, and a strap *l*, attached to the middle of the block *e* near the shoe, for the purpose of steadying the rake.

*Claim*.—The arrangement of the boxes *k*, arch arms *b*, elastic spring *g*, shoe *d*, strap *t*, frame *r*, and strap *l*.

No. 23,944.—AUGUSTUS REBETEX, of Norwich, Conn.—*Improvement in Tools for the Manufacture of Fire-Arms*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The use of a crank shaft A B C to carry a cutter I, such crank shaft suspended at the centres of an engine lathe, or any similar machine, and receiving its motion from the counter shaft of such lathe, or similar machine, for the purpose of cutting an eccentric shaped slot in the barrel of a pistol or anything else.

No. 23,945.—SYLVANUS RICHARDSON, of Jericho, Vt.—*Improvement in Water Wheels*.—Patent dated May 10, 1859.—The inventor says: The nature of this invention consists in so constructing a water wheel that I am not under the necessity of placing the wheel at the bottom of the water privilege, but by placing it as low as may be convenient, and by attaching a draft tube below the wheel, and through which tube the water passes into the tail race, I receive the full benefit of the head and fall of the water.

*Claim*.—The construction and arrangement of the shutes formed by irons *g* and *i*, and the arrangement of openings in plate *f*, in fig. 3, and corresponding openings in plate *f*, in fig. 5, and the arrangement of plate *c c*, and wheel *e e e e*, and case *a a*, and draught tube *d*, and the combination of the same.

No. 23,946.—JOHN W. RINEHART, of Lexington, Mo.—*Improvement in Hemp Brakes*.—Patent dated May 10, 1859.—This invention consists in a peculiar manner of operating a swinging or oscillating beater frame, which is used in connection with stationary beaters, whereby the woody portion of the hemp may be broken and detached from the fibre in a very expeditious and perfect manner.

*Claim*.—The particular manner of operating the beater frame B, to wit: by means of the lever *j*, links *k k*, lever *l*, shaft C, arm *m*, connecting rod *n*, and crank *o*.

No. 23,947.—S. S. RITTER, of Philadelphia, Pa.—*Improvement in Hernial Trusses*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the construction of a surgical truss, having a short spring, with one or more plates of metal extending in front about half round the body, and held by a strap or straps, forming the other half of the girdle, when the said spring is curved, as shown, for the purpose of making a more agreeable pressure on the hernia, and for fitting the ends of the spring better to the hips, thus rendering the truss more comfortable to the patient.

Second. I claim the described pad, having a central prominence, surrounded by a groove and ridge, when the face of said pad is made in one piece.

No. 23,948.—EDWARD A. L. ROBERTS and WILLIAM J. DEMOREST, of New York, N. Y.—*Improvement in Apparatus for Vulcanizing Rubber*.—Patent dated May 10, 1859.—The nature of this improvement is that of a portable stove, boiler, and steam chamber, for vulcanizing various articles of rubber and gutta percha.

*Claim*.—The general arrangement of the stove, boiler, and vulcanizing chamber.



No. 23,949.—DAVID B. ROGERS, of Pittsburg, Pa.—*Improvement in Grain Shovels.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The so bending a plate of iron into the shape of a shovel as to form a socket for the handle out of the same piece of iron.

No. 23,950.—S. E. ROOR, of Bristol, Conn.—*Improved Clock Dial.*—Patent dated May 10, 1859.—C is a curved or ornamental frame; E is the sash, secured to the frame by a joint G, and held close by a catch H; the back A may be made entirely flat, when desirable; the dial B made the diameter of the back, and the frame made plain and turned over the edges of the frame and back, thus cramping them firmly together.

*Claim.*—The combination of a clock dial B, metallic back A, frame C, as a new manufacture, specifically, as and for the purpose described.

No. 23,951.—STEPHEN P. RUGGLES, of Boston, Mass.—*Improvement in Printing Presses.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of two screws having different sized threads, and operating together substantially as described, to give a greater motion to a platen, or its equivalent, at one time, and more power at another time, as may be desired.

I also claim connecting two such screws together, and to the lever or bar that actuates them, by a strong helical spring, that, by being wound up, becomes a clamp, so as to put the two screws in action one after the other, substantially as described.

I also claim running out the bed of the press on inclined ways, for the purpose of increasing the distance between the bed and platen, which makes a better entrance for the frisket, blankets, sheet, form, &c., by affording more space when they are run under the platen, as described.

No. 23,952.—JACOB RUPERTUS, of Philadelphia, Pa.—*Improvement in Automatic Primers for Fire-Arms.*—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says; I *claim*, first, the feeding slide lever B, applied in combination with the hammer, to constitute a portion of the thumb piece thereof, and with an interposed spring *l*, substantially as described.

Second. Constructing and applying the feeding piston *q* to roll within the magazine, substantially as and for the purpose set forth.

Third. Attaching the feeding piston *q*, which drives the priming forward in the magazine, to a spring or flexible driver, which winds on and off a spring barrel, substantially as and for the purpose described.

No. 23,953.—JOHN SELSER, of Williamsport, Pa.—*Improvement in Pumps.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, draining the standing pipe D and relieving the air-chamber C from pressure by allowing the water to escape upward through the cylinder B whenever the plunger rod E is sufficiently depressed, thereby draining the pipe without draining the pump itself, substantially in the manner set forth.

Second. The splash plate G, with its aperture O, when used in connection with the vertical termination D<sup>1</sup> of the discharge pipe, substantially as and for the purpose set forth.

No. 23,954.—THEODORE SHARP, of Bloomington, Ill.—*Improvement in Shafting for Endless Horse Powers.*—Patent dated May 10, 1859.—The nature of this invention consists in constructing the reel, or main shaft, with long hubs, and mortises in each of a suitable length to allow the main, or driving shaft, which has pins passing through it so arranged as to correspond with said mortises or hubs of reels, to allow the shaft to slide endwise from right to left, or left to right, the shaft only projecting one side at a time a suitable length to receive the internal gear pulley, which has long hubs, with a notch or slot in their ends corresponding with the pin in the shaft, to prevent them from turning on said shaft.

*Claim.*—The sliding shaft A A, reels with slotted or mortised hubs R R, constructed and operating in the manner and for the purpose substantially as described.

No. 23,955.—DAVID M. SMITH, of Springfield, Vt.—*Improvement in Seed Planters.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the following devices for operating the dropping slide, viz: the spring *k*, the rack C, the pinion D, the rack lifter *m*, the groove *r* of the rack, and the latch *u*, arranged substantially as specified.

I also claim the application of the rack lifter *m* to the rack, so as to be adjustable thereon, in the manner and for the purpose as set forth.

I also claim combining with the rack C, and apparatus carried by it, the latch elevator *y*, for moving the rack out of gear with the pinion and holding the rack from slipping or being thrown backward, the object being not only to prepare the rack for causing the machine to plant the first dropping of seed in the right place, but to hold the rack out of gear with the



pinion while the machine is moved over the ground and it may not be desirable to have it plant seed.

No. 23,956.—MATTHEW SMITH, of Pittsburg, Pa.—*Improvement in Rotary Steam Engines.*—Patent dated May 10, 1859.—The nature of this invention consists in an arrangement and combination of a revolving cylinder, steam chest, cam yoke, and supply and exhaust passages with a stationary cam, and supply and exhaust chambers.

*Claim.*—The combination and arrangement of a revolving cylinder, steam chest, cam yoke, supply and exhaust passages, with a stationary cam, supply and exhaust chambers, when arranged, combined, and operated as described, and for the purposes set forth.

No. 23,957.—CHARLES SPRING and ANDREW SPRING, of Boston, Mass.—*Improvement in Lathes for Turning Irregular Forms.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of a gripping chuck, by which an article can be so held by one end as to present the other free to be operated upon, with a rest preceding the cutting tool, when it is combined with a guide cam, or its equivalent, which modifies the movement of the cutting tool, all operating together for the purpose set forth.

No. 23,958.—GEORGE A. STONE, of Roxbury, Mass.—*Improved Apparatus for Superheating Steam.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—A steam jet, or the equivalent thereof, located substantially in the position and serving the purpose specified, in combination with a superheating apparatus, which is heated by a portion of the gaseous products of combustion, and is otherwise substantially the same as set forth.

No. 23,959.—GEORGE TATLOCK, of Salem, Ind.—*Improvement in Raking Attachments for Harvesting Machines.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* operating the rake head D, which is pivoted to the sliding bar C through the medium of the rotating shaft r, connecting rod p, rock shaft l, connected respectively with the rod p and sliding bar C by the arms k o, in connection with the arm E, attached to the rake head, the loop or guide d, attached to the arm E, and the bars or arms g i attached to the platform, the whole being arranged substantially as and for the purpose set forth.

No. 23,960.—H. L. THISTLE, of New York, N. Y.—*Improved Bureau Bedstead.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* combining the bedstead frame with the wardrobe, or other case, by means of the hinged links and movable slides, substantially as described, whereby the bed can be let down to a lower level than by any other construction before known, while at the same time it can be let down by a single movement, and within a space no longer than the bedstead, and without the necessity of first drawing out a part of the structure from the wall, or making joints in the side rails, or pieces, the hinged links and slides giving to the structure all the foregoing advantages, as set forth.

And I also claim, in combination with the bedstead frame, connected with the case by the hinged links and slides, the weighing of the head end of the frame to balance the weight of the foot end when lifting it up, and thereby facilitate the manipulation, substantially as described.

And I also claim forming the support for the foot end of the bedstead frame by a hinged panel, substantially as described, so that the said support, when the bed is thrown up, shall form part of the front of the wardrobe, or other piece of furniture, as set forth.

No. 23,961.—SAMUEL THOMAS, of Burnett, Wis.—*Improvement in Harvesting Machines.*—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The false pole K B, with its attached sliding gauge E C, which may be adjusted at pleasure, so as to prevent side draft and pressure upon the near horse, in the manner and for the purpose specified.

No. 23,962.—GEORGE W. TOLEMAN, of Augusta, Ky.—*Improvement in Rotary Harrows.*—Patent dated May 10, 1859.—The centre of the wood frame is made secure by means of the cast plates which are bolted to the wood frame; the arms of the frame are bolted to the iron circle 1; at each crossing of the same a cast-iron shaft 3 is elevate dabove, having a journal on the lower end, which passes through the centre of the harrow.

Rotation is produced by means of the roller or ball 2, resting on the circle iron 1, causing the teeth of the harrow on that side to sink deeper into the ground, thereby meeting with more resistance and causing it to rotate as the harrow is drawn along.

*Claim.*—The arrangement of the frame A, shaft 3, iron circle 1, roller 2, rods B B<sup>1</sup> C, and rod or hook 4, operating conjointly, as set forth, and for the purposes specified.



No. 23,963.—JOHN VAN and HENRY V. BARRINGER, of Cincinnati, Ohio.—*Improvement in Stoves*.—Patent dated May 10, 1859.—This invention relates to certain improvements in doors for cooking stoves and ranges.

*Claim*.—The swinging grated door or hearth *h*, and sliding and swinging register *g*, in combination with the supporting legs *r r* and stove *A*, arranged and operating substantially as and for the purpose set forth.

No. 23,964.—EDWARD VAN CAMP, of Readington, N. J.—*Improvement in Hillside Ploughs*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Making the share, the landside, and the landside brace of hillside ploughs, each in one piece, and uniting them together to the mould board and beam, in the manner and for the purpose set forth, thus making a cheap, strong, and efficient plough for hillside ploughing.

No. 23,965.—JAMES VAUGHN, of Magnolia, Ill.—*Improvement in Grain Separators*.—Patent dated May 10, 1859.—The operation of this machine is as follows: Power is applied to the cylinder *B*, and the ears of corn are fed in between the cylinder *B* and concave *C*. The corn is shelled from the cob as the ears pass between the cylinder and concave, and the cob and corn pass down the inclined spout *D* into the screen *E*, which is rotated from the cylinder *B* by means of the gearing *g h j k* and the belt *m*. As the screen *E* rotates the corn passes through it into the hopper *F*, while the cobs are fed along within the screen by the spiral plates *c c*, and are discharged at the outer end of the screen, the fan *J* creating a blast which passes through the screen and forces out light, foreign substances with the cobs.

*Claim*.—The arrangement and combination of the semi-cylindrical hopper *F*, having a depression *b* in its centre, with the screen *E*, buckets *d*, spout *D*, fan *J*, and spout *I*, as and for the purpose shown and described.

No. 23,966.—WILLIAM VINE, of Hartford, Conn.—*Improved Meat Slicer*.—Patent dated May 10, 1859.—The nature of this invention consists in the peculiar arrangement for feeding, or forcing the meat forward, to be cut by a rotating knife.

*Claim*.—The beveled lip *T*, and the pendant *G*, for the purpose described, in combination with the other parts of the dried meat slicer, substantially as set forth.

No. 23,967.—THOMAS K. WEBSTER, of Lawrence, Mass.—*Improved Lock*.—Patent dated May 10, 1859.—*E* is a guard or fender, and is relied on to protect the levers, the ends of the levers *c* being directly behind it, leaving no direct view of the levers from the key hole, either when locked or unlocked.

*Claim*.—The guard or fender *E*, as described in the specification, and for the purpose described.

No. 23,968.—LEONARDO WESTBROOK, of New York, N. Y.—*Improved Churn*.—Patent dated May 10, 1859.—The inventor says: To operate my churn I place the same over a tub, pail, or other suitable vessel; I then pour into the space above the disk *C* the milk or cream to be churned, simultaneously turning the crank *K*. The disk being slightly in contact with the rim *X X X* as it revolves, rubs the milk or cream as it passes through, producing in it some change mechanical, or otherwise, but not having enough friction to melt the butter contained in it. The milk or cream in this modified form then falling among the numerous dashers is thoroughly churned before it passes out into the receiving vessel at the bottom.

*Claim*.—The use of the projecting rim *X X X*, and the revolving disk *C*, working over the same, in combination with the fixed and revolving radial dashers, and with or without the regulating thumb screw *s*, all constructed and operating substantially as described, and for the purposes set forth.

No. 23,969.—MILTON WHITE, HOWARD WHITE, HENRY T. WHITE, and JOSEPH WHITE, of Philadelphia, Pa.—*Improved Ice Pick*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of the ball *A* in tube *B B*, sliding upon the stem *C C*, in such a manner that the blow may be struck upon the head of the stem, substantially as described.

No. 23,970.—JOHN GEORGE WIDMANN, of New York, N. Y.—*Improvement in Stoves*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement and combination of the gas tubes *d*, with the cylinder *D*, and fire openings *b*, so that the gases which arise from the heating of the coal will be compelled to pass down into the fire, as shown and described.

No. 23,971.—HOSEA WILLARD and ROBERT ROSS, of Vergennes, Vt.—*Improvement in Harvesting Machines*.—Patent dated May 10, 1859.—In this invention the segment *e* will retain the finger bar *G* in proper position, serving as an effectual brace to both the bar *D* and



the finger bar G. By drawing the lever I backward the chain or cord *p* will, through the medium of the lever H and the projection *o*<sup>\*</sup>, raise bodily the finger bar G and cutter thereon.

The inventors say: We *claim*, first, the arrangement and combination of the hinged bar J, with the lever I, substantially as and for the purpose shown and described.

Second. The arrangement and combination of the adjustable spring *b*<sup>1</sup>, bar D, adjustable rod *i*<sup>1</sup>, spring *h*<sup>1</sup>, and finger bar G, as and for the purpose shown and described.

No. 23,972.—WILLIAM E. WILSON, of Denton, Md.—*Improvement in Harvesting Machines*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the vibrating sector A, rack *p*, lattice frame C, and carriage *j*, with the beam B, or its equivalent, and the rake D, the several parts being arranged substantially as described and for the purpose set forth.

Second. In combination with the rake D, having its centre driven backward and forward over the platform, the swiveling plate *f*, ratchets *r*, and pawl *n*<sup>1</sup>, and adjustable shifting stop *g*<sup>4</sup>, or its equivalent, whereby the rake is turned upon its centre and caused to sweep the grain off, as specified.

Thirdly. In combination with the rake D, having its centre driven back and forth over the platform, as specified, the guiding plate *w*, and rolls *p*<sup>1</sup> *p*<sup>2</sup>, or their equivalents, whereby the rake is thrown back into the proper position to sweep across the platform after having discharged a sheaf, as described.

Fourth. The combination of the rod M, with the rod *s*, arm *r*, cam *y*, and spring N, the whole arranged and operating as and for the purpose set forth.

Fifth. The stop *h*, arranged as described for the purpose set forth.

No. 23,973.—WILLIAM E. NORTHEN, of New York, N. Y.—*Improvement in Combined Metallic Street Curb and Gutter*.—Patent dated May 10, 1859.—The inventor says: The precise shape, capacity, form of curves, and size of this compound curb and gutter, are unimportant, provided all be such as to attain the ends proposed, viz: a gutter under the sidewalk curb to protect that walk, and sufficient protection from the curb portion to receive the tires of wheels whose felloes would strike and tend to upset the curb.

*Claim*.—The compound metallic curb and gutter, constructed substantially in the manner specified, whereby advantages, substantially such as are set forth, are attained.

No. 23,974.—T. J. DE YAMPERT, of Shohola, Pa.—*Improvement in Ploughs*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a revolving cone having under-cut or overhanging curved flanges or wings that extend entirely from the base to the point of the cone, so that it will revolve upon its shaft or journal by the resistance of the earth alone against it, and without being driven by other forces, as described.

I also claim, in combination with a cone furnished with spiral under-cut flanges, and revolving by the resistance of the earth against it, the mould board and landside for turning over the loosened earth and directing the plough in its path, substantially as described.

No. 23,975.—G. G. BELCHER, of Worcester, Mass., assignor to Himself and JOSEPH S. HILL, of said Worcester.—*Improved Pruning Knife*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, arranging the blade of a knife in such a manner that it opens and closes by turning one or both parts of the handle, substantially as specified.

Second. The pins *i* *i*<sup>1</sup>, on the blade B, arranged in combination with the slots *h*, in the plates *a* *a*<sup>1</sup> of the handle, for the purpose of operating the blade, and keeping the same rigid when it is opened as well as when it is closed, substantially as set forth.

Third. The slide C, or its equivalent, arranged in combination with the eye *d*, for the purpose of securing the two parts of the handle together, substantially in the manner described.

No. 23,976.—JOHN B. COLLEN, of Philadelphia, Pa., assignor to Himself and PASCAL YEARSLEY, of said Philadelphia.—*Improved Horse Shoe Machine*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, bending the heated bar of iron to the requisite form, by applying it to a revolving former of the shape of the inside of the shoe, when the said former is arranged to hold the bent iron while it is acted upon by the dies, as set forth.

Second. The combination of the revolving former *q* with the cutter *x*, when the latter is so arranged, in respect to the former, that the edge of the cutter shall coincide, or nearly coincide, with the circular path traversed by the outer edge of the former, and when the cutter is hung to the movable bar *y*, or its equivalent, as set forth and for the purpose specified.

Third. The die N, the spindle Q, its former *q*, and the sleeve S, in combination with the counter die T, on the spindle *u*, when the whole of the parts are arranged in respect to each other for joint action, substantially as and for the purpose specified.



No. 23,977.—JAMES D. BLACK, of Boston, Mass., assignor to Himself and EZEKIEL HALLET, Jr., of said Boston.—*Improvement in Boot Crimping Machines*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* machines for crimping boot-legs, in which the "hitch-on" is raised by the hand of the operator, pivoting the device by which the "hitch-on" is raised to a spring clock, or its equivalent, for the purpose set forth.

Second. I claim the peculiar construction of "hitch-on" described, the movable jaws *p* being temporarily closed upon both sides by a spring *r*, so that they may be separately opened, as set forth, for the insertion of the leather, and may be permanently closed by a single screw, as described.

No. 23,978.—SIMEON S. DODGE, of Sunapee, N. H., assignor to Himself and EDMUND BURKE, of Newport, N. H.—*Improved Hand Plane*.—Patent dated May 10, 1859.—In order to adjust this improved plane for work, the break iron C is confined to the adjustable cap iron D by means of the two set screws G G. Thus adjusted, the break iron C and the adjustable cap iron D are inserted in the mouth F of the plane, in which they are confined in the right position by means of the bolt H passing through the groove *h*<sup>1</sup>, and confined in place by the nut *h*.

The inventor says: I *claim*, first, the curved adjustable cap iron D, constructed and operating substantially as described.

Second. The combination of the adjustable cap iron D with the bolt H, the set screws G G, the thumb screw E, and the break iron C, constructed and operating substantially as described.

No. 23,979.—WILLIAM GRIFFITHS, of Philadelphia, Pa., assignor to Himself and JOSEPH H. LAMBERT, of said Philadelphia.—*Improvement in Knapsacks*.—Patent dated May 10, 1859.—The nature of this invention consists in making the usual stationary inner frame, or case of a knapsack so that it can, at any time, be either totally and readily removed therefrom, folded down into one end of the same in a compact or solid condition, admitting of the knapsack being rolled up in the ordinary cylindrical form like a portmanteau, or placed in a flexible covering to serve as a knapsack.

*Claim*.—A military knapsack, having the usual frame or case, made and adapted thereto, so as to be convertible, substantially as and for the purposes described, as an improved article of manufacture.

No. 23,980.—WILLIAM H. KING, of Charleston, Ill., assignor to Himself and NELSON COLSON, of said Charleston.—*Improvement in Corn Planters*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, in combination with the cams L and the arm M, the arrangement of the rods *e* in such relation to the seed cells *c* that they push out the corn contained in the same, substantially as described.

Second. The arrangement of the marker *g*, in combination with scraper *h*, so that the same never fails to make a clear mark in the track of the driving wheel, substantially in the manner set forth.

No. 23,981.—CHARLES LEARNED, of Indianapolis, Ind., assignor to Himself and GEORGE P. STEVENS, of said Indianapolis.—*Improvement in Seed Drills*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of these devices so that, by their continued action, they shall produce a steel with sharp ribs or edges, in the direction of its length, substantially as set forth.

No. 23,982.—SAMUEL LEE, of Taunton, Mass., assignor to CHARLES S. POMEROY, of said Taunton.—*Improvement in Making Steels for Sharpening Knives*.—Patent dated May 10, 1859.—The nature of this invention consists in making, upon the surface of a blank piece of steel, a series of longitudinal grooves, with sharp edges between them, formed by compression from the substance of the metal by a milling tool cut with sharp edges, thereby cutting away none of the metal, but increasing its density, and rendering it, after being hardened, very hard and serviceable when applied in sharpening knives.

*Claim*.—The guard, or series of straps K, in combination with the toothed roller G and elastic guard J, when operated in connection with the roller H and agitator I.

No. 23,983.—HENRY G. LEONARD, of Taunton, Mass., assignor to LEMUEL M. LEONARD, of said Taunton.—*Improvement in Cooking Stoves*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* so constructing and arranging one or more of the oven plates of the stove, that it or they can be removed and the flue or flues cleaned and the plates replaced, substantially as described, without loosening or separating the plates which form the outside of the stove.

I also claim making one or more of the interior flue plates so that it can be removed and



the flue cleaned, and the plate replaced, substantially as described, without loosening or separating the plates which form the outside of the stove.

No. 23,984.—JAMES S. McCURDY, of Brooklyn, N. Y., assignor to ELIAS HOWE, jr., of said Brooklyn.—*Improvement in Single Thread Stitches*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: A single thread interloped stitch, in which each successive loop is encircled by a tight coil of the thread of the preceding loop, substantially as described.

No. 23,985.—DANIEL P. MEALEY, of Washington, D. C., assignor to Himself and A. E. H. JOHNSON, of said Washington.—*Improved Device for Suspending and Liberating Ships' Boats*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the hanger, constructed with a seat or seats for the ring of the boat to rest upon, in combination with the seat formed in the tumbler, in such manner that the seat or seats of the hanger shall coincide with the seat in the tumbler, that a large portion of the weight and strain may be supported by the hanger, which increases the power of the device to resist strains, and facilitates the unlatching of the tumbler, substantially as described.

I claim, also, in combination with the arrangement of the opening E in the tumbler, in combination with the seats *c c* and that portion *m* of the hanger which rises above and overhangs them in such manner that when the seats of the hanger and tumbler coincide, the mouth of said opening will pass, and be inclosed by the hanger, in the manner and for the purposes described.

I also claim, in combination with the tumbler and hanger, arranged as described, extending the legs of the hanger below the range of the motion of the opening in the tumbler, so as to form a cut off to the passage of the ring, and thus prevent it from being carried round with the motion of the tumbler, substantially as described.

I also claim, in combination with a boat detacher, making a recess or shoulder *f* in the tumbler, in combination with a snug or projection *g* on the dead eye, whereby the connection of the ring of the boat with the tumbler, may be made with one hand, when necessary, substantially as described.

No. 23,986.—JAMES O. MERRILL, of Chichester, N. H., assignor to WILLIAM A. SWAIN, of said Chichester.—*Improved Churn*.—Patent dated May 10, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement of the oscillating lever L and its weight W with the vibrating shaft M, the vibrating lever E, the auxiliary levers F F<sup>1</sup>, and the alternate reciprocating dasher arms G G<sup>1</sup>, with their dasher N N<sup>1</sup>, constructed and operating substantially as set forth, by which the oscillating power of the pendulum is applied to the process of churning butter.

No. 23,987.—JAMES W. MUNROE, of Fall River, Mass., assignor to JOHN SOUTHWORTH and WILLIAM R. MCKENSIE, of said Fall River.—*Improvement in Factitious Enamelled Leather*.—Patent dated May 10, 1859.—This invention consists in the employment of two thicknesses of fine cloth, united by a suitable cement, as the foundation upon which the varnish surface is laid, by which means a smooth surface is obtained, one that is not liable to crack when bent.

*Claim*.—As a new article of manufacture, the within described artificial leather, composed of two or more thicknesses of cloth, united by cement and varnish, as set forth.

No. 23,988.—JONATHAN B. PARVIN, of Hightstown, N. J., assignor to Himself and ELIAS STRATTON, of said Hightstown.—*Improvement in Machines for Digging and Gathering Potatoes*.—Patent dated May 10, 1859.—As the machine is drawn over the field the serrated cutter D cuts off the weeds, which are then pressed down by the roller C. The frame G being lowered down to the required depth by the means described, the digging plough F enters the ground, and the soil and potatoes are carried up the inclination I, and upon the endless apron K, which conveys the said soil and potatoes to a vibrating grate, where the potatoes are freed from dirt and carried by the elevator to box U, from which, when full, they are dropped on the ground in a pile.

The inventor says: I *claim* the combination of the weed cutter D and roller C, when mounted on a swivel and applied to a potato digger, substantially in the manner and for the purpose described.

I also claim hinging the frame that carries the plough, and the endless apron K, on the shaft *c*, when used in combination with the lever, links, and rods, by which the operator, from his seat can raise, lower, or hold up the plough and apron, substantially as described.

I also claim the combination of the adjustable endless apron *k*, horizontal and vertically vibrating grate O, and the elevating apparatus, substantially as described.



No. 23,989.—GEORGE W. RANDALL, of Boston, Mass., assignor to REUBEN J. TODD, of said Boston.—*Improved Basin Cock*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The wash basin cock, or faucet, as made with cold and hot water inlet passages *d e*, and the column passage *h*, arranged in the socket C and column A, and with respect to the discharging spout B, substantially as described, in order to enable a person, by turning the movable part, or parts, to discharge either cold or hot water, or a mixture of the same, from the faucet, or to close off both hot and cold water induction passages, as circumstances may require.

No. 23,990.—AUGUSTUS REBETEV, of Norwich, Conn., assignor to the MANHATTAN FIRE-ARMS MANUFACTURING COMPANY, of New York City.—*Improvement in Tools for Manufacturing Pistols*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The use of a frame, constructed as described, having a profile in one plate of it, to shape and finish a corresponding recess in the side plate of a pistol, by means of a revolving cutter, governed by the outlines of said profile.

No. 23,991.—FRIEDRICH SCHUTTE, of Philadelphia, Pa., assignor to Himself and PHILIP P. WEIS, of said Philadelphia.—*Improved Rotary Cutters and Mode of Operating Them for Mouldings*.—Patent dated May 10, 1859.—The object of this invention is to continue the cutting of a curved moulding throughout all changes which may occur in the direction of the grain of the wood without any interruption or alteration other than the simple reversing of the cutter; and also to insure the cut surface being clean, smooth, and uniform.

*Claim*.—A revolving cutter, with any convenient number of double cutting edges of the form of the tongue, groove, bead, or hollows to be cut; one cutting edge being the reverse of the other in each pair, so that one cutting edge only of each pair shall have a cutting effect, when the cutter revolves in one direction; the other edge to cut when the cutter revolves in a contrary direction, and so that one cutting edge of each pair shall act as a guard, to prevent the adjacent edge from penetrating too deep into the wood, when the said cutter with double cutting edges, thus constructed, is secured to a spindle capable of having the direction of its rotation readily reversed, as and for the purpose set forth.

No. 23,992.—GEORGE F. LOMBARD, of New Orleans, La.—*Improvement in Steam Engines*.—Patent dated May 10, 1859; patented in England, October 10, 1857.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the relative arrangement of two cylinders, four pistons, two rocking beams, two steam chests with valves, and the specified connections which combine and operate the same, in the manner and for the purpose set forth.

Second. The application of the exhaust steam of the engine to the crank, or eccentric shaft, through a fly wheel, constructed and combined with the engine and crank shaft, substantially as and for the purpose set forth.

No. 23,993.—JAMES A. WHIPPLE, of Boston, Mass., assignor to JAMES WHIPPLE and BENJAMIN F. COOKE, of said Boston.—*Improved Steam Engine*.—Patent dated May 10, 1859.—The following is the operation of this engine: Steam is admitted from the pipe I to the valve chest H; it passes thence through the port *o*<sup>1</sup> and channel *i* to the piston *h*<sup>1</sup>, which is driven in the direction of the arrow at the same time the steam space in front of the piston *h* communicates through the channel *i*<sup>1</sup>, port *o*, and exhaust port *r*, with the exhaust pipe G. When the pistons *h h*<sup>1</sup> and the hub *e* have revolved sufficiently far within the cylinder F to bring the pistons nearly in contact with the heads *l*, the crank *a* will be carried over its centre; the valves *k* will then be thrown into a position to admit steam on the opposite side of each piston, and drive the pistons in the contrary direction, the steam escaping through the port at which it previously entered.

*Claim*.—The described intermittent rotary engine, consisting of the cylinder F, the heads *e*, and pistons *h h*<sup>1</sup>, operating in the manner substantially as described.

No. 23,994.—CORNELIA H. WILLIAMS, of Williamsburg, N. Y., administratrix of the estate of Augustus Williams, deceased, assignor to ANTHONY POLLAK, of Washington, D. C., assignor to A. N. CLARK, of Beverly, Mass.—*Improved Steam and Water Gauge*.—Patent dated May 10, 1859.—The claim and engravings explain the nature of this invention.

The administratrix says: What is claimed as the invention of the deceased is, first, combining the vessels separate and distinct from, but connected to the boiler by means of two pipes, as described, containing a float, having an indicator or pointer attached thereto, with the transparent tube or steam chamber, when said parts are constructed and arranged in relation to each other, to operate in the manner and for the purposes substantially as set forth.

Second. The general arrangement of the instrument for forming an alarm water gauge by combining with the indicator water gauge, constructed as described, a whistle attached to a



separate chamber containing a valve arranged to be operated by the float, so as to admit steam to said whistle to give the alarm when required, substantially as set forth.

No. 23,995.—ELISHA H. ADAMS, of Taladega, Ala.—*Improvement in Cotton Presses*.—Patent dated May 17, 1859.—The nature of this invention consists in a combination of levers, connecting rod, and guide rod, for operating the follower block and guiding it while entering the bale box.

*Claim*.—The combination and arrangement of guide rod D, toggle levers E E, connecting rod H, lever G, and rack lever I, all operating substantially in the manner and for the purposes set forth.

No. 23,996.—DAVID AHL, of Newville, Pa.—*Improvement in Surgical Splints*.—Patent dated May 17, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim*, as a new article of manufacture, my splint, made of the ingredients and in the manner set forth.

No. 23,997.—V. R. ALLEN, of St. Louis, Mo.—*Improved Stencil Brush*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The mode of making the handle of the brush in two parts, and fastening the two parts by means of a screw turned on the wedge, (which I term a wedge-screw,) which is driven through the bristles in the iron band, thereby wedging the bristles in the band and enabling the main handle to entirely cover the ends of the bristles and bands, which prevents the handle and bristles, when in use, from working through the iron band holding the brush together.

No. 23,998.—EDWARD R. ARNOLD, of Providence, R. I.—*Improvement in Cut Off Gear of Steam Engines*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of an adjustable cam or sector  $H^1 H^2$ , fig. 4, or its equivalent, located on the rock shaft; a stop block  $J^1 J^2$ , fig. 5, or its equivalent, and an arm  $I^1 I^2$ , fig. 3, or its equivalent, attached to the devices which lift the valve, the three, so combined, operating to regulate the cut off of the steam in its passage into the engine at any desired point of the stroke, in the manner and on the principle substantially as described.

Second. I claim the same combination above specified for the purpose of working the exhaust valves of a steam engine, by means of the same rock shaft and eccentric motion with which the steam valves are operated.

No. 23,999.—WILLIAM S. G. BAKER, of Chicago, Ill.—*Improvement in Variable Exhausts of Locomotive Engines*.—Patent dated May 17, 1859.—This invention consists in arranging over the exhaust pipe a rotary cylindrical plug with different sized openings which are brought to correspond with the openings in the exhaust pipe, and with the openings of the pipes leading therefrom to the chimney, by means of gear wheels easily operated from the engineer's stand; and the whole is so arranged that the exhaust steam from the two cylinders is kept separate until it reaches the chimney, and the opening of the exhaust pipe of each cylinder is raised separately.

*Claim*.—The plug E, arranged in combination with the shell D and with the exhaust pipes A  $A^1$  of a double cylinder steam engine in such a manner that the exhaust of each cylinder can be varied while both are separate from each other, substantially as and for the purpose specified.

No. 24,000.—ABRAHAM BARTHOLF, of New York, N. Y.—*Improvement in Sewing Machines*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* applying the said lever to work on a fixed fulcrum in combination with a friction clamp, which, though it permits the said lever to be moved by and with the needle arm or needle carrier during a portion of the movement of the latter in either direction, for the purpose of drawing back the thread through the cloth and completing the stitch, and letting it slack again to form the loop of a succeeding stitch, holds the said lever in a positively stationary condition during the first part of the movement of the said arm or carrier, in either direction, and so prevents the thread getting slack till the needle has entered the cloth, and prevents its being drawn up through the cloth till the heel of the shuttle has arrived at the loop, substantially as described.

And, in combination with the thread controlling lever, constructed and applied as specified, and operated as described by the needle arm or needle carrier, I claim the stationary eye  $k$ , made adjustable, relatively to the said lever, substantially as and for the purpose set forth.

No. 24,001.—E. O. BAXTER, of Foreston, Ill.—*Improvement in Sewing Machines*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, the clearers formed of the bars *i i*, placed on the seed tubes *F*, connected with the bar *I*, and operated through the medium of the lever *J*, or its equivalent, substantially as and for the purposes set forth.

Second. The frame *A*, fitted to the axle *B*, as shown in connection with the cams *tt*, interposed between the axle *B* and the frame *A*, substantially as shown, so as to raise the frame *A* when desired to throw the seed distributing device out of gear with the driving wheel.

Third. The arrangement of the frame *A*, lever *N* connected with frame *A* by the rod *V* and the upright *M* on draft pole *D*, substantially as shown, for the purpose of regulating the depth of the furrows as described.

No. 24,002.—DOUGLAS BLY, of Rochester, N. Y.—*Improvement in Artificial Legs*.—Patent dated May 17, 1859.—The nature of this invention consists in a certain arrangement and combination of parts, whereby a substitute is attained for the natural leg, the action of the latter, as provided for by various muscles, tendons, and joints, being simulated by simple substance.

The inventor says: I *claim*, first, curving or deflecting the jointed extremities of the bars *J*, so as to bring their axes of motion back of their line of direction, substantially as and for the purpose set forth.

Second. I claim the cord *T* and spring *X*, acting upon the parts *D* and *L*, substantially in the manner and for the purpose set forth.

Third. I am aware that metallic springs have been employed to simulate the functions of the natural muscles; but experience has proved their inadequacy, both as respects the results obtained and their durability. I am also aware that India rubber, or elastic cords, have been used for the same purpose, and with no better results; and these I do not claim; but I claim the combination of the non-elastic tendon *F* with the India rubber spring *E* in such a manner that the required effect is derived from the compression and expansion of the material, and not from its elongation and contraction, substantially as set forth.

No. 24,003.—AMOS H. BOYD, of Saco, Maine.—*Improvement in Sewing Machines*.—Patent dated May 17, 1859.—In operating this machine, the cloth is placed under the shoe, which is smooth on its under side, and is caught between the shoe and the smooth plate *e*. By turning the wheel *B*, motion is given to shaft *E* and by it to the parts which form the feeding apparatus.

*Claim*.—The employment of lever *I*, a shoe and shoe shaft, spring *j*, plate *b*, and sliding bar *h*, with an under feed plate *e*, the shoe and the feed plate having an intermittent direct horizontal reciprocating motion, and the shoe having an intermitting direct vertical reciprocating motion, the same being given substantially in the manner specified and for the purpose set forth.

No. 24,004.—JAMES BOYLE, of Roxbury, Mass.—*Improvement in Apparatus for Cooling Beer*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination with two or more vessels, containing a series of tubes inserted in diaphragm plates, so arranged as to allow communication from the upper part of each vessel to the lower part thereof, and *vice versa*, by means of and through the said tubes, of pipes so arranged on either side of the diaphragm as to connect the said vessels alternately at the top and bottom thereof; and of a pump or any suitable device for forcing beer or any other liquid to be cooled down through one set of tubes and up the other, while a supply of cold water surrounding said tubes is forced in a direction opposite to that of the liquid contained therein, substantially as set forth.

No. 24,005.—MERRITT S. BROOKS, of Chester, Conn.—*Improved Drill Stock*.—Patent dated May 17, 1859.—The operation is as follows: The knob *C* is placed against the breast of the operator, or the palm of the hand is pressed against it, and the bit *B* applied to its work. The operator moves the socket *E* by hand, back and forth on the shaft *A*, and the tube *D*, in consequence of the stop *e* preventing its rotation from right to left, rotates the shaft *A* and bit *B* from left to right, as the socket *E* and tube *D* are shoved outward towards the bit *B*. As the socket and tube are drawn back, the shaft and bit remain stationary, the tube *D* turning within the socket *E*.

*Claim*.—The arrangement and combination with a spiral or screw-shaped shaft *A* of a tube *D*, ratchet *a*, and stop *e* within the socket *E*, as and for the purpose shown and described.

No. 24,006.—JOHN D. BUCKLEY and S. F. MOSHER, of Schaghticoke, N. Y.—*Improvement in Plugs for Blasting Rocks*.—Patent dated May 17, 1859.—The plug consists of the combination of a tapered screw with a plug, a part of which is divided and made capable of expansion; said plug being so constructed as to be capable, when forced out against the rock, of taking a sufficient hold of it.

*Claim*.—The combination of the tapered screw with the expanding metallic plug, having



ledges, or other equivalents, to penetrate the rock, and provided with an aperture for the fuse, as set forth.

No. 24,007.—GEORGE E. COWPERTHWAIT, of Danbury, Conn.—*Improvement in Machinery for Hardening Hat Bodies*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the method of hardening hat bodies by means of a cradle, sustained in an inclined position, and having a tremulous movement, substantially as set forth.

I also claim the method of subjecting hat bodies to greater or less pressure during hardening, by inclining the cradle of the hardening machine to a greater or less extent, substantially as set forth.

No. 24,008.—JESSE A. CRANDALL, of New York, N. Y.—*Improved Rocking Toy*.—Patent dated May 17, 1859.—The longitudinal bar D prevents the body A from rocking too far back, it being attached to the transverse bar E at the rear end, by means of an iron loop or band S, by which means the shaft or pole D turns, when acted upon by the body or box A. An elastic string F and thumb screw or pin *i* may be used to prevent the pole D from rising too high.

*Claim*.—The flat wound springs C C, pole or bar D, elastic string F, pin or thumb screw *i*, or their equivalent, in combination with the box A and frame B, arranged and operated in the manner and for the purpose set forth, as shown.

No. 24,009.—C. L. CROWELL and ROBERT SMITH, of Peoria, Ill.—*Improved Machine for Upsetting Tire*.—Patent dated May 17, 1859.—The inventor says: My improvements in machines for upsetting iron, or other metals, relate to that class in which the metal bar to be upset is held or grasped firmly, on either side of the point at which it is to be upset, by means of two clamps, and by the movement of these two clamps towards each other, the bar, after being heated, is pressed between the holding points and is thus upset.

*Claim*.—The combination of the lever and the intermediate slide, arranged substantially as described, for the purpose of giving movement to the sliding jaw.

No. 24,010.—JAMES E. CROWELL, of Chelsea, Mass.—*Improvement in Drawing Heads for Spinning Machines*.—Patent dated May 17, 1859.—The principal object of this invention is to draw and spin a sliver as it is delivered from the doffer of a carding machine.

*Claim*.—So constructing and gearing the two pairs of drawing rollers  $D^2 d^2$  and  $D^3 d^3$ , that each pair will draw and release the sliver or roving, and so allow the twist to pass and run back to the first rollers  $D^1 d^1$ , substantially as and for the purpose set forth.

No. 24,011.—WILLIAM DAWES, of Washington county, Tenn.—*Improvement in Soap*.—Patent dated May 17, 1859.—The following are the ingredients composing this improved article of soap: Four pounds white bar soap, three pounds brown soap, half pint alcohol, one and a half pounds sal soda, half pint table salt, to six gallons of boiling water.

*Claim*.—The use of the ingredients, when combined in the proportions set forth; the whole forming an improved soap.

No. 24,012.—GEORGE W. DEAN, of Glenn's Falls, N. Y.—*Improved Tuyere*.—Patent dated May 17, 1859.—This invention consists in the employment or use of a rotating cylinder, provided with a series of chambers having orifices of different sizes, variously arranged and placed relatively, with a blast pipe and an opening in a bed plate, whereby the desired object is obtained.

*Claim*.—The adjustable rotating chambered cylinder C, arranged substantially as shown, with the slot B in the bed plate A, and relatively with the blast pipe D, to operate as and for the purpose set forth.

No. 24,013.—OLIVER H. DENNIS, of Altona, Ill.—*Improvement in Cultivators*.—Patent dated May 17, 1859.—This improvement consists in so connecting the side beams B B with the handles C C, and arranging both the handles and side beams in connection with the central beam A, that the position of the side beams and the consequent breadth of cultivation shall be directly under the control of the holder of the implement, to be instantaneously raised by him at pleasure.

*Claim*.—The arrangement and combination of the hinged handles C C, hinged side beams B B, and connecting bars H H, in relation to the central beam A, substantially in the manner and for the purpose specified.

No. 24,014.—J. B. DRAKE, of Goshen, Ind.—*Improvement in Straw Cutters*.—Patent dated May 17, 1859.—This invention consists in the combined construction and arrangement of the toothed feeding roller and the ratchet wheel, by means of which motion is given to it, by which arrangement, while the ratchet wheel is made to operate more effectually as a band



to keep the roller from splitting, at the same time the teeth are made to keep the ratchet wheel from working out of place.

*Claim.*—The arrangement of the hinged forked feeding pawl frame Q, feeding and stop pawls P and T, centrally arranged ratchet wheel N, spiked feed roller M, and rising and falling knife frame, substantially as and for the purposes set forth.

No. 24,015.—JOHN L. DRAKE, of Cincinnati, Ohio.—*Improvement in Lamps.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first a wick tube for containing two or more flat wicks, one at least of which wicks is a conductor, said tube having a double chamber, brace and opening, as stated, so that the burning wick may receive the oil from the conductor, and still be free to move upon or against it, as it is raised or lowered, to regulate the burning, substantially as described.

I also claim, in combination with a slotted and perforated dome, and a flat wick for burning heavy oils, an auxiliary flat wick and wick tube, substantially as herein described and for the purpose stated.

No. 24,016.—DANIEL INGHAM DURFEY, of Croton, Ohio.—*Improvement in Apparatus for Evaporating Saccharine Juices.*—Patent dated May 17, 1859.—This invention relates to a construction and arrangement of evaporating apparatus whereby the speedy concentration of the syrup is effected without liability of burning.

The inventor says: I *claim*, first, a descending series of evaporating pans, each having a well or depression on the side next its immediate successor in the range, closable by sluices, substantially as set forth.

Second. The arrangement of the sluices B, alternately on the right and left of the range, when used in the described combination with the wells or depressions referred to, for the purpose set forth.

Third. The strainer D, in the described combination with the clarifier A, operating in the manner and for the purpose set forth.

No. 24,017.—JOHN L. FRISBIE, of Cincinnati, Ohio.—*Improved Water Indicator for Steam Boilers.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the described combination and arrangement of the box C H, adjustable pipe B I J, valve K, sleeve Q q, and sector M N, operating in the described connection with the float arm O, for the purpose of varying the point of alarm from the outside of the boiler, as set forth.

Second. The cogged sector M N, provided with a segmental slot n, in the described combination with the sliding sleeve Q q, float arms O, and bolt p, to enable the application of the alarm to any part of the boiler, as set forth.

No. 24,018.—RUSSEL FRISBIE, of Middletown, Conn.—*Improved Nut Cracker.*—Patent dated May 17, 1859.—The inventor says: I make my invention of any suitable material, having the base of suitable form, as at Figs. 1, 2, and 3, upon which I place a stationary jaw b, and bearings for joints c and d of the cam lever e and movable jaw f. By elevating the cam lever e, the jaws b and f will be opened to receive the nuts; then by depressing the cam lever the jaws will be made to compress and crack the nuts.

*Claim.*—The nut cracker, substantially as described, as a new and improved article of manufacture.

No. 24,019.—OMRI C. FORD and JARVIS O. FORD, of Collinsville, Conn.—*Improvement in Water Wheels.*—Patent dated May 17, 1859.—This invention consists in the improved construction of a reversed action turbine water wheel.

*Claim.*—The application of the reversed curved buckets, or guides, to form a reversed action centripetal and centre vent turbine water wheel, in combination with the inner and outer cut off F and K, in the manner substantially as set forth and described.

No. 24,020.—A. W. FOX, of Athens, Pa.—*Improvement in Straw Cutters.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement described and shown of the wheels D and E, or their equivalent, in connection with the crank G, connecting rod H, sliding frame I, and shafts B and C, by which I obtain an accelerated upward and retarded downward motion to the knife of a straw cutter, as set forth.

Second. The combination of the sliding frame I, with the knife J, sliding in the said frame by means of the action of the angular slot and roller, or their equivalent, by which combination of parts a drawing cut is given to the knife, without interfering with the attachment and operation of the connecting rod H, communicating motion from a shaft placed crosswise to the machine, as set forth.



No. 24,021.—ALBERT GOULD and CYRUS MARSH, of Seneca Falls, N. Y.—*Improved Arrangement of Key Board for Pianos, &c.*—Patent dated May 17, 1859.—The inventors say: Instead of arranging the tones of a diatonic in one range or bank of keys, and the intermediate tones which complete the chromatic scale in another range of keys, as in the common key board, we employ different ranges of keys, so arranged that those of one range uniformly alternate in position with those of the adjacent range or ranges, and the tones of each range are, in order, all at intervals of a whole step, one above another, while those of one range are, in order, all at intervals of a half step above or below those of the next alternating keys of the adjacent range or ranges, so that by the employment of two adjacent ranges of keys all the tones of the chromatic scale are uniformly produced in succession.

*Claim.*—The arrangement of two, three, or more ranges of keys of the key board, in the manner and in relation to each other substantially as and for the purposes specified.

No. 24,022.—JOSHUA GRAY, of Medford, Mass.—*Improvement in Sewing Machines.*—Patent dated May 17, 1859.—The inventor says: My invention is upon that class of sewing machines which form a double looped stitch with two threads, and is designed to attain precision and certainty of action with the greatest simplicity of mechanism, and consists in certain details of construction for the above named purpose.

In stating his claim, the inventor says: I *claim*, first, the combination of the reciprocating bar G, with its side inclines 10 and 11, and upper incline *w*, with the bar N, stop *v*, and adjustable stop *t*, arranged and operating as described, for the purpose set forth.

Second. In combination with the slide bar G, which operates the feeder, the bent lever *f*, and universally adjustable cam I, the several parts being arranged to operate substantially as described, for the purpose set forth.

No. 24,023.—WILLIAM D. GUSEMAN, of Morgantown, Va.—*Improvement in Weighing Scales.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* in a weighing apparatus a pendulum drum or roller, which has, in addition to a rolling motion, a travelling movement, substantially as and for the purposes described.

I also claim, in combination with a rolling and travelling drum or roller, and an index, a travelling vernier or dial, substantially as described.

I also claim the combination of the horizontal levers G, of a platform scale, with the pendulum drums C and bands F, substantially in the manner and for the purpose described.

No. 24,024.—JOSIAH D. HARRINGTON, of Rochester, N. Y.—*Improved Machine for Roasting Coffee.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the construction and arrangement of the divided handle *h* whereby the crank C not only serves to hold the two halves of the ball together while rotating, but also to lift up one half of the ball when moved into the position shown.

Second. I claim my method of uniting the two halves of a coffee roaster by means of the hinge E, formed of the curved jaw attached to one half of the ball and passing into a slot in the second jaw, said slot having the pin R, beneath which the carved jaw passes.

No. 24,025.—ELIJAH HARRIS, of Princeton, Ill.—*Improvement in the Mode of Applying Lever Power.*—Patent dated May 17, 1859.—The nature of this invention consists in applying lever power by means of a weight hung from a single or double lever, which passes or is attached to an axle with pivots, so that by the suspended weight acting upon the lever and the axle, a momentum is communicated to a circular plate provided with ratchet clicks, and these acting upon a ratchet wheel, the machinery is set in motion, and power thus gained and applied.

*Claim.*—The use of a weight B, a single or double lever C, axle and pivots *D d*, acting in combination with the circular plate E, ratchet clicks G, and ratchet wheel H, in applying lever power to machinery, substantially in the manner and for the purposes specified.

No. 24,026.—JOSEPH HAWTHORN, of Thomas County, Ga.—*Improvement in Cotton Presses.*—Patent dated May 17, 1859.—Figure 2 is an end view of this invention, which consists in so combining a screw and its tap with levers and with the followers of the press as that a great amount of power can be exerted with a comparatively small amount of labor.

*Claim.*—The combination of the screw B, the tap block C, and the levers D and H, with the packing cases M, and their followers G, substantially in the manner and for the purpose described and shown.

No. 24,027.—ALBERT H. HOOK, of New York, N. Y.—*Improvement in Sewing Machines.*—Patent dated May 17, 1859.—This invention consists in furnishing the vibrating barbed needle machine with a separate and adjustable apparatus for feeding, instead of using the motion of the needle for that purpose.



*Claim.*—The combination of the cam *b*, the lever *e*, and spring *g*, arranged and combined substantially as and for the purposes set forth.

No. 24,028.—SHERMAN S. JEWETT, of Buffalo, N. Y.—*Improvement in Cooking Stoves.*—Patent dated May 17, 1859.—This invention relates to the construction of cooking stoves, partly of iron and partly of bricks, these materials being so arranged and combined as to secure the advantages of a brick oven, in connection with the ordinary purposes of a cooking stove.

*Claim.*—The bricks  $B^1 B^2 B^3$ , when constructed, arranged, and supported within the stove for the purposes of an oven, substantially as described.

No. 24,029.—WILLIAM W. JOHNSON, of Clarksburg, Va.—*Improved Machine for Manufacturing Picket Fencing.*—Patent dated May 17, 1859.—The claim and engraving will explain the nature of this invention.

The inventor says: I *claim*, first, operating a series of twisters *B*, by means of pulleys and cords, arranged as set forth, so as to give a twist and reverse twist to the wire, in combination with vibrating fingers *J*, hollow shafts *C*, and tension plates *S*, or their equivalents, substantially as and for the purposes set forth.

Second. I claim the segmental roller *N*, constructed of the pieces  $r r^1 r^2$ , for the purposes explained.

No. 24,030.—ISAAC E. JONES, of Cincinnati, Ohio.—*Improved Adjustable Canopy for Railroad Cars.*—Patent dated May 17, 1859.—This invention consists in an improved covering, or canopy, for cars, so that said cover shall adapt itself to the irregularities or curves on the road allowing a free, lateral, and, at the same time, a vertical motion to the canopy without injury to the ends of the cars, or liability to injure the covers.

*Claim.*—The combination of springs, covers, and hinges, all arranged and operating substantially in the manner and for the purposes set forth.

No. 24,031.—WILLIAM JOSLIN, of Cleveland, Ohio.—*Improvement in Centrifugal Guns.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, arranging the barrel *G* upon the same shaft with cog wheel *F*, which is secured near the periphery of the plate *I*, and revolving the barrel around the wheel *K*, substantially in the manner and for the purpose set forth.

Second. The combination of the bevel and spur gear wheels with the plate *I* and barrel *G*, the same being arranged in the manner and for the purpose specified.

Third. I claim the arrangement of the slide *a*, with the barrel and bevel table *d*, for the purpose of elevating the balls to the barrel, substantially as is set forth.

Fourth. The arrangement of the revolving hopper bottom plate *J* and cylinder *e*, for the purpose of conveying the balls down to the barrel, as is fully set forth.

No. 24,032.—ALBERT B. KEELEY and JAMES S. BECK, of Philadelphia, Pa.—*Improvement in Pumps.*—Patent dated May 17, 1859.—The nature of this invention consists in the combination of a solid valveless oscillating piston, with a peculiarly shaped piston chamber, and the upper and lower valves operating in a satisfactory manner.

*Claim.*—The combination of a solid or valveless oscillating piston with the peculiar shaped piston chamber, and with the upper and lower valves, all arranged and operating substantially as and for the purpose set forth.

No. 24,033.—HENRY S. LESHER, of Brooklyn, N. Y.—*Improvement in Breast Pads and Perspiration Shields.*—Patent dated May 17, 1859.—This invention consists in producing a new article of wearing apparel for ladies, which shall prevent the arm pits of their dresses from becoming saturated and stained by perspiration, give a symmetrical rotundity to their breasts, and a more comfortable and graceful support to the skirts of their dresses than heretofore.

*Claim.*—The combination of the arm pit shields or protectors *H* and breast pads *D*, substantially as described, so as to produce a new article of female apparel of the character set forth.

No. 24,034.—DAVID D. LEWIS, of Tamaqua, Pa.—*Improvement in Railroad Frogs.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The steel point *K*, dovetailed to the body of the frog, in combination with the tread plate *K* and the block *i*, when the said tread plate overlaps and is riveted to the said point, and when the block *i* is of such a tapering or wedge-shaped form that, during the process of riveting it and the tread plate to the body of the frog, the said block may serve the purpose of driving the point tight up into its socket, for the purpose specified.

No. 24,035.—ARTHUR MAGINNIS, of Philadelphia, Pa.—*Improvement in Ventilating Hats.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—The combination of the perforated hat body, the perforated sweat leather, and the intervening corrugated band C, when said band is provided with corrugation upon its two sides and made plain and smooth on its rear and front, the whole being constructed and arranged substantially in the manner and for the purpose specified.

No. 24,036.—ROBERT A. MAINGAY, of Pottsville, Pa.—*Improved Filter and Purifier.*—Patent dated May 17, 1859.—This invention consists in the peculiar arrangement of a series of purifying and filtering hogsheads, a large filtering tank or reservoir, a set of purifying kegs or hoppers, and a series of turbines, for the purpose of filtering and purifying the water.

The inventor says: I *claim*, first, the combination of the lime water hopper D, agitator *h*, turbine *i i i*, and hogshead A, substantially as and for the purposes set forth.

Second. The combination of the alkali keg E, hogsheads A<sup>1</sup> A<sup>2</sup>, and turbine F *o o*, substantially as and for the purposes set forth.

Third. The arrangement and combination of the purifying and filtering hogsheads A A<sup>1</sup> A<sup>2</sup> A<sup>3</sup>, filtering tank C, turbines F *o o i i i*, purifier and alkali kegs or hoppers D E, substantially as and for the purposes set forth.

No. 24,037.—ALBERT H. MANCHESTER, of Providence, R. I.—*Improved Anti-Friction Support for the backs of Rudders.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The device or apparatus described, viz: supporting the rudder from behind by means of a backer or brace rising from the deck, or attached above it, having rollers in its face, constructed, arranged, and operating substantially as described.

No. 24,038.—ALFRED MARSH, of Detroit, Mich.—*Improvement in Gas Retorts.*—Patent dated May 17, 1859.—This invention consists in providing the feed pipe at or toward its lower end with a secondary and smaller cover to the retort in fusible metal in the main cover, and serving in its connection with the feed pipe many advantageous uses.

*Claim.*—The employment of the secondary lid *h* for the purposes set forth, when the same is arranged and connected with the feed pipe, substantially as shown and described.

No. 24,039.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in Composition for Emery Sticks and Wheels.*—Patent dated May 17, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The composition for the manufacture of emery wheels, sticks, and tools of more or less flexible nature, formed of gutta percha or India rubber and sulphur, emery, and olive oil, substantially in the manner and for the purposes set forth.

No. 24,040.—JOHN McDIARMID, of Brooklyn, N. Y.—*Improved Machine for Sawing Beveled Surfaces.*—Patent dated May 17, 1859.—The peculiar features of this invention are not in the use of a saw or cutters, for both or either may be used, but in the construction of an oscillating frame B B with its parts and appendages, whether the bearings or points of support are internal or external to the same, the respective parts being so arranged that any desired angle or bevel can be cut or sawn, either continuously or constantly changing.

*Claim.*—The employment of the oscillating frame B B in combination with the centre wheel O, central flange N, fig. 11, and saw T, or cutters *t*, fig. 5, when the same shall be constructed in the manner described and for the purpose specified.

No. 24,041.—CHARLES A. McEVoy, of Richmond, Va.—*Improvement in Metallic Seals.*—Patent dated May 17, 1859.—This improvement consists in constructing a metallic seal for sealing money bags, &c., of hard sheet metal, and in a manner that will admit of its being readily and securely sealed, so that it cannot be opened without defacement, and of a form that will enable it to carry, concealed from the view and protected from mutilation or removal, a label of paper, or any similar material, on which a date or address may be written.

*Claim.*—The use of a paper label, or its equivalent, in combination with a metallic seal, substantially as and for the purpose specified.

No. 24,042.—CHARLES MESSENGER, of Warren, Ohio.—*Improvement in Seeding Machines.*—Patent dated May 17, 1859.—This machine is designed for a two-fold purpose, it being a seeding machine and a ground roller, which roller also takes the place of wheels in ordinary machines for sowing grain. The roller A upon which the machine is mounted may be used as a ground roller separately without the seeding apparatus.

*Claim.*—The lever *b*, arm *c*, levers *e*, and spring *h*, when arranged substantially as described, and in combination with a combined seeding machine and ground roller.

I also claim the studs E E<sup>1</sup> and F F<sup>1</sup>, rods I I<sup>1</sup>, and shaft J, in combination with the cams D D<sup>1</sup>, substantially as set forth, and when used in connection with the seeding machine and ground roller combined.



No. 24,043.—RICHARD MONTGOMERY, of New York, N. Y.—*Improvement in Screw Excavators*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, making the cylinder *a b*, which incloses the screw *a*, in a conical form, for the purpose of rendering the ascent and discharge of the earth more free and perfect, as set forth.

Second. Supporting the cylinder and screw by means of the hinged frame *u s s<sup>1</sup>*, substantially as and for the purposes set forth.

Third. Driving the cylinder *a b* and screws *a<sup>1</sup>* by means of the gearing *y x e d*, arranged and combined as described.

Fourth. Supporting and adjusting the front of the excavator by means of the friction ring *g* and chin or rope *n*, as described.

Fifth. The curved swinging standard or derrick *p*, for elevating the front end of the excavator without unfastening the chain *n*, when desired, as described.

Sixth. The combination of the cylinder *a b* and screw *a<sup>1</sup>* with the swinging frame *u s s<sup>1</sup>*, derrick *p*, and carriage *K*, substantially as set forth.

No. 24,044.—JOEL MOULTON, of Boston, Mass.—*Improved Extension Ladder*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the improved extension ladder hose-carrier, constructed substantially in manner and with its parts arranged and applied together as described, viz: with a series of single ladder bars *A B C*, connected together, and provided with pins or handles, and having not only an extension line and sheaves connected with and arranged in them, (the said bars,) as explained, but a supporting platform and guide braces arranged at the upper part of the upper bar, as described.

I also claim the combination and arrangement of the water conduit, or hose pipe director, and its guiding lines, with the extension ladder, constructed essentially in manner and to operate substantially as described.

No. 24,045.—JACOB MURPHY, of Half Moon, Pa.—*Improvement in Metal Drills*.—Patent dated May 17, 1859.—This invention consists in so constructing the component parts of the machine that in the operation of drilling, after boring through the metal, or to the desired depth, the bit, instead of remaining fast in the metal after the weight has been withdrawn from above, is drawn entirely out and clear from the metal below.

*Claim*.—The shoulders on the drill *d*, in combination with the braces *b b* and pin *p*, upon the sliding frame *B B*, substantially as and for the purposes set forth.

No. 24,046.—THOMAS H. MURPHY, of New Orleans, La.—*Improvement in Machines for Rolling and Measuring Cotton Bagging*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The described machine or combination for simultaneously rolling and measuring bagging, consisting of an adjustable guide bar *F*, sliding shaft *D* fitting into driver *B*, the windlass and cord *E b*, adjustable pressure roller *G*, carrying cam *i*, lever *J*, indicating wheel *L*, arm *K*, pawl *l*, and spring *M*, when all said parts are arranged and combined, substantially as shown and set forth and for the purpose specified.

No. 24,047.—JACOB NAEHER, of North Orange, N. J.—*Improvement in Machines for Husking Corn*.—Patent dated May 17, 1859.—This invention consists in the employment or use of reciprocating troughs, one or more clamps or pincers, and toothed plates or stripping combs, arranged to operate so that ears of corn may be husked very expeditiously.

*Claim*.—The reciprocating troughs *c c*, one or more, provided with pincers *I*, in connection with the toothed plates or stripping combs *o o o p*, and with or without the retaining plate *q*, the whole being arranged to operate substantially as and for the purpose set forth.

No. 24,048.—CHARLES NEER, of Albany, N. Y.—*Improvement in Metallic Frames for Window Blinds*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* constructing frames for blinds of sheet metal, bent in a U form, and connected together, substantially as specified.

I also claim the bent or folded strips *ff*, provided with holes receiving the ends or tenons of the slats, as set forth.

No. 24,049.—H. NORTON and J. S. B. NORTON, of Farmington, Maine.—*Improved Mop Handle*.—Patent dated May 17, 1859.—This invention consists in having one end of the mop cloth or yarn attached to the end of the handle, and the opposite end attached to a slide which is fitted on a handle, so that when the mop is used the slide may be drawn on the handle and secured in such a manner that the mop cloth, or yarn, may have a folded, or doubled position similar to the usual mop cloths, and when surcharged with water, readily distended and wrung dry.



*Claim.*—Attaching the mop cloth or yarn B to the handle A, and to a slide C, fitted on the handle, and arranged substantially as and for the purpose set forth.

No. 24,050.—NELSON PARMENTER, of Gardner, Mass.—*Improvement in the Manufacture of Bricks.*—Patent dated May 17, 1859.—The improved fire brick is composed of the following ingredients, used in the following proportions: sandstone, one part; pipe clay, one part; plaster of Paris, one part; lime, one half part; salt three eighths; coagulated part of the blood (called crassamentum), one eighth.

*Claim.*—A fire proof brick or lining, composed of the above named ingredients, in the proportions set forth, and in the manner substantially as described.

No. 24,051.—CHARLES PAGE, of West Meriden, Conn.—*Improved Signal Door Bolt.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Passing the pin which moves the bolt through the door, and permanently fixing to the projecting extremity thereof a segmental plate, so as to overlay the fixed symbol plate, and, in the manner set forth, communicate the desired intelligence.

No. 24,052.—H. D. J. PRATT, of Washington, D. C.—*Improved Machine for Planing or Shaving Ice.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The machine or implement for cutting or reducing ice to small particles, as described, the same consisting of the arrangement in a hopper of suitable size and shape of rotating cutters, with or without a presser, the whole constructed and operating substantially in the manner described and applied to the purpose specified.

No. 24,053.—ASA PRESTON, of Unionville, Ohio.—*Improvement in Cultivators.*—Patent dated May 17, 1859.—This invention consists in the peculiar construction of the plough, which can be readily changed from one form to another, by simply adding, or removing some of its parts, making it successively a subsoil plough, a right or left hand mole plough, a shovel plough, and cultivator.

*Claim.*—The construction of a combined plough cultivator, having the several parts so arranged that they can be easily attached or detached, as described, when said plough has the hinged wings W, mould board H, bars L M, and blades J K, arranged and operated substantially as set forth.

No. 24,054.—REUBEN RICH, of Albion, N. Y.—*Improvement in Water Wheels.*—Patent dated May 17, 1859.—This invention relates to improvements in the centre vent wheel plate and penstock.

*Claim.*—Constructing the penstock A, dadoed joints L, and bolts I, in combination with gates G and G<sup>2</sup>, and centre scroll plate B, and wheel C, when constructed and operated in the manner and for the purposes specified.

No. 24,055.—SYLVANUS RICHARDSON, of Jericho, Vt.—*Improved Water Wheel.*—Patent dated May 17, 1859.—This invention consists in constructing the floats of a scroll water wheel at their lower extremity, in a spiral or curved form, with a draft tube at the bottom of the case, inclosing the wheel, so that the discharge of the water through the spiral or curved parts of the floats and draft tube produces additional power to the wheel, and also in constructing the upper parts of the floats, on which the water when let in upon the wheel, within the scroll, first acts with parts or sections attached by hinges to the outer edge of the inner parts of the floats, by which the difficulties arising from small obstructions of wood or other matter clogging the floats at the termination of the scroll in the common wheel are avoided.

*Claim.*—The float with hinges, as shown at point marked *a*, and the spiral or curved form of the lower part of the float, as shown at points marked *b*, combined with the extension downwards of the case below the scroll case *e*, and with draft tube *h* as shown, substantially in the manner and for the purposes set forth.

No. 24,056.—JOHN R. ROGERS, of Sacramento, Cal.—*Improved Washing Machine.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination in cylinder B, of the diagonal slats *c c c C*, with the two heads of the cylinder, when said heads are provided with holes of such a shape and form that they will collect and force the water in, and empty it at alternate ends of the cylinder, as the direction of its revolutions are changed, substantially as set forth.

No. 24,057.—TIMOTHY ROSE, of Cortlandville, N. Y.—*Improved Water Wheel.*—Patent dated May 17, 1859.—This invention consists in a peculiar construction of the wheel, whereby a large per centum of the maximum power of the water is obtained.

*Claim.*—Forming the buckets B, of four parts *a b c d*, arranged or disposed relatively with



each other, the hub A, and annular plate *e*, and with a scroll C, specifically as shown and described and for the purpose set forth.

No. 24,058.—JOHN RUSSELL, of Troy, N. Y.—*Improvement in Cast-Iron Grinding Mills.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the breaker B, and internally armed hopper A, with the upper grinder I, and lower grinder H, all arranged and operating together as set forth, for the purpose of feeding into the mill and grinding large substances, such as corn on the cob.

Second. I claim making the armed portion of the hopper of separate rings N, provided with internal projections *b*, and arranged and secured together in the mill, as and for the purpose set forth.

Third. I claim making the lower grinder of separate toothed rings C, arranged and secured together upon the supporting plate E, as and for the purpose described.

Fourth. I claim making the upper grinder of separate toothed rings J, arranged and secured together in and to the supporting plate K, as and for the purpose set forth.

No. 24,059.—THOMAS SHORT, of Danville, Ill.—*Improvement in Seeding Machines.*—Patent dated May 17, 1859.—The turning of the shares I facilitates the turning of the draft. In moving or drawing the implement from place to place, the frame D is raised by the driver, who moves the lever E, and the wheel H being thereby raised from the ground, the distribution of seed is stopped.

*Claim.*—The swinging frame D, when provided with a seed distributing device, actuated by a wheel H and cutting furrow shares I, and fitted within a mounted frame A, substantially as and for the purpose set forth.

No. 24,060.—CHRISTIAN SHUNK, of Canton, Ohio.—*Improvement in Refining Iron in the Hearth of a Blast Furnace.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The employment of an auxiliary tuyere pipe within the hearth of the common blast furnace, when charged with molten iron, at such an angle as that the blast of air entering the iron may strike the circular wall of the hearth as nearly as possible at a tangent to its circumference, so as to cause the blast of air to pass round in the metal, giving the whole mass in the hearth a spiral motion immediately before the tapping of the furnace for the manufacture of pig iron from the ore.

No. 24,061.—JAMES C. SPENCER, of Phelps, N. Y.—*Improvement in Sewing Machines.*—Patent dated May 17, 1859.—The nature of this invention consists in making a needle bar and feeder combined, which will answer the purpose of moving the needle up and down, and at the same time moving the cloth or material to be sewed.

*Claim.*—The construction of a feeder and needle bar in one piece, or connected together, and the combination of the eccentric D and pin F with the needle bar by means of the slot *s*, for the purposes specified.

No. 24,062.—W. S. STETSON, of Baltimore, Md.—*Improvement in Harvesting Machines.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, connecting the finger bar to the frame of the machine by means of the saddle and its support, constructed and arranged substantially as described.

Second. In combination with the saddle *d*, I claim the swiveling guide and swiveling lever *k*, as set forth.

Third. I claim throwing the cutters in and out of gear by means of the shifting bar *t*, constructed and operated substantially in the manner set forth.

No. 24,063.—W. S. STETSON and R. F. MAYNARD, of Baltimore, Md.—*Improvement in Harvesting Machines.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the double hinge joint at the end of the finger bar, consisting of the hinge *p*, shaft *r*, collar *s*, and brace *t*, arranged and operating in the manner described, for the purpose specified.

Second. We claim the compound connecting rod *m*, constructed and operated as set forth.

Third. We claim so constructing or forming the upper part of the obtuse angle iron tooth bar and the base of the finger or tooth, that said base shall bear upon two plain faces of the said angle iron, in the manner and for the purposes set forth.

No. 24,064.—FREDERICK S. STODDARD, of Litchfield, Conn.—*Improvement in Foot Power Machines.*—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.



The inventor says: I *claim*, first, a two throw crank, operated by one pitman, in combination with a lever and spring, or their equivalents, as described.

Second. The mode of attaching the spring to the footpiece to operate on the pitman crank, in connection with the set screws for adjusting and reversing the motion, as set forth.

No. 24,065.—J. C. STODDARD, of Worcester, Mass.—*Improvement in Potato Planters*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the compound cam K, hooked lever I, and sliding cross head *o*, with cutter *p* attached, the whole arranged and operating substantially as and for the purpose shown and described.

Second. I claim arranging the plough shares L and covering shares M, on parallel rock shafts *j k*, so that a lateral and vertical adjustment can be given to the same, substantially as set forth.

No. 24,066.—WORDEN E. STODDARD, of Horicon, N. Y.—*Improved Stop Gauge for Weather Boarding, &c.*—Patent dated May 17, 1859.—This invention consists in the employment of a pair of adjustable gauges, or stops, for facing the width of the show of clapboards, mouldings, and other boards, and at the same time holding them in their places while fitted and nailed.

*Claim*.—The use of the bar A, forming a stop or support for boards and mouldings, and the knob C, the spur D, and the adjustable slide B, substantially as shown, for the purposes set forth.

No. 24,067.—JOHN THOMPSON and M. L. DOTY, of Chariton, Iowa.—*Improved Paddle Wheel*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* the buckets of a paddle wheel, arranged in combination with the segments *b*, the weighted pinions F, and the dogs H, or their equivalents, to operate substantially as and for the purposes specified.

And, in combination with the above named parts, we also claim the arrangement of the spurs *j*, or their equivalents, for the purpose of retaining the buckets in the proper position while the wheel is backing, substantially as described.

No. 24,068.—L. E. TRUESDELL, of Warren, Mass.—*Improvement in Connecting Together the Braces of Truss Bridges*.—Patent dated May 17, 1859.—This invention consists in so constructing the diagonal braces that they shall lock, or embrace each other at the points of their intersection, so that when bolted together by means of a clamp of suitable construction, they will be so firmly connected that any dislocation or derangement of the parts will be prevented.

*Claim*.—The method described of constructing and interlocking the diagonal braces, for the purposes set forth.

No. 24,069.—CHARLES R. M. WALL, of New York, N. Y.—*Improved Propeller*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, an apron G, arranged in such relation to a wheel A that it operates to propel a vessel, substantially as described.

Second. The arrangement of the rollers E E<sup>1</sup>, in combination with the apron G, whereby the wheel is made to work at any dip, substantially as specified.

Third. The springs *g*, or their equivalent, arranged in combination with the rollers E<sup>1</sup>, and with the apron G, for the purpose of regulating the strain on the apron, substantially as set forth.

No. 24,070.—CALVIN D. WHEELER, of New York, N. Y.—*Improved Needle Case and Index*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A needle case and index combined for sewing machines, as described, whereby the appropriate sizes of the thread and needles to properly work together is always determined and shown.

No. 24,071.—NICHOLAS WHITEHALL, of Newtown, Ind.—*Improvement in Seeding Cultivators*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of the stirrups *o o*, with the notched handles N N, eye bolts D, and hooks F F, by which I am enabled to raise and secure the plough at any desired height, substantially as set forth.

No. 24,072.—J. CARPENTER WORTH, of township of Little Britain, county of Lancaster Pa.—*Improvement in Cements for Roofing*.—Patent dated May 17, 1859.—In making this improved composition for roofing, the ingredients are mixed in the following proportions:



To one gallon coal tar mix one quart of petrolemm, four ounces India rubber, four ounces sandrolach, four ounces red lead, three ounces massicot, and five ounces calcined plaster of Paris.

*Claim.*—The composition for roofing made up in the manner, and of the ingredients proportioned and mixed, as set forth.

No. 24,073.—JOHN H. YOUNG, of St. Louis, Mo.—*Improved Pump.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, dividing the pump cylinder into two chambers *a a*<sup>1</sup>, by the division valve-seat plate *b*, with its valves opening upwards, and uniting them by the water-way *E*, substantially as described and for the purpose set forth.

I also claim the puppet valves *m m*, connected to and operating with the buckets *K L* in the two chambers, so that, whilst they move with said buckets, they shall have action independent of them, as set forth.

I also claim, in combination with the hollow piston and stem passing through it, the causing of the upper valve *m* to close upwards against its bucket, substantially as described.

No. 24,074.—JACOB YOUNGMAN, of Sunbury, Pa.—*Improvement in Railroad Switches.*—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of two guards *4 4* so that a space *5* exists between them at the point where the cars take an oblique direction to the switch rails, in order to run upon the lower portion of the main track on a frog plate, which has stationary frogs *1 2*, and a rail *3*, arranged on it, substantially as and for the purposes set forth.

No. 24,075.—ORSON BILLINGS, of La Grange, Ohio, assignor to Himself and MORRIS TRAVER, of Clinton Hollow, N. Y.—*Improved Lock.*—Patent dated May 17, 1859.—This invention consists in the use of a series of guards arranged relatively to each other and to a bolt, whereby the lock is prevented from being picked, or even opened with a proper key, unless the operator has a knowledge of the construction and arrangement of the different parts.

The inventor says: I *claim* the combination of the guards or plates *E F H*, constructed and arranged relatively with each other, and the bolt *B*, to operate as and for the purpose set forth.

I also claim the spring tops *c*, when applied to the guard or plate *E*, and the latter is used in connection with its fellow-guards *F H*, for the purpose described.

No. 24,076.—TYRANNUS P. BUTTERFIELD, of Indianapolis, Ind., assignor to ABIJAH TAYLOR, of Morgan county, Ind., and R. STEVENSON, of said Indianapolis.—*Improved Hand Planing Machine.*—Patent dated May 17, 1859.—*A* is a sliding frame, to which is attached the knife *D*. The pinion *C* raises or lowers the frame *A*, regulating the contact of the knife *D* with the lumber to be planed, as it passes through the machine over the rollers *E E*, the journal of the feed roller *F* working in the sliding box *G*. The pressure given by the feed roller upon the lumber is governed by the spring *H* and screw *I*.

*Claim.*—The combination and arrangement of the frame *A*, knife *D*, feed roller *F*, spring *H*, and screw *I*, when the whole is arranged, constructed, and operated, in the manner substantially as and for the purpose set forth.

No. 24,077.—SUMNER COOPER, of Windsor, Conn., assignor to Himself, THOMAS DENHAM, and JOSEPH W. BRIGGS, of Cleveland, Ohio.—*Improvement in Window Sash Supporters.* Patent dated May 17, 1859.—This improvement in spring pulleys for window sashes consists in the employment of a spring pinion secured in the jamb of the window frame, having a device for locking the same at any given point, with a rack secured to the edge of the sash, and having friction rollers in the upper and lower corners of the opposite edge of the sash, so that, when it is desired, one spring pinion may be used alone to raise the sash, or lock it down, or at any other given point.

*Claim.*—The combination and employment of the spring pinion pulley *C* with the rack or perforated plate *L*, tube or box *I*, pin *J*, key *K*, latch *H*, substantially in the manner and for the purpose described.

No. 24,078.—C. B. COTTRELL, of Westerly, R. I., assignor to Himself and NATHAN BABCOCK, of said Westerly.—Patent dated May 17, 1859.—*Improved Feeding Device for Planing Machines.*—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the anti-friction and feed rollers *G L* applied to the class of planing machines described, and driven from one and the same shaft *H* by gearing, arranged as shown, to admit of a separate lateral adjustment of each, for the purpose set forth.

No. 24,079.—HARRY H. EVARTS, of Chicago, Ill., assignor to Himself and P. E. MERRIHEW, of said Chicago.—*Improved Machine for Sawing Staves from the Bolt.*—Patent dated



May 17, 1859.—The object of this invention is to expedite the cutting of the staves from the bolt, and to render the operation of the working parts automatic throughout.

The inventor says: I *claim*, first, the employment or use of the reciprocating saws F F, in connection with the swinging bolt frames G G, operated by the wiper wheels s, or their equivalents, substantially as and for the purpose set forth.

Second. The employment or use of the segment racks b, operated substantially as shown, and connected by the pinions g with the right and left screw rods H, having jaws f f placed thereon for the purpose of dogging and undogging the bolts at the proper time, as described.

No. 24,080.—HENRY HOWSON, of Philadelphia, Pa., assignor to ANDREW HARRIS and JOHN W. HARRIS, of said Philadelphia.—*Improvement in Valves for Dry Gas Meters*.—Patent dated May 17, 1859.—This improvement consists in a self-adjusting pin, fitted loosely on the valve, and intervening between the latter and the driver, so that the pin may adjust itself to any irregularity in the movement of the driver, thereby obviating the tendency which such unequal movements have to raise the valve from its seat and allow the gas to escape.

The inventor says: I *claim*, first, a pin E, or its equivalent, fitted loosely to the valve and intervening between the valve and the driver, substantially as set forth, for the purpose specified.

Second. Constructing the driver in the form of an inverted cup D, with the driving pins in the inside, said cup being so arranged in respect to the annular flanch e of the valve, as to serve the double purpose of maintaining the latter in its proper position and of preventing the access of tar to the driving pins.

No. 24,081.—WARREN MILLAR, of Chicago, Ill., assignor to Himself and JOHN NUTT, of said Chicago.—*Improvement in Sewing Machines*.—Patent dated May 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the hook h, when constructed and operated substantially as described, in combination with an eye pointed needle, and the spool case c, for the purpose specified.

Second. The combination of the flange b and space x, or their equivalents, of the spool case c, when constructed as and for the purposes described.

Third. The sliding supports s s, or equivalents therefor, when constructed, arranged, and operating in the manner substantially as described, for the purpose specified.

Fourth. I *claim* imparting to the spool case c the tripping or rocking motion, to receive the loop of needle thread from the hook h, or its equivalent, in the manner and for the purpose described.

No. 24,082.—WILLIAM SAILOR, of Philadelphia, Pa., assignor to Himself, W. L. BOYER, and H. K. BOYER, of said Philadelphia.—*Improvement in Corn and Cob Mills*.—Patent dated May 17, 1859.—This invention consists in certain plates with saw teeth on their edges, said plates being secured obliquely to the spindle and adjacent to the burr, and being arranged so as to effectually tear up the cob and direct the broken pieces toward the burr. Also in a peculiar construction of the burr, whereby portions of it may be renewed when the teeth are worn.

The inventor says: I *claim*, first, the plates i i with their saw teeth, when the said plates are secured obliquely on the spindle and adjacent to the burr, and when both the burr and plates are arranged, in respect to the shell, substantially as set forth.

Second. Forming the burr in three or more separate pieces, adapted and secured to each other and to the spindle, substantially as specified.

No. 24,083.—GEORGE W. SIMMONS and GEORGE H. SIMMONS, of Bennington, Vt., assignors to Themselves and NORMAN MILLINGTON, of Shaftsbury, Vt.—*Improved Vinegar Cruet or Bottle*.—Patent dated May 17, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—As a new article of manufacture, a bottle, cruet, or other similar vessel, for containing liquids for table, culinary, or household purposes, provided with the tubes A and B, made and fitted to them in the manner and for the purposes described and represented.

No. 24,084.—HIRAM ALDRIDGE, of Michigan City, Ind.—*Improved Shoe for Grain Separators*.—Patent dated May 24, 1859.—The inventor says: My improvement relates to the manner in which I have constructed and arranged the chaff and straw elevator in connection with the inclined sieve and inclined connection slant board, all of which is incased in a common shoe and placed above the main cleaning sieve in an inclined position, admits of the application of a powerful blast for cleaning the grain.

*Claim*.—The endless incline elevator belt C C, with its lags or cross slats I, in combination with the incline sieve board F and incline extension board R, arranged in the manner and for the purpose set forth.



No. 24,085.—GEORGE W. BAKER, of Cochranon, Pa.—*Improved Bedstead Fastening*.—Patent dated May 24, 1859.—The box E is screwed to the post A, with the cavity side of the box against the rail B B, thereby keeping the hook D in its place; on the convex side of the box E is a slot *m* in which the shaft of the hook D works; F is a toothed rack screwed on the shoulder of the rail, and in which the end S of the hook D hooks.

*Claim*.—The box E, the hook D, and the rack F, when the same are used and combined, substantially in the manner described and for the purposes set forth.

No. 24,086.—E. BARNHART, of Shippensburg, Pa.—*Improvement in Smut Machines*.—Patent dated May 24, 1859.—This invention consists in arranging in a hollow cylinder, with a fluted top and sides, a rotary disk, the surface of which is also fluted, and to which a cylindrical fluted shell is attached, which surrounds four wings placed at the under side of the disk, so that the wheat or the grain as it passes through the funnel on the disk is spread in all directions by means of the fluted surface of the same, assisted by the fluted top and sides of the hollow cylinder and by the fluted shell, and, when so spread, is exposed to the blast created by the wings of the underside of the disk, so that the larger part of the dust and chaff is thrown out by the force of this blast before the grain enters the fan cylinder, in which it is exposed to a second and more powerful blast.

*Claim*.—The disk D arranged with the fluted shell E and with the wings *c*, to operate in combination with the fluted cylinder F, which is provided with a spout *e*, substantially as and for the purpose specified.

No. 24,087.—DANIEL BARNUM, of New York, N. Y.—*Improvement in Surface Condensers*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the method, substantially as specified, of making yielding joints between the tubes and tube sheets in the condensing water compartments of surface condensers, and of thus compensating the expansions and contractions in the tubes, by the means of leaving a portion of India rubber, or other elastic packing, immediately surrounding each tube, free, so that its elasticity can yield longitudinally with the tubes and compensate for their varying lengths, without causing the packing to slip on the metal, substantially as and for the purposes specified.

I claim also the combination of a relief valve, with yielding joints (without followers) in the condensing water compartments, of surface condensers, for the purpose of preventing the blowing out of the packing, and thus preserving the joints, substantially as specified.

No. 24,088.—DANIEL BARNUM, of Jersey City, N. J., and S. G. TYLER, of Quincy, Ill.—*Improvement in Hemming Guides for Sewing Machines*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The manner substantially as specified in the illustrations, fig. 2, of arranging and constructing a hollow conical U shaped tube and slot *j*, in combination with a horizontally acting spring plate *c*, or its equivalent, bearing against the slot *j*, and tending to press the edge of the flexible material, when the same is placed within the slot, into the tube *b* and against the lower side of the concave surface thereof, for the purpose of aiding the hand in turning the hem on the under side and leaving the fair stitch upon the upper or right side of the garment as specified.

No. 24,089.—JOHN W. BATSON and LEONARD BATSON, of Clarksville, Md.—*Improvement in Cultivators*.—Patent dated May 24, 1859.—H is a concave point applied in a similar manner to the shovel E<sup>1</sup>, this point following in the rear and slightly to one side of the furrow made by the point F; it is unnecessary that a cutter should be applied to it. It is made with the four points *o* *o*<sup>1</sup> *o*<sup>2</sup> *o*<sup>3</sup>, each of which may be used in turn for entering the ground as the others become dull and worn.

*Claim*.—The arrangement of the reversable concave shovel point H, reversable shovel point F and its cutter G, with beam A and standards C and D, the whole being constructed and applied in the manner described, for the purpose specified.

No. 24,090.—THOMAS BELL, of New York, N. Y.—*Improved Rig for Vessels*.—Patent dated May 24, 1859.—A is the mast bench, consisting of a single round stick of wood, or built of several pieces in the ordinary manner of built masts, said bench being stepped into the keelson of the vessel.

C is the mast and B is a spar which is substituted for both boom and bowsprit, the mast being straight and the spar being curved, so that its ends are higher than the middle, where, or at some distance in front of which, it is secured to the mast in the strongest and most permanent manner.

*Claim*.—The arrangement and combination of the mast C, spar B, and revolving forked mast bench A, substantially as and for the purpose shown and described.

No. 24,091.—EZRA R. BENTON, of Cleveland, Ohio.—*Improved Spring Bed Bottom*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—The construction of a bed bottom, or spring couch, consisting of a series of double springs B B<sup>1</sup> and C C<sup>1</sup>, the longitudinal pieces G G<sup>1</sup> and the transverse slats A A, &c., either with or without the flexible band I, when arranged as set forth, and operating in the manner and for the purposes specified.

No. 24,092.—JOHN BOYD, of Philadelphia, Pa.—*Improvement in Carding Engines.*—Patent dated May 24, 1859.—The operation of the covered roller B and the roller C, in connection with the scrapers D and E, when combined with the doffer cylinder of a carding engine, is to strip off all the fibrous material and discharge it from the machine.

*Claim.*—The combination of the rollers B and C and scrapers D and E, for stripping the ordinary doffing cylinder of a carding engine; the whole being constructed and arranged substantially as described.

No. 24,093.—CORNELIUS R. BRINCKERHOFF, of Batavia, N. Y.—*Improvement in Harvesting Machines.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the crank, operated by the main shaft, with the rake and sweep post, to which it is attached, and the eighth arm, when arranged in the manner described.

Second. The open work divider to divide the grain falling upon the platform from the gavel being removed therefrom by the rake, when arranged upon the rake head, in the manner and for the purpose specified.

Third. The spring catch marked *c* and dog marked *a*, in combination, and the location of said catch, to break the forward motion of the rake, and its return by the spring, arranged substantially as described.

Fourth. The projection on the lower side of the slot or notch in the dog to arrest the catch with certainty, in the manner described.

Fifth. The application and arrangement of the toothed rack connected with the spring, by which the rake is caught and held after its descent upon the gavel, the rebound thereof is prevented, and the gavel removed with greater certainty.

Sixth. The placing of a rake (having spring teeth) in the rear of the machine, for the purpose of gleaning and contracting the gavel sheaf into form, substantially as described.

Seventh. The combination of the cam attached to the main shaft, with the arm of the rear rake, to cause it to pass over the gavels at the proper time.

Eighth. The ratchet cam I and lever, in combination, substantially as described, for throwing both rakes into or out of action, as set forth.

No. 24,094.—JOHN T. BROOKS, of New Albany, Ind.—*Improved Apparatus for Heating the Feed Water of Steam Boilers.*—Patent dated May 24, 1859.—The main object of this invention is to lessen the liabilities to leakage and explosion, by avoiding the introduction of cold or partially cold water.

*Claim.*—The described relative arrangement of the force pump *e*, water supply pipe *f* conveying steam from the upper part of the boiler or steam dome to the heater; the whole operating together in the manner set forth, to heat feed-water on its way between the pump and the boiler, by means of living steam, and inject it into the lower region of the boiler.

No. 24,095.—ROBERT W. BUCKLES, of Grayville, Ill.—*Improvement in Harrows.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Two harrows hung to one frame independent of each other, with two vertical toothed wheels D D also working independently of each other, and connected to the horizontal wheels *c c*, which are actuated by means of pinions E E, as described, for the purpose set forth.

No. 24,096.—WASHINGTON BURNHAM, of Essex, Mass.—*Improvement in Ox Yokes.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The method of applying the pole ring to the yoke, viz: by means of the staple rack and the ring carrier, made so as to be capable of sliding on the rack, and with a pin passage arranged with respect to the staple rack, substantially in the manner as described, the whole being for the purpose explained.

No. 24,097.—J. F. CALHOUN, of Wolcottville, Conn.—*Improved Curtain Rack.*—Patent dated May 24, 1859.—The metal plate *a* has an oblong slot *b* placed at the centre of the plate, through which passes a screw *c* having a square head *d*, which fits loosely between the flanges *e* on the inside of the plate *a*. A small washer *f* is placed over the screw on the front side of the plate, and against this is placed an annular collar *g*, which projects out a short distance beyond the side of a pulley *h*, which turns on said collar.

*Claim.*—The combination of tightening screw *c*, collar *g*, pulley *h*, and button *i*, for effect-



ing the required tension on the cord, substantially in the manner and for the purposes herein above set forth.

No. 24,098.—PETER S. CARHART, of Collamer, N. Y.—*Improvement in Sewing Machines.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—Feeding the cloth by the combined action of the needle and friction pad, when the said needle and pad operate jointly and in unison to propel the cloth as the needle descends therethrough, the cloth being held in its required position by the needle during the intervals of feed, while the pad is retreating to take a fresh feeding gripe on the cloth, essentially as specified.

No. 24,099.—JOSEPH CARRIER, of Marlborough, Conn.—*Improved Bread Knife.*—Patent dated May 24, 1859.—This invention consists in providing an adjustable roller gauge to the outer side of the knife, in such a manner that the roller may be raised above or depressed to, or below, the cutting edge of the knife.

*Claim.*—The employment of the roller F, the adjustable studs D, with the collars C and thumb nuts E, substantially as and for the purpose described.

No. 24,100.—M. C. CHAMBERLIN, of Johnsonsburch, N. Y.—*Improvement in Stove Pipes.*—Patent dated May 24, 1859.—The pipe A is provided with a spring tube B, which is secured on it, extending in a few inches from its mouth. This tube is made smaller at one end, and is joined at one end and left open at the other, so that it may be allowed to expand and contract when required. The pipe A is also provided with a slot *a*, which is made in its end. The slot runs longitudinally first, and then turns at right angles and runs transversely.

The inventor says: First, I *claim* the employment of the spring tube B, in connection with the pipe A, when the same is used, in the manner and for the purpose herein specified.

Second. The arrangement of pipe C, provided with pin *d* and pipe A, provided with slot *a* and spring tube B, substantially in the manner and for the purpose specified.

No. 24,101.—ALBERT R. COLTON, of Athens, Ga.—*Improvement in Horse Power Machines.* Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the stationary wheel J and its hub L, when the same are placed centrally with the large driving wheel M, for giving motion to the pinions U V and gear wheels R S, revolving with the driving wheel M, so as to impart a rapid rotary motion to the horizontal shaft E, having its bearing in the axis of both driving wheel M and stationary wheel J; all arranged in the manner and for the purpose herein specified.

Second. I claim the sectional yoke G, as herein described, in combination with the annular collar N and set screws *c*, arranged in the manner and for the purposes herein shown.

No. 24,102.—JOHN E. CRYER, of Peoria, Ill.—*Improved Joiner's Bench.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the movable jaw B, constructed and arranged with reference to the permanent jaw *b*, in such manner as to secure properly the lumber to be wrought, and at the same time to form a track or guide for the plane during the operation of jointing and squaring lumber, as herein set forth.

Second. Operating the jaw B by means of guides *e e*<sup>1</sup>, rod *f*, lever *g*, and dog *l*, substantially as herein described.

Third. The gauge *p*, adjustable vertically with reference to the jaws B *b*, in combination with the scale *m*, substantially as and for the purposes set forth.

No. 24,103.—HENRY DAVIS, of Bethlehem, Conn.—*Improved Carpet Sweeper.*—Patent dated May 24, 1859.—This invention consists in arranging under the box of the sweeper two rollers E E<sup>1</sup>, parallel to the brush, and so close to the same that the brush, as it rotates, sweeps against the rollers.

*Claim.*—The arrangement of the rollers E E<sup>1</sup> to operate in combination with the yielding brush B, and with the scraper G, substantially in the manner and for the purpose herein specified.

No. 24,104.—WILLIAM DAVIS, of Middleburg, Md.—*Improvement in Hominy Machines.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Providing the outer cylinder A with apertures *a a*, gauged to such a size, while serving to discharge the hulls also to perform the additional function of discharging the hominy as soon as reduced to the desired degree of fineness, in combination with the inner cylinder B, when the same is driven at the specific speed as herein described, for the purposes specified.

No. 24,105.—JAMES M. DAY and E. H. A. OAKLEY, of Aiken, S. C.—*Improvement in Compositions for Roofing.*—Patent dated May 24, 1859.—This invention consists in a com-



position of coal tar, resin, or asphaltum, plaster of Paris, soda, hydraulic or Roman cement, and lampblack, combined in such proportions as to form, when applied to canvass, a pliable roofing.

*Claim.*—The ingredients, in the proportion set forth in the specification.

No. 24,106.—M. DE CAMP, of South Bend, Ind.—*Improved Millstone Bush.*—Patent dated May 24, 1859.—The object of this invention is to obtain a durable bush for the spindle of the bed stone; one that will admit of a certain degree of adjustability, so as to conform in itself to the position of the spindle, and be self adjusting to a certain extent; one that will also insure a perfect lubrication of the spindle and admit of an easy adjustment of the followers to the collar of the same, and also protect the spindle from foreign substances that might otherwise work between the collar and followers and produce unnecessary friction and wear.

The inventor says: I *claim*, first, the adjustable followers F, provided with convex sides and backs fitted within an oil box A, and arranged in relation with the collar D of the spindle to operate as and for the purpose set forth.

Second. The serrated or notched wheels  $i^1$ , attached to the outer ends of the screws  $i$ , when used in connection with the stops  $j$ , attached to the plates  $k$ , substantially as and for the purposes specified.

No. 24,107.—CHARLES DOUGLAS, of Hebron, Conn.—*Improvement in Chimney Caps.*—Patent dated May 24, 1859.—In the base A there is a neck B sufficiently large inside to receive the smoke pipe, which it is designed to cover. E is an inverted cone, made stationary, directly over the base A, by means of the iron standard F F F F. D is a conical valve, suspended from the inverted cone E upon the round head of the bolt  $e$  at  $d$ . C is a valve equal in diameter to valve D, with a hole through the centre sufficiently large to allow it to play loosely over the neck B.

The inventor says: I *claim*, first, the valves C and D, and the manner and position in which they are suspended, substantially as described and for the purposes set forth.

Second. The arrangement of the neck B, the top E G, and the standard F F F, in combination with the valve D, or its equivalent, as and for the purposes herein specified.

No. 24,108.—SAMUEL DOWN, of New York, N. Y.—*Improvement in Dry Gas Meters.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Constructing or arranging the mouths  $a^1 b^1$  of the channels of communication  $a b$  between the inlet and outlet pipes and the measuring chambers and valve chamber of a dry gas meter, to dip down in the wells below the said pipes, substantially as and for the purpose herein set forth.

No. 24,109.—CHRISTIAN H. EISENBRANDT, of Baltimore, Md.—*Improvement in Railroad Car Couplings.*—Patent dated May 24, 1859.—This invention consists in constructing a car coupling in such a manner as that it is self-coupling and detachable when the cars are thrown off the track, and at the same time acts as a brake or lock in connection with the wheels of the car.

The inventor says: I *claim* the plates  $a a a a$  with the springs  $a^2 a^3$ , the prong clasping grippers  $b c c^2 d e e^2$ , with the spring latch  $f g h i$ , constructed, arranged, and operated, substantially as set forth.

I also claim the hitching pin or bolt K K provided with the chain and button, or ring L L  $m m$ , when arranged, operated, and used in combination with the clasping prong grippers  $b c c^2 d e e^2$ , and brake lever  $q q r$ , substantially as set forth and described.

I also claim the combination and arrangement of the sliding bolts  $n o p$  with the prong clasping grippers  $b c c^2 d e e^2$ , substantially as set forth and described.

No. 24,110.—JOHN A. ENGGREN, of Brooklyn, N. Y.—*Improved Device for Securing Lightning Rods.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—An insulator for lightning rods, composed of a glass standard A, a spring clasp C, having shanks  $i$  and shoulders  $j$ , and otherwise made as described.

No. 24,111.—KASSON FREEMAN, of Fond du Lac, Wis.—*Improved Device for Clamping the Bolts in Circular Sawing Shingle Machines.*—Patent dated May 24, 1859.—This invention consists in an improved device for operating the jaws or dogs, for the purpose of dogging and undogging the bolts.

*Claim.*—The arrangement of the sliding or adjustable bar K with weights  $s$  attached, or their equivalents, when used in connection with the sliding jaws D, for the purpose specified.

No. 24,112.—EDWARD GARRETT, of New Orleans, La.—*Improvement in Ties for Cotton Bales.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—The combination of the two plates *a* and *c*, when made and arranged as, or substantially as set forth, to form a tie for iron bands for baling cotton, or for similar purposes.

No. 24,113.—E. L. GAYLORD, of Terrysville, Conn.—*Improved Trunk Lock.*—Patent dated May 24, 1859.—This invention consists in arranging the bolt of the lock with a tumbler and spring, whereby any injury to the lock from the accidental falling of the lid is effectually prevented.

*Claim.*—The arrangement of the bolt *B* with the springs *c c D* and tumbler *C*, to operate substantially as and for the purpose herein set forth.

No. 24,114.—ELISHA GEIGER, of Lancaster, Pa.—*Improvement in Horse Rakes.*—Patent dated May 24, 1859.—*J* indicates flat steel springs with grooved wooden heads, forming clips that rest upon and across the teeth *D* near the rake head *E*. These springs are attached to an operating cross bar *K*, which rests upon the platform *B* near the carriage axle, by which the weight of the devices is concentrated at the carriage axle so as to relieve the horses.

*Claim.*—The arrangement of the cross bar *K* having the flat springs and heads *J*, and provided with arms for actuating the supporting bar *F* with and in relation to the clearing rocker shaft, the whole being constructed and operated as herein set forth.

No. 24,115.—HENRY GLOSSER, of New York, N. Y.—*Improvement in Cases for Steroscopic Pictures.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of two or more pairs of eye-glasses on the same side of a stereoscopic case, so that several persons can look at the pictures at one and the same time, substantially in the manner specified.

Second. The piston frames *D* arranged with cogs *i* or their equivalent at their lower edges, in combination with the cams *j j<sup>1</sup> j<sup>2</sup>* and *j<sup>3</sup>*, or their equivalents, whereby the same are made to travel from one pair of eye-glasses to the other, substantially as described.

Third. Giving a double motion to the picture frames, first in a direction transversely through the case by the action of the cam *g*, or its equivalent, on the endless belt *E*; and, second, in a longitudinal direction, by the action of the cams *j*, substantially as and for the purposes set forth.

Fourth. The arrangement and combination of the endless belts *E* and *E<sup>1</sup>*, to operate in relation to the channel *G*, substantially as and for the purpose described.

Fifth. The cams *g* and *g<sup>3</sup>*, arranged in combination with the cams *j j<sup>1</sup>*, &c., or their equivalents, in such manner that they produce the within described motion of the picture frames at alternate intervals, substantially as and for the purpose specified.

No. 24,116.—ARTHUR GRAY, of Naples, Me.—*Improved Washing Machine.*—Patent dated May 24, 1859.—The claim and engraving will explain the nature of this invention.

*Claim.*—An improved washing machine, as made with a set of fluted rollers *B B B*, and a fluted presser or bucking board *C*, arranged, constructed, and applied to the reservoir *A*, substantially as described, in order to enable the clothes to be both rolled and beaten as specified, during the operation of washing the same.

No. 24,117.—BENJAMIN L. GRIFFITH, of Hazletownship, Pa.—*Improvement in Steam Boilers.*—Patent dated May 24, 1859.—This invention consists in the arrangement of the smoke stack *N*, the chamber *F*, the two series of flues *M M*, and the doors *U U*, and diaphragms *K K*.

*Claim.*—The combination of the single smoke stack *N*, single chamber *F*, and double series of flues *M M*, with the hollow hinged doors *U U*, and the diaphragms *K K*, arranged and constructed substantially as and for the purpose set forth.

No. 24,118.—A. HADLEY, of Lynn, Mass.—*Improved Machine for Filing Saws.*—Patent dated May 24, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, determining the bevel of the teeth of a straight saw by means of pivoting the frame *g*, (which supports the rail *e* and saw-plate *a*) at *h*, and hinging rods *f<sup>1</sup> f<sup>1</sup>* to said frame as seen at *g<sup>1</sup> g<sup>1</sup>*, and confining these rods in their relative position by set screws *h<sup>1</sup> h<sup>1</sup>*, constructed and arranged substantially as described.

Second. Determining the bevel of the teeth of a circular saw by arranging the shaft *z<sup>2</sup>*, of the saw between two points *l* and *m*, one of the points *m* being adjustable by means of a grooved piece *p*, block *n*, and set screw *O*, the whole being constructed and combined substantially as described.

Third. Determining the bevel of the straight and circular saws by combining the frame *v* with grooves *x<sup>2</sup>*, forming arcs of a circle in combination with clamp screws *s<sup>2</sup>*, and slotted plates *z<sup>2</sup>*, substantially as described.

Fourth. Holding the file by clamps *r<sup>2</sup> r<sup>2</sup>*, set screws *o<sup>2</sup> o<sup>2</sup>*, in combination with shaft *n<sup>2</sup>*, set screw *p<sup>2</sup>*, and bracket *m<sup>2</sup>*, constructed and operating substantially in the manner and for the purpose set forth.



Fifth. The combination of the movable table O<sup>1</sup>, with the mechanism for supporting and moving the saws, constructed and arranged thereon as shown and described, whereby the same machine can be quickly adapted for filing either straight or circular saws, as set forth.

Sixth. The combination of the mechanism for supporting and moving the saws with the mechanism for supporting and operating the file, constructed, arranged, and combined as described, and for the purposes set forth.

No. 24,119.—**NAPOLEON J. HAINES**, of New York, N. Y.—*Improvement in Piano Forte Actions*.—Patent dated May 24, 1859.—This invention consists in the employment of a cross shaped or four armed repeating fly, applied and operating in combination with the jack, the key, and the hammer, for the purpose of arresting the hammer at a short distance from the string when it falls after striking, and supporting it in such a manner that by a very slight rise of the front end of the key, the jack is permitted to enter the notch of the hammer butt far enough to permit the repetition of the blow.

*Claim*.—The cross shaped or four armed fly F, applied in combination with the jack, the key, and the hammer butt, to operate substantially as herein set forth.

No. 24,120.—**LUTHER T. HAZEN**, of Coventry, N. Y.—*Improvement in Hubs for Carriage Wheels*.—Patent dated May 24, 1859.—This invention consists in encasing wood hubs entirely with metal, which forms the pipe box and helps to hold firmly the spokes.

*Claim*.—Inclosing wood hubs for carriage wheels or other vehicles with metal cases which form the pipe box and bands, in the manner described and for the purposes set forth.

No. 24,121.—**WILLIAM HENNEY**, of Wapello, Ill.—*Improvement in Machines for Raising Railroad Tracks*.—Patent dated May 24, 1859.—This invention consists in arranging an extension balance on the top of a piston, which is operated by means of an eccentric disk, acting against a roller in the lever end of the piston, in connection with a serrated bar attached to the side of the frame in which the piston operates, this bar serving to retain the piston by means of a pawl attached to the side of the latter, so that the same, as it is raised step by step, is retained by the action of the pawl against the serrated bar, and the vertical arms of the extension balance are provided with hooks to catch under and raise railroad tracks or other heavy articles.

*Claim*.—The balance H, arranged with the arms I and with the extension J, to operate in combination with the piston E, the serrated bar L, the pawl M, and with the eccentric disk C, substantially in the manner and for the purpose described.

No. 24,122.—**JOHN F. HOFFMEISTER**, of Alton, Ill.—*Improvement in Ovens*.—Patent dated May 24, 1859.—This invention consists in arranging a rotary platform over two flues which conduct the heat from the fireplace in opposite directions round to a chamber where the flues unite, and from which the heat is carried back through an additional flue, extending over one half of the space in which the platform rotates, to the chimney, so that the dough placed on the platform, and rotating with the same, is exposed to considerable and uniform heat during the first half of its rotation, and to a less intense heat during the latter half of its rotation.

*Claim*.—The arrangement of the flues F F<sup>1</sup>, which terminate in the chamber H, in combination with the additional flue J, to operate in combination with the rotary platform E, substantially as and for the purposes set forth.

No. 24,123.—**C. R. HURLBUT**, of Yorkshire, N. Y.—*Improved Clothes Dryer*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The described article of manufacture, constructed as described, to wit: The arrangement of the standards C C, side rails E E and G G, cross rails F F, D, and I I, and sash B B, provided on their under side with buttons K K, the whole being jointed and the several parts acting conjointly, substantially in the manner and for the purpose specified.

No. 24,124.—**CHARLES JONES**, of Brooklyn, N. Y.—*Improvement in Coolers for Beer*.—Patent dated May 24, 1859.—This invention consists in dividing the water space of a cooler by means of a cylindrical shell placed in the same in two compartments, which communicate by a narrow crevice left between the bottom of the water space and between the edge of the cylindrical shell, while that part of the water space outside the shell is closed perfectly air tight on the top, so that the water in this space is kept up to or near to the top by the atmospheric pressure.

*Claim*.—The shell D, arranged in the cooler so as to form the two compartments a and b, to operate in combination with the coil E, as and for the purpose described.

No. 24,125.—**ALFRED FAUVIN JALOUREAU**, of Paris, France.—*Improvement in the Manufacture of Waterproof Cement Pipes*.—Patent dated May 24, 1859; patented in France December 30, 1857.—This invention consists in forming pipes or tubes intended as water or gas pipes,



tubes for underground telegraph wires, &c., of a number of layers of paper, cotton, flax, or other tissues, &c., lapped together with bituminous or caoutchouc substance between each layer, so as to render the whole impermeable to air or water.

*Claim.*—The manufacture of air and water tight tubes or pipes by the process set forth.

No. 24,126.—G. P. JORDAN, of Burlington, Iowa.—*Improvement in Separators for Smut Machines.*—Patent dated May 24, 1859.—This invention consists in a peculiar arrangement and combination of parts, whereby the desired work, to wit: the separating of smut and other impurities, or foreign substances, from grain is effected by a very simple machine.

The inventor says: I *claim*, first, the combination and arrangement of the scourer I with the spout D, chamber C, and box B, provided with the blast chambers *b b*, spout H, fan F, and screens *u v*, substantially as and for the purposes set forth.

Second. The employment or use of the valves *c<sup>1</sup>*, placed in the partition plates *a a*, when used in combination with the fan F, chamber C, spout D, and scourer I, and arranged relatively therewith, as and for the purpose set forth.

No. 24,127.—WILLIAM KELLY, of Hastings, Mich.—*Improved Churn.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the dashers E E with the slide partition D and connecting rods F F, as described, the parts being so connected to the frame that the oscillations of the churn shall operate the dashers E E and force the cream against and through the slide partition, substantially as set forth; not intending to claim the operation of the dasher or dashers by the oscillations of the churn, but only the combination and arrangement of the vibrating dashers with the movable partition and concomitant parts, as described, for the purposes set forth.

No. 24,128.—JESSE LITTLE, of Chambersburg, Pa.—*Improvement in Harvesting Machines.* Patent dated May 24, 1859.—By means of brace A and the groove or slit sliding on bolt *e*, the tongue *p* is allowed, in turning, to break or move suddenly at an angle of thirty degrees or more, compelling the propelling wheel to revolve in a circuit, and thereby operating the cutters and blades as effectively in a circular as in a forward movement and lessening the area required for turning.

*Claim.*—The inventor says: I claim, first, the arrangement of the sliding brace A in combination with the tongue *p* and bar B, constructed and operating in the manner described, for the purpose specified.

Second. The combination and arrangement of the castor plate *c c*, jaws I I, and segments G G, in the manner and for the purpose described.

No. 24,129.—MURDICK LYTTLE, of Allegheny, Pa.—*Improved Propelling and Steering Apparatus.*—Patent dated May 24, 1859.—This steering and propelling device is adjusted in a frame work, not permanently attached to the boat, so that the frame, together with the machinery, may be moved from one boat to the other, and still remain in working condition.

The inventor says: I *claim*, first, the shaft *b* with a supporting arm or arms *g* and bearing recess *v*, in combination with the propeller or paddle wheel shaft *k*, the whole being constructed and arranged in the manner and for the purposes set forth.

Second. The tubular shaft *c*, with gear wheels at the upper and lower ends, in combination with the shaft *b* and propeller shaft *k*, the whole being constructed and arranged in the manner and for the purposes set forth.

No. 24,130.—LEVI H. MARKLEY, of Lime Lexington, Pa.—*Improved Propeller.*—Patent dated May 24, 1859.—When it is desired to change the position of the paddle blades or flyers F so as to move the vessel sternwise, the rod G is disengaged from the hook J and the block H at its end from the groove, between which and the bar I it moves by the withdrawal of the said bar I and the pivoted frame E is turned so as to reverse the position of the paddles F.

*Claim.*—The arrangement and combination of the peculiarly acting paddle blades, or flyers F, pivoted frame E, rods G, hooks J, sliding block H, and reversing and bracing bar I, as and for the purpose shown and described.

No. 24,131.—GEORGE W. MATTHEWS, of York, Pa.—*Improved Method of Forming Plough Handles.*—Patent dated May 24, 1859.—This invention consists in the employment or use of two rotating cutter heads provided with novel cutters, and used in connection with a carriage in which the *stuff* to be operated upon is centred, and which carriage is provided with a pattern to actuate one of the cutter heads, the axis being fitted in movable bearings.

*Claim.*—The arrangement and combination of the carriage C, provided with the patterns or curved surfaces *f*, the adjustable rotating cutter head I, belt H, adjustable shaft D, provided with pinion *c* and the rack *b* attached to carriage C, substantially as and for the purpose set forth.



No. 24,132.—W. S. MAYO, of New York, N. Y.—*Improved Metallic Pipe*.—Patent dated May 24, 1859.—This invention consists in placing around the outer surface of metallic pipes, longitudinal strips of metal at certain determined distances apart, and coiling around the pipes thus prepared suitable sized wire, or wires, which may be wound in close contact or be separated, according to circumstances.

The inventor says: I *claim* the application of longitudinal strips B to the surface of a metallic pipe, in combination with the coiled wire covering C, whereby I am enabled to insure great strength, with a less thickness of metal, substantially as herein above specified.

No. 24,133.—WILLIAM P. MAXSON, of Albion, Wis.—*Improvement in Bag Fasteners*.—Patent dated May 24, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The employment of the oblong grooved faced plate A, or its equivalent, having two segments of its middle portion punched out, so as to admit the string, and fasten it to the bag, in combination with the string B and ring E, when constructed to operate upon the principle of the wedge, substantially as and for the purpose set forth.

No. 24,134.—THOMAS McBEAN, of Fowlerville, N. Y.—*Improved Egg Beater*.—Patent dated May 24, 1859.—This invention consists in arranging a double spiral shaped beater or dasher, with its surface formed into steps within a square box, and in communicating to this dasher a swift rotary motion, so as to revolve it horizontally within said box.

*Claim*.—The double spiral dasher A in combination with a square box E, when the same are arranged substantially as shown.

No. 24,135.—JOSEPH McKOWN, of Geardstown, Va.—*Improvement in Seed Planters*.—Patent dated May 24, 1859.—This invention consists in the arrangement, for united operation, of the horizontally moving hand lever, vertical shaft, horizontal elbow lever, and slides, divided hopper, vacuum plate, and seed tube, whereby a simple and effective plough handle, combined seed planter, and guano dropper are produced, and capable of being conveniently operated from the rear of the handles, and after the seed is dropped covering in the same by a share and rollers.

*Claim*.—The arrangement for united operation of the horizontally moving hand lever K, vertical shaft J, horizontal elbow lever I, horizontal slides H H, divided hopper G, seed tube F, and vacuum plate L, substantially as and for the purposes set forth.

No. 24,136.—THOMAS E. McNEILL, of Philadelphia, Pa.—*Improvements in Seats and Couches for Sleeping Cars*.—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

The inventor says: I *claim* two adjacent seats, each seat having detachable cushioned boards G and E, and each having a permanent end frame D, and a rear frame F, with upper and lower ledges *i h*, in combination with the swing bracket H and rib I, or their equivalents, the whole being arranged substantially as herein set forth, so that the cushioned boards G, of the two adjacent seats may form one couch, and the boards E of the same seats another couch, and so that when the said boards are arranged as couches, there may be a space between them and the permanent end frames D for the purpose specified.

Second. Constructing and arranging the end frames D of four seats, substantially in the manner set forth, so that they may serve as supports for the cushioned platforms which form the two intermediate berths.

No. 24,137.—JOHN MILLER, of Bucyrus, Ohio.—*Improvement in Attaching Thills to Axles*.—Patent dated May 24, 1859.—This invention consists in the peculiar form of the jaws on the clip and the hook on the thill irons, with shoulders so arranged that the thills are always perfectly firm, and secure against accident when in use, easily detached and adjusted without the use of springs or screws, by simply raising them up nearly perpendicular.

*Claim*.—The adjusting and securing of the hooks *s*, on the pin *i* by means of the circular face *b c*, on the jaws D D, and the shoulders *r r*, on the iron E, substantially as and for the purpose set forth.

No. 24,138.—JOHN R. MOFFITT, of Piqua, Ohio.—*Improvement in Threshing Machines*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of fixed bearings *t*, set screws *e*, (in the line of adjustment,) and hinged concave heads *c d*, the whole operating together to set and rigidly retain the toothed portion of the concave at any desired proximity to the threshing cylinder; while at the side at which the unthreshed grain enters its distance is substantially unchanged.

No. 24,139.—TIMOTHY NEWHALL, of Lynn, Mass.—*Improved Machine for Dressing Kid Skins*.—Patent dated May 24, 1859.—The object of this invention is to produce a gloss on kid and other thin skins, after being colored and gummed, and consists in the employment or use of a rotary brush, in connection with a reciprocating yielding bed.



*Claim.*—The rotary brush F, in connection with the reciprocating bed or carriage C, connected with its guide rods B B, by springs D D, the parts being arranged to operate substantially as and for the purpose set forth.

No. 24,140.—T. A. NOBLE and ERASTUS COY, of Akron, Ohio, and JAMES B. ANGELL, of Allegheny, Pa.—*Improvements in Smut Machines.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the adjustable hoop C, in connection with the increased chamber *f*, to regulate the blast passing up through the circular opening N, also the adjustable ring D, to regulate the blast coming up through the circular opening E; the operation in both cases being to increase or diminish the blast, as may be required, substantially as set forth.

Second. The chamber G, in combination with the arm F and spout L, when said chamber is placed above the revolving chamber H, to catch the screenings, substantially as set forth.

Third. The revolving chamber H, provided with sides *h* and rim *h*<sup>1</sup>, for distributing the wheat evenly as it falls over the edge of the rim *h*<sup>1</sup>, so as to be more effectually operated upon by the blast passing up the opening E, and also the flange M, upon cylinder L, for the similar distribution of the wheat to the second blast rising through opening N, as set forth.

Fourth. Making the conical scourer O adjustable perpendicularly, both independently of shaft A and disk L, and in connection with said shaft and disk, substantially as set forth.

No. 24,141.—JOHN SMITH SHATTUCK, of Malden, Mass.—*Improvement in Machines for Cutting Soles.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the alternating or vibrating segment Q Q<sup>1</sup>, carrying the two cutters T T<sup>1</sup>, having the toe and heel in opposite directions.

I claim the yielding table V, which supports the leather as it is fed forward, and the yielding gauge *c d*, by which the leather is brought to the right position to be operated upon by the cutters.

I also claim the projecting knife edges at the heel and toe of the cutter, by which the scraps are detached from the strip of leather.

No. 24,142.—L. K. SELDEN, of Haddam, Conn.—*Improved Folding Cradle.*—Patent dated May 24, 1859.—This invention consists in constructing the cradle frame in such a manner that the same folds up the length of one of the rockers, the several rockers being slotted so as to form guides for slides to which the several bottom braces and the cross bars, united by pivots, are attached, while the longitudinal bars are constructed of two parts, fastened together and to the cross bars by means of pivots, made rigid by sleeves, which can be drawn over the joints.

The inventor says: I *claim* the rockers A, of a cradle arranged with slots *a*, or their equivalents, and operating in combination with the bottom braces B, the upright cross bars C, the longitudinal bars D, and the top bars E, substantially in the manner and for the purpose herein specified.

Second. The arrangement of the slides *b*, in combination with the bottom braces B, and with the upright cross bars C, to operate substantially as and for the purpose described.

No. 24,143.—ELNATHAN SAMPSON, of St. Johnsbury, Vt.—*Improvement in Platform Scales.*—Patent dated May 24, 1859.—The object of this invention is to adapt "platform scales" to a railroad in such manner that the scales will be rendered durable, and the device simple and efficient.

The inventor says: I *claim* attaching the rails A A of the platform directly upon the sleepers B, which are connected at each end by the links *m* to yokes H, fitted on levers E, the lower ends of said levers at each side of the platform being connected together, and to the shaft G of the scale beam by rods *g*, substantially as and for the purpose set forth.

I also claim the employment or use of the adjustable rods F attached to the levers E, to permit of the compensation of the same, for the purpose specified.

No. 24,144.—GEORGE ROUSHE, of Lima, Ohio.—*Improvement in Straw Cutters.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The relative arrangement for united operation in a straw cutter of the reciprocating cutting knife C, when arranged in a circularly moving frame, reciprocating feeding rake E, and rising and falling pivoted press board G<sup>1</sup>, said parts being connected together and operated in the manner set forth.

No. 24,145.—ADOLPH ROESLER, of Warsaw, Ill.—*Improvement in Buckles.*—Patent dated May 24, 1859.—This invention consists in having two metal plates, forming the tug, loosely attached with their lower end to a loop, each plate having a number of semi-circular notches, which, when said plates are closed, form a series of holes through the middle of them. Another plate provided with one or more knobs, with enlarged heads, is fastened to the



upper end of the trace, which is slipped through the above mentioned loop; the tug plates when open will admit the knobs of the trace plate, the tug plates are then closed, and fastened by means of a screw rod that fastens the lame hook to the tug plate, and keeps them close together.

*Claim.*—The tug plates A A, the trace plate D, having one or more knobs *o*, the fork shaped lame hooks *g*, and screw rod *h*, all arranged substantially as described, and for the purpose specified.

No. 24,146.—RICHARD RICKON, of Rochester, N. Y.—*Improvement in Car Couplings.*—Patent dated May 24, 1859.—This invention consists in constructing car couplings in such a manner that they shall uncouple when the engine or any car in the train is thrown off the track. They couple themselves and are uncoupled by changing a lever at the corner of the car with which the chains *f* are connected without going between the cars.

*Claim.*—Constructing self adjusting car couplings, with a series of grooves *g*, as specified, so as to admit of the coupling (with self-couplers) of cars of unequal heights, for the purpose set forth.

No. 24,147.—ROBERT RAMSAY, of Philadelphia, Pa.—*Improvement in Burners for Vapor Lamps.*—Patent dated May 24, 1859.—The fluid having been drawn up the tube B, by means of capillary action, is evaporated by heating the chamber C; the gas thus generated passes around this chamber, as indicated by arrows in the drawing, and through the tube D D D to the jet E.

*Claim.*—The combination of the wick tube B, the gas chamber C C, tube D, and jet E, arranged and operating substantially as shown.

No. 24,148.—RICHARD B. PULLAN, of Cincinnati, Ohio.—*Improvement in Stoves.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—A rotating vessel, provided with two grates and a central row of grate bars *f g*, arranged within stoves in such manner as to form two fire chambers, one above the other, and which may be used alternately, substantially in the manner and for the purpose set forth.

No. 24,149.—LUTHER E. PORTER, of Lake Mills, Wis.—*Improvement in Machines for Stripping and Cutting Sugar Cane for Grinding.*—Patent dated May 24, 1859.—To the clasp H H are attached the spring cutters *m m*, which are formed to fit the clasp at the point of attachment, and to converge towards and lap over each other at their cutting points; these cutting points *p* are made V shaped, and lap over each other in order that they may be adjusted to the size of the stock, and always expose a cutting edge to the leaves.

The inventor says: I *claim*, first, the divided clasp H H *i i k k*, arranged substantially as set forth.

Second. In combination with the above, I claim the spring cutters *m m*, all constructed, arranged, and operating substantially as herein described, for the purposes set forth.

No. 24,150.—JONAH PLATT and MYRON D. BROOKS, of Akron, Ohio.—*Improvement in Metallic Shields for Boots and Shoes.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

*Claim.*—The construction of boot and shoe shields A, having an opening S in front to prevent water or sand from being entrapped between the shield and the leather, substantially as described.

No. 24,151.—CHARLES PERLEY, of New York, N. Y.—*Improved Seats for Churches, Schools, &c.*—Patent dated May 24, 1859.—This invention consists in a folding seat, combined with a swinging bracket or support, so constructed that the operation of turning the seat up or down retracts or swings out the said bracket.

*Claim.*—The combination of the swinging bracket *g* with the turning seat *d*, connected and acting in the manner and for the purposes specified.

No. 24,152.—RICHARD NUTTALL and JOHN KIRKPATRICK, of Allegheny, Pa.—*Improved Chuck for Screw Cutting.*—Patent dated May 24, 1859.—The claim and engravings will explain the nature of this invention.

The inventors say: We *claim*, first, the ring D, having a portion of the inside cut away or recessed for the purpose of making room for the outer end of the cutting dies, said ring being furnished with cams *e* on the inside, and with a spring catch *h*, lever *g*, cam *k*, and locking stud *l*, on the outside, as described and for the purpose set forth.

Second. The cam chamber *w*, in the die box *b*, when used in connection with the cams *e*, and ring *d*, as described and for the purpose set forth.

Third. The regulating stud when made in three parts, as herein represented, and used in connection with the die box *b*, ring *d*, and spring catch *h*, as described and for the purpose set forth.



Fourth. The combination and arrangement of the die box *b*, cutting dies *f*, and cap *c*, with the ring *d*, the whole being combined, arranged, constructed, and operated as described, and for the purpose set forth.

Fifth. The eccentric lever *j*, on the face plate *d*, when used in combination with the lever *g*, cam *k*, locking stud *l*, and spring catch *h*, as described and for the purpose set forth.

No. 24,153.—RICHARD NUTTALL and JOHN KIRKPATRICK, of Allegheny, Pa.—*Improved Machine for Screw Cutting*.—Patent dated May 24, 1859.—This invention consists in the combination and arrangement of lever, rods, stops, and springs, with the holding head of a screw cutting machine, for the purpose of opening and closing the cutting dies.

The inventors say: First, we *claim* the combination and arrangement of the levers *m* and *n*, rods *k l*, stops *o p*, and springs 2, with the holding or sliding head *d*, and eccentric lever *r*, the whole being combined, arranged, and constructed in the manner described, and for the purpose set forth.

Second. The use of the sliding or holding head *d* and eccentric lever *r*, when used for the purpose of opening and closing cutting dies in chucks for screw cutting.

No. 24,154.—F. H. SMITH, of Plainville, Conn.—*Improvement in Spring Balances for Window Sashes*.—Patent dated May 24, 1859.—This improvement consists in arranging the device in the head jamb of the window directly over the side edge of the sash, which is lifted by cords passing over the edge of a plane spring pulley, or over a conical or spiral groove spring pulley revolving on a spindle *J*, secured from turning by the pawl and ratchet *I*.

*Claim*.—The manner of securing the pulleys *F*, in the head jamb *A*, of the window frame, as described, and the manner of winding up and adjusting the two pulleys through one orifice for the purpose described.

No. 24,155.—JASPER SNELL and JOHN R. DEIHM, of Pottsville, Pa.—*Improved Coal Screen*.—Patent dated May 24, 1859.—This invention consists in so constructing a coal screen of metallic plates or blades *C*, that the coal shall pass over and be discharged at the foot of the screen without passing through it, while all laminated matter shall pass through between the plates or blades of the screen and be deposited under it.

*Claim*.—The arrangement of the plates or blades *C*, in parallel planes with spaces between their edges so as to slope lengthwise of the screen, and crosswise from the centre of the screen, substantially in the manner and for the purpose specified.

No. 24,156.—EDWARD SPAULDING, of Westborough, Mass.—*Improvement in Friction Pulleys*.—Patent dated May 24, 1859.—This invention consists in the combination of a tabular rest with the driving pulley, one of the hangers and shaft of the driving pulley, when such pulleys are applied and made to operate together.

*Claim*.—The combination of the tabular rest *D*, with the driving pulley *A*, the hanger *E*, or its equivalent, and the shaft *C* of the driving pulley *B*, the pulleys being arranged and made to operate with respect to one another essentially as specified.

No. 24,157.—A. WASHINGTON STEWART, of Cambridge, Md.—*Improvement in Sails for Fore-and-aft Rigged Vessels*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I do not claim enlarging sails by the addition of bonnets or splices, as these have been before known, but I confine myself to the peculiar improvement of foresails: therefore, what I *claim* as my improvement in foresails is the cluesail *b*, of the form specified, united to the after leach of the foresail and managed by sheets *e e<sup>1</sup>* as herein set forth.

No. 24,158.—STEPHEN L. STOCKSTILL, of Midway, Ohio.—*Improvement in Seed Planters*.—Patent dated May 24, 1859.—This invention consists in an improved arrangement for adjusting the drill tooth.

*Claim*.—The described arrangement of the open notches *l l l*, pivot *m*, drag bar *K*, and pin *p*, the whole being constructed in the manner and for the purpose set forth.

No. 24,159.—JAMES A. STODDARD, of Milford, Mass.—*Improvement in Mechanism for Varying Speed*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Graduating or varying speed by means of pulleys, or their equivalents, operated in connection with surface wheels, or their equivalents, in such a manner as to receive and transmit the motion at variable distances from their centres, when constructed and operated substantially in the manner set forth and described.

No. 24,160.—HENRY STOWELL and LORENZO SPENCER, of Placerville, Cal.—*Improvement in Portable Wagon Jacks*.—Patent dated May 24, 1859.—The lever chest is placed with the piston inserted in a vertical position so as to bring the upper end of the piston directly under the wagon axle or other weight to be raised; the lever is inserted into the chest at the opening *c* so as to bring the knuckle *i* a little forward and under the end of the piston, the fulcrum



pin resting upon one of the pair of notched rests *h*. The outer end of the handle of the lever is then to be depressed, by which means the knuckle turning under the piston forces it up, and with it the weight to be raised, the clopper dog catching it into the rag teeth which holds down the handle of the lever and secures the weight in position.

*Claim.*—The peculiar arrangement, combination, and adaptation, for the purpose of raising the axles of wagons and other heavy bodies to which the foregoing invention may be adapted.

No. 24,161.—FRANCIS M. STRONG and THOMAS ROSS, of Brandon, Vt.—*Improvement in Weighing Scales.*—Patent dated May 24, 1859.—The weight placed upon the platform acts through the balls or spheres and intermediate frame C upon the knife edges of the shafts A A, tending to turn them and consequently depress the ends of the arms B B, and they actuate the beam where the weight is indicated by the “poise” and weights in the usual manner.

The inventors say: We *claim* the employment of an auxiliary frame, substantially such as described, in combination with and interposed between the platform and levers, substantially as described and for the purpose specified.

We also claim constructing such intermediate frame in two parts, connected by movable joints at the angles, substantially as and for the purpose specified.

We also claim the manner of inserting the bearing blocks that rest on the knife edges, substantially as and for the purpose specified.

And we also claim bringing the ends of the arms of the levers immediately one above the other, in combination with the mode of connecting the two with the beam by single and double connecting rods, substantially as described and for the purpose set forth.

No. 24,162.—FRANCIS M. STRONG and THOMAS ROSS, of Brandon, Vt.—*Improvement in Platform Scale.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* arranging the series of rocking levers which sustain the platform, with their shafts all parallel, and with the arms of all of them in the same line, except those constituting the inner section, which are inclined, substantially as described, in combination with the transmitting lever above, which connects with the scale beam to the short arms, of which they are all suspended at equal distances from the axis of vibration, substantially as and for the purpose described.

We also claim the method of connecting the several sections of the shaft of the transmitting lever by means of projections and links, substantially as described, for the purpose of enabling it to yield freely to the inequalities or variations in the supports, that it may vibrate freely and without binding, and thereby transmit the weight accurately to the scale beam as described.

We also claim suspending the bearing blocks by two links, in manner substantially as described, so that any swinging motion of the levers will not cause the blocks to vibrate on the knife edges, by which means we are enabled the better to preserve the fine knife edges so essential to accurate weighing.

We also claim constructing the bearing pieces with convex face and projecting tenon, substantially as described, whereby they are rendered self-adjusting, that the knife edges may bear without binding, as set forth.

And we also claim, in combination with the nose iron, adjustable by a screw in the end of the transmitting lever, the employment of a spring bearing against the end of the adjusting screws, substantially as described and for the purpose set forth.

No. 24,163.—ISAAC P. TICE, of Baltimore, Md.—*Improved Machine for Cutting Irregular Forms.*—Patent dated May 24, 1859.—The object of this invention is to obtain a simple machine for cutting waved mouldings, one that may be operated or manipulated with facility and work rapidly. The inventor says: This object is attained by having a fence or gauge, as well as a feed and pressure roller, attached to a vibrating bed, and using in connection therewith a rotary cutter head which is fitted in permanent or vibrating bearings.

*Claim.*—The employment or use of the vibrating bed B, with fence or gauge E and feed and pressure rollers F G attached, in connection with the rotary cutter head H fitted in stationary bearings on the platform or table, the whole being arranged to operate substantially as and for the purpose set forth.

No. 24,164.—ROBERT R. TAYLOR, of Reading, Pa.—*Improvement in Sugar Cane Harvesters.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The two sets of rotating cutters, one set being situated above and in advance of the other set, in combination with the reel *n* and shield L, the whole being arranged substantially as and for the purpose set forth.

No. 24,165.—JOHN THOMPSON, of Marblehead, Mass.—*Improved Machine for Cutting Soles.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—In connection with the entire sole cutter K L, applied to opposite sides of the shaft G, and operated as described, a gauge U and mechanism to operate it in such manner as first to move it up to the path of the cutter and carry it away therefrom sufficiently to enable the sole that may have been cut to be discharged from the supporting bed as may be described.

No. 24,166.—THOMAS H. TATLOW, jr., of Palmyra, Mo.—*Improved Rocking Chair.*—Patent dated May 24, 1859.—This invention consists in extending the arms of the chair down behind the seat to the rockers, so as to form the arc of a circle, the under edge of which is provided with saw teeth, which serve to retain the back in any desired inclination by means of a rod with two rectangular bends at each end.

*Claim.*—A rocking chair, having its arms extending down to the rockers and its back arranged and operated as specified.

No. 24,167.—JAMES L. TOWNSEND, of Newburyport, Mass.—*Improvement in Reefing Fore-and-aft Sails.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the application of the gaff C to the mast A, so as to be capable of being dropped downward on either side of the sail into, or about into, parallelism with the mast, as specified, in combination with the application of one or two head reefing lines L L<sup>1</sup> to the gaff and the sail, so as to enable the slack of the leach and the upper part of the sail to be taken up, and also the lower end of the gaff to be secured in order to effect the reefing of the sail, as specified.

I also claim, in combination with the said means of reefing the head and producing the flap of the sail, one or more buntlines, or lap-securing lines M M<sup>1</sup>, N N, applied to the leach and body of the sail.

No. 24,168.—CHAPMAN WARNER, of New York, N. Y.—*Improved Moulding Machine.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the method of packing the sand by dropping it from any given height, substantially in manner described.

Second. The mode of obtaining the same result by means of revolving bladed shafts, substantially as described.

Third. The double-hinged flask, constructed and secured by plates and pins, substantially as described.

Fourth. The table, constructed substantially as described, under and independent of the moulding board, capable only of a vertical motion communicated to it by the arrangement described, or any one equivalent thereto, and working in connection with the moulding board, through which latter the patterns, which are fastened on the table, protrude.

Fifth. The mode, substantially as described, of supporting the moulding board from beneath and through the table.

Sixth. I claim the combination of apparatus for packing the sand, with the mode of hinging and securing the flask by plates and pins, and with the vertically working table apparatus for withdrawing the patterns from the sand through the moulding board, supported as above described, and the whole operating substantially as described.

No. 24,169.—JOSEPH W. WATTLES, of Canton, Mass.—*Improvement in Ring Traveller Spinning Frames.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The improved arrangement of the ring flanches, by which the traveller is supported and on which it slides, the same consisting in arranging them without reference to the ring or its axis, substantially as shown in Fig. 3 of the illustrations.

No. 24,170.—JESSE WHITEHEAD, of Manchester, Va.—*Improvement in Harvesting Machines.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the supplemental discharging rake O, arranged with its actuating mechanism, substantially as shown and described, so as to operate automatically and conjointly with the platform rake K, for the purpose specified.

Second. Attaching or suspending the rake head J to the shaft H, by means of the pulley d, rod I, oblique bars ff, and pulley h, substantially as shown and described, whereby the head J is allowed to vibrate, and is properly guided or retained on the shaft H.

No. 24,171.—W. I. WILSON, of Franklin, Ind.—*Improvement in Cultivators.*—Patent dated May 24, 1859.—When the carriage is set in motion the ploughs a a drag and enter the ground, the depth to which they enter is regulated by means of the foot of the driver, which presses upon the arms d d. By pressing upon the forward ends of the levers the ploughs may be entirely removed from the ground.

*Claim.*—The arrangement of axles A and E, wheels B, levers C C, shanks D D, ploughs



*a a*, cross piece I, guides F F, and arms *d d*, for operating conjointly in a manner and for the purpose set forth.

No. 24,172.—**SOLON WOOD**, of White Pine, Penn.—*Improved Saw Filer*.—Patent dated May 24, 1859.—This invention consists in an arrangement of a series of revolving cutters, which correspond to the shape of the saw teeth on an arbor, having its bearings in a frame, that can be readily attached to the saw; said arbor being so arranged that it can be rotated by means of bevel wheels, and so that the cutters are kept up to the work by spiral springs, the strain of which can be regulated by means of set screws.

The inventor says: I *claim* the arrangement of the cutter C on an arbor B, the bearings of which are so arranged that the cutters are subjected to the action of adjustable spiral springs, or their equivalents, substantially in the manner and for the purpose specified.

I also claim the additional arm *e*, which is hinged to the bar *a*, in combination with the sliding piece *g*, for the purpose of allowing the cutters to follow the action of the springs *h* in two directions, substantially as described.

No. 24,173.—**ISAAC F. WOODWARD**, of Philadelphia, Pa.—*Improved Gong or Bell for Signals*.—Patent dated May 24, 1859.—The object of this invention is to insure the striking of the bell at all times, and, by simplicity of construction, to diminish its liability to accident.

*Claim*.—The escapement bar B, constructed substantially as described, in combination with the end J and pin K of the hammer, or striking arm C; the whole arranged substantially as described.

No. 24,174.—**HENRY AREGOOD**, of Mansfield township, N. J., and **STEPHEN USTICK**, of Philadelphia, Pa., assignors to **JOHN L. MACKNIGHT**, of Bordentown, N. J.—*Improvement in Machines for Making Clay Pipes*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the annular ring  $q^1$ , upon the core pin H, (which is also provided with a foot,) in combination with a flange upon the inside of the outer front end of the mould G, to retain the core pin in place while forming the bell end of the pipe, operated in the manner and for the purposes specified.

Second. The cam wheel L, in combination with the piston J, trough B, and its connections, mould G and core pin H, for making the bell end and straight part of the pipe at one operation.

Third. The combination of the rock shafts O and  $O^1$  with the two halves of the mould C, the former being operated by the cam wheel M and shaft N, for the purposes described.

Fourth. The slide D, rod R, and cam strip Q, arranged as described, for the purpose set forth.

Fifth. The arrangement and combination of the cam U, rock shaft T, and levers W and V, for operating the knife I, in the manner and for the purpose specified.

No. 24,175.—**HENRY I. BEHRENS**, of New York, N. Y., assignor to **CHARLES S. POMEROY**, of said New York.—*Improved Wrench*.—Patent dated May 24, 1859.—The action of this wrench is as follows: The object to be gripped, a rod for instance, being placed between the jaws, they are made to embrace it by means of the action of the thumb upon the screw; then, upon endeavoring to turn the rod by means of the wrench, the slightest contact is sufficient to induce a motion of the entire jaw D upon the hinge at B, towards the stationary jaw, increasing its bending power by the increase of strain, and holding the object firmly between the two jaws, releasing it instantly by a revolution in the opposite direction.

*Claim*.—Providing the socket C of the screw with a pivot or hinge, substantially in the manner and for the purpose specified.

No. 24,176.—**WILLIAM G. BUDLONG**, of Hartford, Conn., assignor to **HAMILTON W. CONKLIN** and **JAMES W. CORNING**, of said Hartford.—*Improved Carpet Sweeper*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—In combination with the gear wheel D and pinion *f*, at either end of the case, the lever C and screw *h*, by which the height of the brush is adjusted and the pinion is engaged with the driving gear, arranged substantially as and for the purpose specified.

No. 24,177.—**JOHN G. CLARK**, of Augusta, Ga., assignor to Himself and **SAMUEL W. HATCH**, of said Augusta.—*Improved Burglar's Alarm*.—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of one or more cap nipples C, on a suspended gravitating breech piece or plate, to receive a percussion cap or caps, when said breech piece forms part of a burglar's alarm, substantially as and for the purpose set forth.

Second. Providing said suspended breech piece or plate with a vertical stem, and arranging to slide over said stem a tubular weight, so that when the alarm detaches from the door and strikes the floor, the percussion force of the breech piece and weight will explode the cap or caps and produce the desired alarm, substantially as set forth.



Third. Arranging the spring on the stem of the breech piece between the breech piece and weight, so that the same shall be held far enough apart to allow the necessary movement of the same toward each other to explode the cap or caps when the alarm strikes the floor, substantially as set forth.

Fourth. Providing serrations on the under side of the suspending bracket, so that said bracket shall move with the door until it clears the framing, substantially as and for the purposes set forth.

No. 24,178.—H. W. HORTON, of Wheaton, Ill., assignor to OLIVER H. HORTON, of Chicago, Ill., and ROSWELL E. ADAMS, of said Wheaton.—*Improved Apparatus for Cooking by Steam.*—Patent dated May 24, 1859.—This invention consists in arranging over a steam boiler a steam chamber, communicating with the boiler by means of a slide, operated from the outside, and part of which forms a separate compartment, smaller than the chamber, that side excepted where it is provided with a door; the whole being so arranged that the chamber serves to cook articles in the steam, or in dry air, and the oven for baking.

*Claim.*—The described arrangement of a steam boiler C, in combination with a steam chamber E, which communicates with the boiler by means of a slide e, or its equivalent, and one end of which contains the oven G; the whole being arranged substantially as and for the purpose specified.

No. 24,179.—N. N. McLEOD, of St. Louis, Mo., assignor to CARROLL E. GRAY, of said St. Louis.—*Improvement in Hose Couplings.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Making the lip C around the conical end D, so as to leave a cavity to receive the end of the pipe B and the screw nut A, when the said pipe C is a part and portion of the same piece that the cone D is, as shown and described.

No. 24,180.—JOHN W. SMITH, of Washington, D. C., assignor to Himself and WALTER W. BERRY, of Baltimore, Md.—*Improved Waterproof Sole.*—Patent dated May 24, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—As a new article of manufacture, the waterproof inside sole, when constructed of the compound described, placed between two sheets of paper, in the manner set forth.

No. 24,181.—JOHN W. WHEELER, of Cleveland, Ohio, assignor to ALDEN B. STOCKWELL, of said Cleveland.—*Improved Splint Broom.*—Patent dated May 24, 1859.—This invention consists in making brooms of wrought wood splints, by first encircling the ends of a sufficient number in a metallic ring or cup, and then compressing them by introducing the handle in the manner described. The brush is then flattened and sewed with twine, to keep it in a proper form.

*Claim.*—The formation of brooms, composed of separate wrought splints, when constructed in the manner described and set forth, as a new article of manufacture.

No. 24,182.—MARTIN WESSON, of Springfield, Mass., assignor to Himself and D. B. WESSON, of said Springfield.—*Improved Machine for Channelling and Edging Soles of Boots and Shoes.*—Patent dated May 24, 1859.—The object of this invention is to produce a cheap and convenient machine for cutting the grooves in the soles of boots and shoes, for the purpose of sewing the uppers to the soles.

*Claim.*—First, the combination of the feed rolls F F, adjustable knives  $b b^1$ , and the guide R, when constructed and operating substantially in the manner and for the purpose set forth.

Second. The combination of the lever L, sliding pieces  $h h^1$ , and knives  $b b^1$ , when arranged and operating as described, and forming a knife holding arrangement for the purpose specified.

No. 24,183.—STEPHEN G. TYLER, of Quincy, Ill., assignor to Himself and G. I. SAAGE and I. W. BARNUM, of said Quincy.—*Improvement in Circular Clamps for Sewing Machines.*—Patent, dated May 24, 1859.—This invention consists in arranging and constructing a central disk e, and combining the same with a convex clamping disk d, and a flat sustaining disk c, for the purpose of dividing the crown and quarters of caps, or equivalent parts of other circular sewing, and in presenting the edge of the fabric to the needle, to be sewed by a sewing machine, without changing any of the parts of said machine.

*Claim.*—The combination of a central disk e, with the convex clamping disk d, and the flat sustaining disk f, substantially in the manner described, for the purpose of dividing the crown and quarters of circular sewing, and presenting the edge of the fabric to the needle in the manner set forth.

No. 24,184.—GEORGE M. ALSOP, of Philadelphia, Penn.—*Improvement in Air Springs for Railroad Cars.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, the method or arrangement of inclosing an air tight vessel filled with air, in a box or chamber, with a flexible water proof cover, or diaphragm, and surrounding the air vessel with water, or some other suitable fluid, substantially as described and for the purpose set forth.

Second. I claim the arrangement of the convex steel plates  $B^2$ , which are divided into radiating leaves, or segments, connected together at the centre, whose outer edges or periphery rest upon and slide on the metal ring, or plate  $b$ , and in the recess in the bottom of the top  $A^1$ , the whole being arranged as described for the purpose of forming a flexible metallic support or covering to the diaphragm, to prevent its being strained or ruptured, substantially as set forth.

Third. I claim the combination and arrangement of the piston  $D$ , its elastic cushion  $E$ , the flexible steel plate or plates  $B^2$ , metal plate or rings  $b b$ , and the diaphragm  $B B^1$ , the whole being arranged and combined substantially as described and for the purpose set forth.

No. 24,185.—C. F. ANDERSON, of Charlestown, Mass.—*Improvement in Seed Planters*.—Patent dated May 31, 1859.—The object of this invention is to place the seed distributing device under the complete control of the attendant, so that the dropping of the seed may be checked, or continued at greater or less intervals to insure the even dropping of the same in check rows.

*Claim*.—The ratchet shaped projections  $d e$  in the hub  $H$  of wheel  $B$ , and on the disk  $K$  of the tube  $J$ , in connection with the tube  $L$ , provided with the spiral and straight grooves  $f g$ , in which the projection  $h$  of the tube  $j$  is fitted; the tube  $L$  having the side lever  $M$  attached, and also the catch  $i$ , the whole being combined and arranged to operate as and for the purpose set forth.

No. 24,186.—ENSIGN BAKER, of Fredonia, N. Y.—*Improvement in Straw Cutters*.—Patent dated May 31, 1859.—This invention consists in the employment of a cutter wheel and leger knife in connection with a knife lock, and also in the use of a feeding device arranged in a novel way to operate automatically and conjointly with the cutting device, the whole being so arranged that an efficient implement is obtained for cutting straw, stalks, roots, and other substances used as fodder for stock.

The inventor says: I *claim*, first, the employment or use of the leger knife  $J$ , provided with the hook  $a$ , actuated by the cam  $F$ , and used in connection with the knives  $E E$ , attached to the wheel  $D$ , and provided with the hooks  $G G$ , to operate substantially as and for the purpose set forth.

Second. The arrangement of the crank  $H$ , spring  $L$ , with rack  $d$  attached, and the ratchet  $c$  on the shaft of the feed roller  $K$ , substantially as shown, to feed the stuff intermittently to the knives, as described.

No. 24,187.—JOHN A. BAWSEL, of Powhattan C. H., Va.—*Improvement in Tobacco Presses*.—Patent dated May 31, 1859.—This invention consists in an improved machine for pressing and straightening small bundles of tobacco preparatory to their being pressed or struck in mass for packing.

The inventor says: I *claim*, first, the use of the follower  $B^1$ , fitting into the groove of the opposite roller, substantially as set forth.

Second. I claim the springs  $S$ , as constructed and operated for guiding the tobacco and straightening the leaves as they pass between the rollers, substantially as described.

Third. I claim the use of the treadle  $H$ , in combination with the springs  $S$ , and with the rollers  $B$  and  $C$ , operating substantially as described, for separating the springs  $S$ , and also for separating the rollers, as set forth.

Fourth. I claim the oil cup  $O$ , and roller  $V$ , in connection with groove  $r$ , for oiling the groove and the tobacco, substantially as described.

No. 24,188.—ALBERT BETTELEY, of Boston, Mass.—*Improvement in Elevators for Hoisting Goods in Warehouses, &c.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—So arranging and combining a rider  $t$ , with a brake, by the means described, or their equivalents, as to operate on a drive pulley to check or prevent its rotation whenever the driving belt breaks or is removed.

No. 24,189.—JOSEPH D. BILLINGS, of Rutland, Vt.—*Improvement in Freight Cars*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Placing a metal shoe, single or continuous, between the studs or sheathing boards and sills of railroad cars, for excluding the water, and thereby preventing the rapid decay of the same, substantially as set forth.

No. 24,190.—JOHN W. BREWSTER, of Stamford, N. Y.—*Improved Wrench*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, a wrench, having a six sided handle  $A$ , sta-



tionary jaw B, and sliding jaw C, with apertures *c*, of the precise form shown, and the article being otherwise made as set forth.

No. 24,191.—JAY H. BROWN, of Grand Lodge, Mich.—*Improved Machine for Punching Metal*.—Patent dated May 31, 1859.—The mode of operating this machine is by moving round the lever L from either stop, to the position first described, when the bars I I will assume a vertical position and drive down the punch. The frusto conical rollers, by rotating when they take the power, prevent injurious friction and obviate the difficulty of keeping flat rubbing surfaces in such a position thoroughly lubricated when subjected to heavy pressure.

*Claim*.—The application and use of the bars I I, in combination with lever L, punching bar E, frusto conical rollers *o o o o*, &c., rod G, and spiral (or equivalent) spring S, for the purposes specified, the whole being constructed and arranged substantially in the manner as described and set forth.

No. 24,192.—FREDERICK BUCHER, of Columbia, Pa.—*Improvement in Stoves*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—In combination with the fire cylinder, the double radiators *h*, each inclosing an interior chamber and register, so that the draft may be direct, or checked at pleasure, in its passage through the stove, by which means I obtain much radiating surface and economize much fuel, the whole being arranged substantially as represented.

No. 24,193.—JOHN P. CARR, of Mattapoisett, Mass.—*Improved Pump Gearing*.—Patent dated May 31, 1859.—By turning the cranks F<sup>1</sup> F<sup>2</sup>, the fly wheels are caused to revolve, and consequently the shafts K<sup>1</sup> K<sup>2</sup> are also revolved. By means of the cranks L<sup>1</sup> L<sup>2</sup> on the shafts K<sup>1</sup> K<sup>2</sup>, the connecting rods I<sup>1</sup> I<sup>2</sup> cause the shaft K<sup>4</sup> and consequently the beam G<sup>1</sup> to assume a rocking motion. The two fly wheels E<sup>1</sup> E<sup>2</sup> are caused to rotate with equal velocity by means of the connecting rod I<sup>4</sup> and the cranks L<sup>3</sup> L<sup>4</sup>.

*Claim*.—The device, as set forth and described, for operating pumps on board of ships and in other places where said invention may be useful.

No. 24,194.—JOHN CLACKSON, of Milford, Pa.—*Improved Joiner's Clamp*.—Patent dated May 31, 1859.—The object of this invention is to obtain a clamp that will be perfectly stiff and firm, and one that may be more readily manipulated than those of the usual construction.

*Claim*.—The clamp formed of the bar A with the jaws D F, constructed, arranged, and fitted on it, substantially as described, to form a new and improved article of manufacture.

No. 24,195.—E. P. CLARK, of Holyoke, Mass.—*Improvement in Composition for Pencils*.—Patent dated May 31, 1859.—The component parts of this composition are nitrate of silver, nitric acid, glue, lampblack, and sugar.

*Claim*.—The composition for pencils for indelible writing, made by combining nitrate of silver with the several other ingredients herein specified, substantially in the manner and about the proportions set forth.

No. 24,196.—WILLIAM CLEMSON, of Woburn, Mass.—*Improved Machine for Grinding Saws*.—Patent dated May 31, 1859.—The inventor says: My invention is an improvement upon the patent granted to me May 25, 1858, and consists in arranging the top roll upon the frame so as to produce the requisite degree of pressure upon the saw in grinding by the weight of said roll, and in adjusting the roll to the surface of the saw to be ground.

*Claim*.—The elliptical bearings *a a*, lever L, and double gearing F F and G G, in combination with the adjustable bearing plates D D, when all are arranged substantially as and for the purposes specified.

No. 24,197.—JACOB CLOSS, of Decatur, Ind.—*Improved Churn*.—Patent dated May 31, 1859.—The nature of this invention consists in constructing a tub churn having dashers on a vertical shaft, to operate upon the principle of a propeller screw.

*Claim*.—The use of the screw dashers D E, constructed and operated as set forth, in connection with the wings F F, as specified.

No. 24,198.—T. B. COURSEY, of Fredrica, Delaware.—*Improvement in Corn Crushers*.—Patent dated May 31, 1859.—This invention consists in attaching to the shaft of an ordinary corn or cob crusher, one or more serrated flanches, arranged so that the flanches or saws will perform the double function of crushers and feeders, first cutting or crushing the ears of corn, and then crowding or pressing them down between the conical crushers and shell to be still further reduced or crushed.

*Claim*.—The employment or use of the serrated flanches F F', placed obliquely and eccentrically on the shaft B, in combination with the crushing heads C D and shell A, substantially as and for the purpose set forth.



No. 24,199.—E. HALL COVEL, of New York, N. Y.—*Improvement in Gas Regulators.*—Patent dated May 31, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combining of the rotary pump or air forcer with the air receiver and its fluid valve arrangements, in the manner set forth, whereby the one controls the action of the other, and through their joint action the charging apparatus is controlled, substantially as described.

Second. I claim connecting the commingling chamber of the charging apparatus with the air receiver, for the purpose set forth.

No. 24,200.—E. HALL COVEL, of New York, N. Y.—*Improvement in Hydro-carbon Vapor Apparatus.*—Patent dated May 31, 1859.—This invention consists in constructing the apparatus of several pieces joined together by such means as allow of the various parts being detached, and of its capacity being diminished or increased, and when in use of being supplied and examined interiorly, without interrupting or disturbing its functions.

The inventor says: I *claim*, first, constructing the apparatus, for the purposes set forth, of detachable parts or chambers, substantially as described.

Second. I claim the arrangement of the feed pipes or tubes, and outlet pipes, whereby I am enabled to pass in the material to any one of the chambers, or to let out material, and to examine the interior while the apparatus is in operation and the process of charging going on, as set forth.

No. 24,201.—G. F. DECKER, of Scranton, Pa.—*Improvement in Railroad Car Trucks.*—Patent dated May 31, 1859.—The object of this invention is to allow the axles of the wheels to have a movement independent of each other, so that in passing over curves they may assume radial positions, or form radii of the curve, thereby allowing the trucks to pass over the curvatures with less friction than usual, and without subjecting the axles to the great strain consequent upon the ordinary mode of construction.

*Claim.*—The axles B of a truck, in separate or independent frames *b b*, attached to the bed piece *a*, as shown, and connected by a spring or flexible plate *e*, and used in connection with the spring C, arranged substantially as and for the purpose set forth.

No. 24,202.—EDWARD J. DURANT, of Lebanon, N. H.—*Improvement in Hand Levers.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Combining the forked shaft *a* with the sliding head-piece *b*, the intermediate lever *c*, and the hand lever *d*, in such a manner as to form a compound leverage car-mover, that can be operated substantially as set forth.

No. 24,203.—CELESTIN EASTBURN, of Spencer county, Ky.—*Improvement in Cultivators.*—Patent dated May 31, 1859.—The inventor says: I first use the machine as a seed coverer. In this operation, the wheel F is indispensably necessary, the rake H is taken off, it being of no use in seed covering. When I have used my machine as a seed coverer, I remove the wheel F by drawing out the knees G, and attach the rake H, for the purpose of raking the clods or trash of any kind that may lodge about the young plants. The rake is supported eight inches above the ground by the spring, and works on a space of eighteen inches horizontally, making it convenient to strike anywhere necessary. The rake is taken off by removing the block J.

*Claim.*—The arrangement of the ploughs D, wheel F, block J, spring I<sup>1</sup>, and rake H, as set forth and described, for the purpose specified.

No. 24,204.—FREDERICK EBELING, of New York, N. Y.—*Improvement in Machinery for Crushing and Mixing Sugar.*—Patent dated May 31, 1859.—This invention consists in a peculiar construction and arrangement of devices by which the sugar is forced by a uniform motion upon and against revolving knives, in such a manner that the crushing of the sugar is much more rapid and uniform; at the same time the loaves of sugar only require to be placed in a hopper and are automatically taken therefrom, ground, and mixed in the desired manner.

The inventor says: I *claim*, first, the reciprocating plunger *p*, acting on the sugar loaf, in combination with the revolving cutter-head *e*, in the manner and for the purposes substantially as specified.

Second. I claim the support *r* and latch *s*, actuated as set forth, and acting to drop one loaf of sugar at a time from the hopper, so as to be pressed forward by the plunger *p*, as set forth.

Third. I claim the sliding bar *o*<sup>1</sup>, fitted with the incline 15, in combination with the pins 10 on the wheel *m*, and the weight *o*<sup>2</sup>, or its equivalent, for drawing back the plungers *p p*, in the manner and for the purposes specified.

Fourth. I claim the revolving mixers *y y*<sup>1</sup>, constructed with slats *z z* between the heads, in the manner and for the purposes set forth.



No. 24,205.—JEREMIAH ESSEX, of North Bennington, Vt.—*Improvement in Machines for Drying Fibrous Substances*.—Patent dated May 31, 1859.—The inventor says: I make use of an endless apron of cloth, slats, or other articles, running up over the rollers or cylinders, and down beneath drums or pulleys that act only on the edge of the apron, while the fibrous material that is to be dried is laid on or attached to this apron, and is moved along on the same and carried up over the top rollers and down in the bend formed in the apron at the point where the same passes the pulleys that act on the edges of said apron.

*Claim*.—The manner herein specified of guiding an ascending and descending endless apron by the pulleys *d d*, or their equivalents, acting on the edges of said endless apron, in the manner and for the purposes specified.

No. 24,206.—MERRILL A. FURBUSH and GEORGE CROMPTON, of Worcester, Mass.—*Improvement in Looms for Weaving Plaids, &c.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the employment of two sets of ratchet wheels and appendages, each set consisting of reversed ratchets, substantially as described, in combination with two sets of cams and two series of shuttle boxes, substantially as and for the purpose specified.

And we also claim two sets of reversable ratchets and appendages, the two sets of cams, and two series of shuttle boxes, substantially as described, in combination with one pattern chain or cylinder, in manner substantially as and for the purpose specified.

No. 24,207.—GEORGE GEER, of Uniontown, Ill.—*Improved Washing Machine*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A washing machine provided with a lever *I*, cylinder of rollers *F*, clutch *j*, endless belt *B*, adjustable levers *C C*, made as set forth, and otherwise constructed as shown, so that by shifting the lever *I* the motion of the belt will cease and hold the clothes at rest beneath the rotating cylinder of rollers *F*, so that the belt *B* may be loosened or tightened when desired by shifting the levers *C C*, as specified.

No. 24,208.—JACOB GORE, of Milford, N. H.—*Improvement in Tanning Leather*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Giving to the liquor or tanning fluid in the vat a rapid motion, commencing across the bottom of the vat and under the suspended hides, for the purpose set forth.

No. 24,209.—JOHN HASSELL, Jr., of Newark, N. J.—*Improvement in Constructions of Pins for Securing Artificial Teeth*.—Patent dated May 31, 1859.—The inventor says: My invention consists in providing an artificial tooth, previous to its being baked, with a split pin, double or single, made of half round or flattened wire introduced into the tooth, by means of which I am enabled to fold the split ends back upon the separate pieces of platina or other metal placed alternately between the teeth on the inside surface in the one case, and to fold back the end of the split pin under the preceding pin, which form a strong basket work or skeleton lining, while in the first instance I form a strong continuous arch.

The inventor says: I *claim* the splint pin, used double or single, half round or flat, for the purposes set forth and substantially as described.

No. 24,210.—HENRY HAVELL, of Newark, N. J.—*Improved Meat Cutter*—Patent dated May 31, 1859.—This invention consists in a peculiar construction of rotary knives, adapted to facilitate the feeding of the machine, and in an arrangement to sustain the ends of the stationary knives and increase the efficiency of their operation.

The inventor says: I *claim*, first, the hook-pointed rotary knives *E e*, arranged in the described relation to the hopper *F*, for the purpose explained.

Second. The combined arrangement of the stationary curved knives *C C*<sup>1</sup>, latitudinal grooves *D*, and rotary knives *E*, substantially as and for the purposes set forth.

No. 24,211.—ROBERT W. HAZLETT and JOHN H. HOBBS, of Wheeling, Va.—*Improvement in Retorts for Distilling Coal Oil*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, constructing the horizontal retort, with a pan or flat shaped base *A*, and inclined upper sides or top *B B*, and with open conduits or gutters *b b* running from end to end of the retort, and arranged on the inner sides thereof, and set inclining and emptying into the neck of the retort, the whole for united operation, substantially as and for the purpose set forth.

Second. The drawer or charger *D*, when open at the top, and in no way or at any time attached as a fixture to the retort, and yet serving during the distilling process as a part of the generating chamber, and being kept elevated above the bottom of the generating chamber and allowed to slide in and out without the necessity of removing or disconnecting any portions of the retort or generator, substantially as and for the purpose set forth.



No. 24,212.—J. E. HOLMES, of Newark, Ohio.—*Improvement in Retorts for Distilling Oil from Coal.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, in a retort for distilling oil from coal, of a central perforated tube P, suspended from the mouth piece A<sup>1</sup>, an open space being also left below the bottom of the tube P for the removal of the coke residuum through the mouth C, substantially as shown and described.

No. 24,213.—HENRY HOOTON, of Boston, Mass., and JOSEPH G. BICKNEL, of Cambridge, Mass.—*Improvement in Wheel Jacks for Carriages.*—Patent dated May 31, 1859.—This invention consists in so arranging a notched shaft with ratchets and pawls that heavy bodies may be readily, easily, and steadily raised and lowered.

The inventors say: We *claim*, first, the combination of the hollow box A with the lever D, the front jointed pawl C, the back pawl C, and the notched shaft B, operating substantially as described.

Second. The combination of the button E, the spring F, the catch G, the button H, and the jointed connecting rod K, operating substantially as described.

No. 24,214.—MARK HOWLAND, of Waterbury, Conn.—*Improved Door Latch.*—Patent dated May 31, 1859.—The inventor, in speaking of the arrangement of the different parts of his invention, says: By this arrangement of the parts relatively to one another, it is believed that the well known and very desirable character of door latch which can be fitted to the door by merely making an auger hole, is simplified and rendered more compact, and consequently can be introduced into a small auger hole, and can also be conveniently adjusted to compensate for swelling, or allow for shrinkage of the door, without increasing or lessening the tension of the spring which controls the action of the latch.

*Claim.*—The specified relative arrangement for united operation of the latch C with female screw threaded socket s, latch guide plate u, with square opening v, latch shank or rod B, with male screw thread t, on its front end, stationary slotted guide case A b a a, shoulder w on the latch shank or rod B, spiral spring D, sliding connecting link or plate E, with cross heads d d and double acting knob tumbler F c c, all for the purpose set forth.

No. 24,215.—ROBERT W. HUSTON, of Calais, Me.—*Improved Mode of Securing Corks in Bottles.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The described fastener, which consists of the metallic pieces 3 3, which are hinged on a wire secured below the enlargement on the bottle neck, and which are provided with teeth 5 5 5, with the strips 6 6, and with the wires 2 and clasps 11; the several parts being arranged substantially in the manner and for the purpose specified.

No. 24,216.—A. B. IRVING, of Terre Haute, Ind.—*Improvement in Sewing Machines.*—Patent dated May 31, 1859.—This invention consists in the arrangement relatively to one another of the following parts, whereby a useful machine is produced, to wit: The upper and lower feeding arms, upper and lower rock shafts, actuating cam, combining and regulating projection, and slotted adjustable spring holding down bar.

*Claim.*—The arrangement, relatively to one another, of the following parts, to wit: the upper and lower feeding arms D D<sup>1</sup>, upper and lower rock shafts E E<sup>1</sup>, actuating cam C, combining and regulating projection J, and slotted adjustable spring holding down bar I, for the purposes set forth.

No. 24,217.—WILLIAM G. W. JAEGER, of Baltimore, Md.—*Improvement in Retorts for Distilling Oil from Coal.*—Patent dated May 31, 1859.—The inventor says: I do not confine myself to the precise means of separating the heavy and light oils, although I prefer those set forth. My improvement consists in separating them, or removing the heavy oils from the action of the fire, so as to prevent their decomposition. The opening g is for the purpose of stirring the coal when required.

In stating his claim, the inventor says: I *claim*, first, the side channels d d, and the trap openings or discharge pipes e e, for the heavy oils, as set forth.

Second. In combination with said side channels, I claim the double inclination or arched form of the bottom of the retort.

Third. In combination with the coal oil retort, constructed substantially as above set forth, I claim the opening g, for the purposes set forth.

No. 24,218.—MATHAUS KAEFER, of New York, N. Y.—*Improvement in Machinery for Transmitting Motion.*—Patent dated May 31, 1859.—This invention consists in arranging the fly wheel in a sliding carriage, in such a manner that the weight of the fly wheel and of the frame itself, assists in carrying the crank over the dead points, and by the action of this weight the crank is always kept in a position most favorable for the motive power to act on the same.



*Claim.*—The arrangement of the carriage C and fly wheel E, in such relation to the crank F that the weight of the carriage and of the fly wheel acts on the crank, substantially in the manner specified.

No. 24,219.—GEORGE LINDLEY, of Chicago, Ill.—*Improvement in Field Rollers.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the vibrating scrapers, constructed and arranged so that the driver can operate them to clear the rollers of the earth adhering to them, when the machine is drawn in either direction, substantially as described.

I also claim constructing and arranging the platform so that the ends which support it may vibrate freely under it, substantially as described, when the rollers pass over uneven ground.

No. 24,220.—TINDAL A. MADISON, of Terre Haute, Ind.—*Improvement in the Mode of Connecting and Disconnecting Machinery by means of a Belt.*—Patent dated May 31, 1859.—This invention consists in applying a shifting bar of peculiar construction to a belt used for connecting machinery, in such a way that the belt may be shifted by a motion of the bar, either from a driving pulley to a series of dead rollers, or their equivalent, suitably disposed alongside, or *vice versa*.

The inventor says: I *claim*, first, the combination of the shifting bar K with the belt D D D, the driving pulley A, and the series of dead rollers H H H, or their equivalent, for the purposes described.

Second. The combination of the shifting bar K and box M M with the gate or pawl N, or their equivalents, for the purposes described.

Third. The guide plate S with its slot U U, in combination with the friction roller *h*, or their equivalents, for the purpose of giving both forward and lateral motion to the belt D D D, when moved from a state of rest as described.

Fourth. The series of dead rollers H H H, for the purposes and arranged in the manner set forth.

Fifth. The lever J, in combination with the slots *d* and *e*, the stud *f*, and connecting rod R, for the purpose of operating the gate or pawl N, in the manner described.

No. 24,221.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improved Water Tight Sink.*—Patent dated May 31, 1859.—The inventor says: My invention consists of a new method of making water tight sinks, which are not liable to decay. To accomplish this result I have found desirable compositions of gutta percha and India rubber, and other substances, and a method of forming them into sinks.

*Claim.*—The production, as a new article of manufacture, of water tight sinks, formed from vulcanized India rubber or gutta percha, substantially in the manner and for the purposes set forth.

No. 24,222.—CHARLES MCBURNEY, of Roxbury, Mass.—*Improved Suction Hose.*—Patent dated May 31, 1859.—This invention consists in so forming the rings which retain the hose distended that they shall keep each other in place, each ring having its bore enlarged at one end for the reception of the small end of the adjacent ring.

*Claim.*—The rings B, operating in the manner substantially as set forth.

No. 24,223.—W. H. McCLINTOCK, of Frankfort, Ohio.—*Improved Churn.*—Patent dated May 31, 1859.—This invention consists in the combination of a milk or cream supply chamber, butter separating or collecting chamber, and a suction and force pump, whereby by simply oscillating a piston the cream is kept constantly circulating or moving, and in its movement brought in contact with friction or chafing surfaces, in such a manner as to have its globules broken and the fatty matter contained in the same converted and collected in a separate chamber into a mass of butter.

*Claim.*—The employment of the within specified peculiarly constructed circularly vibrating suction and force pump, in combination with a churn, constructed with a perforated partition, substantially as and for the purpose set forth.

No. 24,224.—ROBERT MCKENNA, of Rossville, Tenn.—*Improved Device for Operating the Index of Time Registers.*—Patent dated May 31, 1859.—This invention consists in making an ordinary spring clock, in combination with it, register and determine the time of events.

*Claim.*—The moving of the pencil in the manner described.

No. 24,225.—THOMAS E. McNEILL, of Philadelphia, Pa.—*Improvement in Seats and Couches for Railway Cars.*—Patent dated May 31, 1859.—This invention relates to improvements in sleeping cars, in which the space used as a central passage during the day is occupied for couches at night, and in which the bases and backs of seats are converted into couches by placing them end to end.

The inventor says: I *claim*, first, the end frame D of the seat, with its slotted stop, and the slotted plate secured to the side of the car, in combination with the back F, and its pins



or bolts, when the several parts are adapted to and arranged in respect to each other, substantially as set forth.

Second. The arms *d*, so hinged to the inside of the end frame as to be folded down under the seat during the day and elevated so as to form supports for the couches during the night, in the manner specified.

Third. The vertical frames *N*, hinged to the side of the car, and furnished with ledges to support two couches.

Fourth. The board *R*, its rod *p*, and the hangers *n*, when arranged as and for the purpose set forth.

No. 24,226.—JOHN McPHERSON, of Pennington, N. J.—*Improvement in Harvesting Machines*. Patent dated May 31, 1859.—The apron *K* is constructed by attaching to an endless apron *r*, passing around the conical rollers *m n*, by any suitable means, the slats *s*, which are made tapering, in order that they may conform to the curved shape of the platform. The slats open in passing around the roller *m* and seize the grain delivered by the apron *i*, and the spaces between the slats likewise assist in the delivery of the grain.

The inventor says: I *claim*, first, the curved slatted flexible apron *K*, when constructed in the manner and for the purposes set forth.

Second. The combination of the endless apron *i*, with the curved slatted flexible apron *k*, the whole being constructed and arranged in the manner and for the purposes set forth.

No. 24,227.—REUBEN M. MELTON, of Criglersville, Va.—*Improvement in Cultivators*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the adjustable links with the adjustable slide, arranged substantially as described, for the purpose of adjusting the distance between the ploughs.

Second. In combination with the curved plough beam, I claim the coulter constructed and arranged substantially as described, whereby the draft of the side ploughs is regulated, by sliding the coulter on the beam, and firm support given to the coulter in passing through compact soil.

No. 24,228.—JAMES R. MOCK, of Elizabethtown, Ky.—*Improvement in Locks for Repeating Fire Arms*.—Patent dated May 31, 1859.—This invention consists of a coiled spring, in combination with a sliding lock, provided with a catch and a catch spring, and a grooved barrel and grooved breech pin.

*Claim*.—The use of the coiled spring *F*, in combination with the sliding lock, the catch No. 6, catch spring No. 7, and grooved barrel and grooved breech pin, substantially as described.

No. 24,229.—RICHARD MONTGOMERY, of New York, N. Y.—*Improvement in the Manufacture of Corrugated Beams*.—Patent dated May 31, 1859.—This invention consists in an improved device for manufacturing corrugated or laminated iron beams designed to be used in buildings, bridges, ships, &c.

The inventor says: I *claim* the roller *A*, with its peculiarly formed projections and recesses, in combination with the roller *B*, with its peculiarly formed projections and recesses, arranged and operating in relation to each other, substantially as and for the purposes set forth.

I also claim the rollers *A* and *B*, in combination with the former *C*; said parts being constructed, arranged, and operating in relation to each other, substantially as and for the purposes described.

No. 24,230.—MORDECAI R. MOORE, of Philadelphia, Pa.—*Improvement in Apparatus for Seasoning Lumber*.—Patent dated May 31, 1859.—This invention consists in providing, for the purpose of drying timber and lumber, a capacious steaming and drying chamber, fitted with internal track rails, steam pipes, and stop cocks, in such a manner that a truck or trucks, piled with lumber to be seasoned, may be readily run into said chamber, inclosed therein steam-tight, and the lumber subjected to the direct action of steam for a sufficient length of time to extract the sap, &c., and immediately after to the drying action of heated air.

*Claim*.—The combined arrangement of the track rails *C C*<sup>1</sup>, or their equivalents, with a steaming and drying chamber or vessel *A*, fitted with steam pipes and stop cocks, or valves, substantially as described, so as to operate therewith, substantially in the manner and for the purposes specified.

No. 24,231.—D. J. OWEN, of Springville Lynn, Pa.—*Improved Broom*.—Patent dated May 31, 1859.—This invention consists in confining the but ends of the wisp of a flat broom in a leather bag of such form, that two of its sides, looking from the flat side of the broom, converge toward the handle; while the other two sides of the same, looking edgewise at the broom, diverge toward the handle, so that a protuberance is formed, which enables a steel spring to confine the wisp in the bag.



*Claim.*—As an improved article of manufacture, a broom provided with a leather bag A, spring C, and otherwise made as shown and described.

No. 24,232.—GEORGE W. PARKER, of Fitzwilliam, N. H.—*Improvement in Cross-Cut Sawing Machines.*—Patent dated May 31, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The cross head, and the several parts attached to it, whether arranged as shown in figures 1 and 2 or as in figure 3, together with the piece *x* or its equivalent, to work the arms V and N, to raise the saw and the handle *h*, to hold the saw when raised.

No. 24,233.—JAMES ROY PARKER, of Sing Sing, N. Y.—*Improved Churn.*—Patent dated May 31, 1859.—This invention consists in a new mode or apparatus for making butter, founded on the idea that butter exists ready made in the sweet milk, but is contained in little vesicles floating in the milk, and that the ordinary mode of churning butter, by powerful agitation of the milk or cream, is a waste of power.

*Claim.*—The combination of the rotating faces of the disk C with the stationary faces B B, in the manner and for the purposes set forth.

No. 24,234.—JOHN F. PEABODY, of Salem, Mass.—*Improvement in Chairs for Railways.*—Patent dated May 31, 1859.—This invention consists in an arrangement and application of certain bearings to the base plate of a railway chair, provided with an elastic rubber bearing, or its equivalent, and metallic cap piece.

*Claim.*—The arrangement and application of the rail bearers *b b*, with respect to the elastic bearing E, its cap plate F, the base plate *a*, and under the rails A B of the railway chair, substantially as described, and particularly with the elastic bearing and cap plate, arranged and protected by a recess, essentially as explained.

No. 24,235.—ALEXANDER E. PIRKEY, of Bradford, Ill.—*Improvement in Mills.*—Patent dated May 31, 1859.—This invention consists in arranging a series of adjustable slides in the interior of the shell, so that not only the corner pieces which serve as guides to the piston, but also those slides which constitute the grinding-surface of the shell, and are opposite to the flat sides of the piston, can be brought closer to, or further from the piston, and that the same can be set according to the required fineness of the flour or meal, or that it can be used for crushing corn, and the shell is so arranged that not only the weight of the piston itself, but also a certain arrangement of levers and wheels assist in facilitating the work.

*Claim.*—The described arrangement of the adjustable slides, and the corner pieces *b*, to operate in combination with the piston B, which receives its motion by means of a lever E, and wheels H and I, substantially in the manner and for the purposes specified.

No. 24,236.—ALBERT H. PITKIN, of Hartford, Conn.—*Improvement in Screw Dies.*—Patent dated May 31, 1859.—This improvement consists in constructing hand screw plates, complete in one piece of metal, having their openings in the edge for the insertion of the cutting die.

The inventor says: I claim making a screw plate A, with both the top and bottom parts P P<sup>1</sup>, which hold the die N, cast or made upon the screw plate A, in the manner and for the purpose described.

I further claim, making the inlet for the introduction of the die N into its chamber, between the parts P P<sup>1</sup>, through the outside edge of the screw plate A, as and for the purpose described.

No. 24,237.—CHRISTIAN REIF, of Hartleton, Lewis Township, Pa.—*Improvement in Clover Hullers.*—Patent dated May 31, 1859.—This invention consists in a concave composed of a series of cast-iron plates, the faces of which are covered with pyramidal projections, either around or down the concave, as the clover might be carried through the machine without being caught by the projections, were the depressions in a straight row, but by having them at different angles each depression is followed by a projection, thus preventing the clover from running through a series of depressions without coming in contact with a projection.

*Claim.*—The projections at different angles on the concave, in combination with the spiral rows of projections on the cylinder, substantially as and for the purposes set forth.

No. 24,238.—EZRA RIPLEY, of Troy N. Y.—*Improved Nut Cracker.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The described nut cracker, or implement, consisting essentially of the fixed jaw A, with its standard *e*, the movable jaw B, with its slide *g*, and the eccentric or cam C, with its handle *d*, and flange *k*, all constructed and arranged in combination for conjoint operation, substantially as described.



No. 24,239.—JOSEPH ROSENKRANS, of Avoca, N. Y.—*Improvement in Self-acting Wagon Brakes.*—Patent dated May 31, 1859.—This invention is designed more particularly for wagons and carriages when used in a hilly country, and is intended to be operated by holding back horses or team.

*Claim.*—The arrangement of means set forth for operating the brake, by the holding back of the team.

No. 24,240.—ANDREW C. ROSS, of Almont, Mich.—*Improved Sawing Machine for Resawing Boards.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of circular saw K, stationary divider L, in connection with a permanent horizontal bed in resawing machines, for the purposes set forth.

Second. The bell shaped flanges, or sockets *z*, of the saws, constructed and employed substantially as and for the purpose described.

No. 24,241.—GEORGE H. RUSSELL, of Baltimore, Md.—*Improvement in Stoves.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination, with the inner fire drum A, of the cold air base D, vertical side pipes E E<sup>1</sup>, and elbow *e*, with their dampers *g g*, cylindrical cover or top drum, with F, its chambers *ff*<sup>1</sup>, *f*<sup>2</sup>, *f*<sup>3</sup>, and connecting tube *f*<sup>4</sup>, horizontal air space G, and outlet *i*, with air drums I K, passage *jj*, front vertical register pipes J J, foot warmer connecting pipes *kk*, and foot warmer L, with its register *l*, ventilating registers *rr*, double smoke pipes N *n*, P *p*, with dampers set as described, and divided outer smoke drum O, with its passage, or passages, substantially as and for the purposes set forth.

No. 24,242.—ALBERT M. SMITH, of New York, N. Y.—*Improved Carpet Fastener.*—Patent dated May 31, 1859.—This invention consists in constructing a hook, or hook part, and an eye or piece with catches or lips to be used in a reversed manner to fasten down carpets, causing the carpet when attached to the hook, hooks, or points of the hook part, to draw back towards or against its head instead of its point or points, thereby and at the same time drawing it back on or under the eye of the catch piece to be fastened to the floor so as to hold the carpet down securely to its place.

*Claim.*—The combination and arrangement of the point A, lips *b b*, slot *c*, bearing *d*, lips *e e*, point *f*, hook *g*, lips *h h*, bearings *i i*, substantially as and for the purposes specified.

No. 24,243.—CHARLES E. SMITH, of Philadelphia, Pa.—*Improvement in the Manufacture of Belting.*—Patent dated May 31, 1859.—This improvement consists in uniting the pieces of belt or band in such a way that a secure joint shall be obtained, together with sufficient flexibility.

*Claim.*—The manufacture of continuous belting, or boards, by uniting pieces of band iron, by lapping and riveting two beveled ends, so as to produce a rhomboidal joint, in the manner and for the purpose substantially as described.

No. 24,244.—GEORGE STEPHENSON, of Northfield, Ind.—*Improvement in Cordage Machinery.*—Patent dated May 31, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The employment of a series of movable bearing cross bars *i*, with side pivots or gudgeons *k*, the ends of the cross bars being supported by longitudinal slots or grooves *h*, in the flyer bars *a*, and connected to each other by elastic straps or thongs *l*, whereby the cross bars are made to press gently upon the ends of the spools (which are mounted upon the side pivots *k*,) to resist slightly the rotary motion thereof, and also admit of the occasional removal of one or more of the spools, without disarranging others of the series, the cross bars, spools, and elastic straps being arranged in the manner and for the purpose described.

No. 24,245.—LEVI STEVENS, of Fitchburg, Mass.—*Improvement in Axle Boxes for Railroad Cars.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A box made of anti-friction metal and backed with a casing of bronze, the bronze passing through the anti-friction metal, and resting upon the axle, for the purpose described.

No. 24,246.—JOHN SUTTON, of New York, N. Y., assignor to Himself and DE WITT C. VAN TUYL, of said New York.—*Improvement in Condensing Steam Engines.*—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—First, the arrangement of the combined air pump and condenser piston K, to act independently of the walking beam of the engine, so that a portion of the exhaust steam, while the piston F is just completing and commencing a stroke, shall impart a full stroke to the piston K, as shown and described.

Second. The arrangement and combination of the forked levers Q S, the crank E, lever R, and piston rod K<sup>1</sup>, so that by the action of the piston K the crank E will be assisted in



passing the dead points, but during other portions of the crank movement, the parts above named will be disconnected from the crank E, all substantially as shown and described.

No. 24,247.—GEORGE C. TAFT, of Worcester, Mass.—*Improvement in the Manufacture of Wrenches*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The peculiar mode of constructing the head and shank of screw wrenches, namely, by first forming or constructing the head *c*, and shank or bar *a*, separately, as shown and described, and then uniting the head and shank after the shank *a* has been inserted into the depression *d*, first made in the head *c*, by welding, the whole operation being substantially as described and for the purposes set forth.

No. 24,248.—THOMAS H. TATLOW, jr., of Palmyra, Mo.—*Improvement in Seeding Machines*.—Patent dated May 31, 1859.—This invention relates to a novel means employed for covering the seed, and also to a novel device for properly pulverizing the ground in advance of the share that forms the furrow to receive the seed.

The inventor says: I *claim*, first, the employment or use of the covering hoe G, operated from the supporting wheel C, through the medium of the rollers *g g*, bar J, and the bars F I, connected by the rod H, substantially as described.

Second. The share O, provided with the curved bars *j j*, in connection with the shares M N, and the hoe G, the whole being arranged for joint operation, substantially as and for the purpose set forth.

No. 24,249.—JOSHUA W. TAYLOR, of Philadelphia, Pa.—*Improvement in Corn Mills*.—Patent dated May 31, 1859.—This invention consists in applying in both the upper and lower concave, or shell of common iron mills, a number of oblique projections for the purpose of increasing the grinding surface.

*Claim*.—The application and arrangement of the oblique projections C to the shell, or concave *a*, operating in the manner and for the purpose set forth and specified.

No. 24,250.—JOSEPH W. THORP, of Hillsboro', N. H.—*Improvement in Tailor's Pressing Machines*.—Patent dated May 31, 1859.—By this invention the goose is suspended from a crane that turns upon bearings arranged in two eccentrics, whereby the goose can travel in every direction.

*Claim*.—Raising the heater from the bottom of the hollow goose, either by means of the projections formed on the bottom of the heater, or by adjusting screws or their equivalents.

No. 24,251.—SIMON H. WALKER, of Somerville, Tenn.—*Improvement in Bee Hives*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the moth decoy entrances *c f*, provided with the jutting lips or ledges *b d*, arranged just within the bee entrance *a*, across its entire extent, both above and below, substantially in the manner and for the purpose specified.

I also claim the construction and arrangement of the cross bars *r r*, attached to a supporting cross piece P, and with open spaces S S around their ends, substantially in the manner and for the purpose set forth.

No. 24,252.—JOHN WAUGH, of Elmira, N. Y.—*Improved Boring Machine*.—Patent dated May 31, 1859.—The nature of this invention is to enable artificers in wood to bore holes with an auger bit (from any position) perpendicularly, upward or downward, horizontally, or at any angle of any degree, or any number of degrees, or fractional parts of a degree from 0 to 90, above or below a horizontal line.

*Claim*.—The arrangement of those mechanical appliances, in a peculiar manner, for a new and useful purpose, substantially as set forth.

No. 24,253.—DAVID WHEELER, of Fairfield, Conn., and ISAAC LITTLE, of Bridgeport, Conn.—*Improvement in Gas Regulators*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of a self-acting discharge pipe or siphon S T, with the chamber *c*, of a gas regulator, substantially as and for the purposes shown and described.

No. 24,254.—E. D. WILLIAMS, of Philadelphia, Pa.—*Improvement in Friction Springs for Supporting Window Sashes*.—Patent dated May 31, 1859.—This invention consists in providing sash friction springs with a projection or spur on their friction or bearing surfaces sharpened, so that the projection or spur shall cut a groove in which the spur shall slide to prevent the sash from rattling.

*Claim*.—Providing with friction springs having sharpened projections, or spurs, for cutting their own grooves, substantially as set forth.



No. 24,255.—THOMAS S. WILLIAMS, of Enterprise, Miss.—*Improved Musquito Bar*.—Patent dated May 31, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The folding musquito net, or bar, constructed substantially as described.

No. 24,256.—SAMSON WOLFF, of Vicksburg, Miss.—*Improvement in Cotton and Hay Presses*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of a conical spiral wheel or pinion, with an inclined rack, when the latter is set oblique to the axis of the pinion, substantially in the manner and for the purpose described.

No. 24,257.—THEODORE T. WOODRUFF, of Philadelphia, Pa.—*Improvement in Seats and Couches for Railroad Cars*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination and arrangement of the two frames with each other, and with the supports therefor, connected with each compartment of a car, the said frame, when spread out, forming couches for two persons, on the same level with the seats, and when transformed, one of the said frames forming seats, and the other the back for such seats, substantially as described.

I also claim connecting the frame which forms the seats with the frame which forms the backs by means of links, connected with one of the said frames by means of hinged joints, and with the other of the said frames by means of sliding hinged joints, substantially as and for the purpose specified.

I also claim, in combination with the frame for the main seats, the auxiliary seats, which slide under the frame for the main seats, substantially as and for the purpose described.

And I also claim the frame for an elevated couch, when combined with the car, by means of sliding hinged joints, substantially as and for the purpose specified.

I also claim, in combination with the elevated couch next to the side of the car, or the equivalent therefor, the front elevated couch, so connected with the car, substantially as described, as to admit of being let down to form part of a double couch, and thrown up towards the roof of the car when not wanted as a couch, as set forth.

No. 24,258.—LESTER L. BOND, of Chicago, Ill., assignor to Himself and GILES B. WILLIAMS, of New York city.—*Improvement in Self Acting Presses*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement for connecting the press beam B with the levers D D by the connecting bars E E, whereby the press is made to operate from above and below.

Second. The socket shoe I and the ratchet plate H, or their mechanical equivalents, for altering and gauging the power of the press, substantially as set forth and specified.

No. 24,259.—C. A. YOUNG and S. W. YOUNG, of Providence, R. I.—*Improvement in Machines for Making Upholstery Springs*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the cutters *o r*, attached to the machine and arranged relatively with the rolls D D I, and bar J, when the movable cutter *r* is actuated automatically by suitable mechanism to cut the springs as formed from the continuous wire T.

Second. The bar J, attached to the lever H, or other part of the machine or framing, when provided with a bend *l* to project over the uppermost roller D for the purpose of guiding and insuring the turning or bending of the wire T, as set forth.

Third. The plates *n p*, when used in connection with the shears *o r* for the purpose of cutting off the springs and bending the ends thereof simultaneously, and substantially as described.

No. 24,260.—JOHN W. DRUMMOND, of New York, N. Y., assignor to HORACE H. DAY, of said New York.—*Improvement in Machines for Measuring Cloth*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the measuring wheel, substantially as described, in combination with the spring block, or the equivalent thereof, for holding the cloth to the periphery of the wheel, and for stopping the said wheel the moment the cloth has passed off, substantially as described.

No. 24,261.—D. G. FLETCHER, of Racine, Wis., assignor to Himself and HENRY WEISKOPF, of said Racine.—*Improvement in Coffee Pots*.—Patent dated May 31, 1859.—This invention consists in protecting the spout by a box-like strainer with a hinged top, so that the liquid coffee runs freely, and the strainer can easily be cleaned from each side.

*Claim*.—The box-like strainer D, arranged with a hinge top *c*, so that access can be had to the same from the inside as well as from the outside, and that the same can easily be cleaned, substantially as described.



No. 24,262.—WILLIAM H. LAZELLE, of Boston, Mass., assignor to Himself and ELBRIDGE B. LAZELLE, of said Boston.—*Improved Refrigerator*.—Patent dated May 31, 1859.—This invention consists in causing the ice water from the receptacle C to run into the space at the top on one side of the chamber, pass downward under the bottom and up to the top of the opposite side, whence it is allowed to escape through a pipe running downward in the space and out at the bottom of the refrigerator, by means of which arrangement all the frigorific properties of the ice water are retained.

*Claim*.—The combination and arrangement of the siphon pipe I, water space F, and ice box C, opened and beveled at one end, substantially as set forth and for the purposes described.

No. 24,263.—HUGH LOGUE, of Philadelphia, Pa., assignor to Himself and DANIEL P. VANDERGRIFT, of said Philadelphia.—*Improvement in Dry Gas Meters*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—So constructing one of the partitions between two of the chambers of a dry gas meter that it may afford a passage for the gas from the inlet pipe to the central opening of the valve seat, substantially as and for the purpose set forth.

No. 24,264.—HENRY F. MANN, of Laporte, Ind., assignor to Himself and WILLIAM I. WALKER, of said Laporte.—*Improved Hemp Brake*.—Patent dated May 31, 1859.—When, in this machine, it is deemed advisable to diminish the speed of the breaker, without changing the motion of the wheel, it may be effected by withdrawing every alternate cam, so that, at each revolution, instead of four, there will be but two strokes of the breaker.

The inventor says: I *claim*, first, the combination of the adjustable cams or arms *c* with the breaker, as constructed, the whole being arranged and operated substantially as described.

Second. The adjustable spring *h*, as arranged and operated for the purpose set forth.

No. 24,265.—HENRY MESSER, of Roxbury, Mass., assignor to CHARLES RICE, of Boston, Mass.—*Improved Machine for Cutting India Rubber into Threads*.—Patent dated May 31, 1859.—As the carriage D is revolved the cutters *o* are revolved rapidly in contact with the block of rubber E and cut into its edge as it is revolved, the carriage H being at the same time fed towards the centre of the machine by the screw *h*.

*Claim*.—The arrangement and combination of the rotating table D and the adjustable cutters *o*, substantially as and for the purposes shown and described.

No. 24,266.—A. ORVIS, of Niagara, N. Y., assignor to Himself and Downs & Co., of Seneca Falls, N. Y.—*Improvement in Grinding Mills*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the construction and arrangement of cylinder D and concave F with supplementary cylinder G, whereby the rhomboidal teeth *f* and *g* serve to adjust the parts to efficient action by means of the longitudinal movement of the collar *e* on the shaft B, substantially as set forth.

I also claim the peculiar conformation of the grinding surfaces of the cast-iron cylinder E and concave H, consisting of the alternate intersection of the raised and depressed corrugations thereof, in the manner and for the purpose shown and described.

I claim the combination and arrangement of the two concaves F and G, spout *j*, and divided winged partition R, or its equivalent, whereby the operation of cracking and grinding in said concaves may be conjoint or separate, substantially in the manner and for the purposes shown and described.

I claim the automatic rapper V, arranged and operated substantially as described, for the purpose of keeping the bolt free from obstructions and rendering its action efficient, as set forth.

No. 24,267.—WILLIAM H. TENDLER, of Cambridge, Mass., assignor to Himself and JOHN F. MOESCHLIN, of said Cambridge.—*Improved Sofa Bedstead*.—Patent dated May 31, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the improved sofa bed, constructed not only with each of its arm rests formed in two parts and hinged together, arranged and applied to the back *b* and bed frame *a*, as described, but with its seat hinged to the bed frame, so as to be capable of being moved with respect to it and the arm rests, as specified.

I also claim the combination of the pillow and foot rests *l m* E and F, with the arm rests and seat frame or seat applied to the frame A, the whole being made to operate together, essentially as explained.

No. 24,268.—FERDINAND WALTERS, of Covington, Ky., assignor to C. F. WALTERS and S. H. STOUT, of said Covington.—*Improvement in Mill Drivers*.—Patent dated May 31, 1859. This invention relates to the construction and arrangement of a divided adjustable millstone driver.



*Claim.*—The driver  $d$   $d^1$ , constructed and arranged with reference to the shaft C and cap  $c$ , substantially as and for the purpose set forth.

No. 24,269.—ALFORD B. WILTON, of Dorchester, Mass., assignor to Himself and CHARLES ADAMS, of said Dorchester.—*Improved Heel for Boots and Shoes.*—Patent dated May 31, 1859.—This improvement consists in constructing the outer bearing surface or tread of the heel or heel cap concave or with a concavity, whereby there is not only a better foot hold, but it is prevented from adhering to the pavement by means of atmospheric pressure while it may be in use.

*Claim.*—The improvement of the dished or concave elastic heel as made with the air channel  $b$ , leading out of the concavity  $a$ , and arranged substantially as described.

No. 24,270.—JAMES ALBRO, of Elizabeth, N. J.—*Improvement in Printing Oil Cloths.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Forming ornamental figured surfaces on oilcloth, by raising parallel ridges or surfaces  $b$  on the ground color, when in a soft or green state, by means of a properly prepared block pressed upon it; and then forming parallel ridges or raised surfaces  $d$ , at right angles thereto, and in the form of the design or desired configuration by means of a properly prepared block. It being understood that I claim the privilege of having either the ground  $b$  or figure  $d$ , one of them only, if desired, composed of dots or broken lines, or ridges, in order to obtain a similar effect.

No. 24,271.—D. HILLEN ARMOUR, of Columbia, Texas.—*Improvement in Breakwaters.*—Patent dated June 7, 1859.—The object of this invention is to protect the channel across a bar from the flow of sand which comes in upon the bar with the tide, and keep the channel open without the necessity of making the channel in the bar narrower than the channel of the river.

*Claim.*—The projecting or overhanging sand plate F, applied in combination with the diagonal walls of the breakwater, substantially as and for the purpose described.

No. 24,272.—DANIEL S. AYRES, of Hope, N. J.—*Improved Washing Machine.*—Patent dated June 7, 1859.—The nature of this invention consists in providing a washing machine with a movable and a revolving disk, inside of a stationary tub or cylinder. The movable disk is operated by two springs and a treadle, and the revolving disk by a crank and cog wheels.

*Claim.*—The revolving disks or heads, with the mode of operating the same as applied to washing machines.

No. 24,273.—J. A. AYRES, of Hartford, Conn.—*Improved Device for Raising Water.*—Patent dated June 7, 1859.—This invention consists in the employment of an endless chain of buckets, a wind wheel and an annular water receiver, the whole being arranged and applied to a well, whereby a simple and economical device is obtained.

*Claim.*—The wind wheel H, vane G, endless chain J, with buckets  $d$ , and weight L attached, the cylinder C and annular receiving trough D, the whole being arranged and combined for joint operation, substantially as and for the purpose set forth.

No. 24,274.—THOMAS BAILEY, of New Orleans, La.—*Improvement in Revolving Fire-Arms.*—Patent dated June 7, 1859; patented in England January 17, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the placing of the within named working or actuating means within the body, as set forth.

Second. The revolving chamber, working on two adjustable centres of suspension instead of in the ordinary way.

Third. The mode described of connecting the barrel to the body.

Fourth. The stopping or retaining of the revolving chamber by means of a spring stop acting on the ratchet, such stop being actuated by a cam on the tumbler.

Fifth. The notch or cavity, in the cap guard or cocknose, to fit upon the solid part of the chamber, and retain the chamber in a safe position.

No. 24,275.—JOHN B. BAKER, of Syracuse, N. Y.—*Improvement in Bridle Bits.*—Patent dated June 7, 1859.—This invention consists in constructing bits in such a manner that when a moderate draft is made upon the reins the bit will act only as a snaffle, but if a strong pull is made, as when the horse is running, the connection between the rein and the bit is drawn downward, causing a change from a snaffle to a curb; and, on the rein being slackened, the connection is drawn upward by a spring to its former position, and the bit serves again as a snaffle.

*Claim.*—The attachment as described, of sliding rings, or rein connections P to the curb bars of bridle bits, when the same are operated upon by springs attached to the bit, substantially in the manner and for the purpose set forth.



No. 24,276.—HENRY BEDLOW, of Newport, R. I.—*Improved Chimney Cowl*.—Patent dated June 7, 1859.—This invention consists in constructing the cowl in such a manner that the upper end of the chimney, to which it is applied, will be encompassed by a chamber provided with a deflecting plate, and communicating with upright tubes or pipes attached to the outer side of the chamber.

*Claim*.—The arrangement and combination of the chimney top, or tube A, chamber F, tubes G, or other external draft passages and deflectors *b b c c*<sup>1</sup> C, the tube chamber and draft passages communicating with each other and the external air, to operate as and for the purpose set forth.

No. 24,277.—N. BOARDMAN, of Fond-du-Lac, Wis.—*Improved Method of Sawing Shingles from the Bolt*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of two bolt carriages F F, when used in connection with the adjustable planes H, and arranged in the relation with the circular saw C, as shown, so that a shingle may be sawed from each bolt at each movement of its carriage, and the two bolts operated upon simultaneously by means of one and the same saw.

Second. The adjustable or tilting tracks or bolt frames E E, in combination with the reciprocating carriages F F and saw C, the whole being arranged to operate substantially as and for the purpose set forth.

No. 24,278.—JEHU BRAINERD and W. H. BURRIDGE, of Cleveland, Ohio.—*Improvement in Tanning*.—Patent dated June 7, 1859.—This invention relates to the employment of a preparation of liquor, or liquors, in which skins and hides are to be prepared, or treated, after having been unhaired and bated, in order to let them receive more readily the tan; this step in the process being intermediate between the bate and handling in the tan or ooze.

*Claim*.—The described process of treating skins or hides in a preparation liquor or liquors, substantially as set forth for the purposes described.

No. 24,279.—JOHN M. BRUNSWICK, of Cincinnati, Ohio.—*Improved Pocket Handle for Billiard Tables*.—Patent dated June 7, 1859.—This invention relates to the construction of pocket handles for billiard tables, of vulcanized gutta percha, or India rubber, in such form and manner as to be conveniently attached to billiard tables, to take the place of metallic handles now in common use.

*Claim*.—The pocket handles A A<sup>1</sup>, arranged and secured substantially as described, and formed of vulcanized gutta percha or India rubber, as a new article of manufacture, for the purposes set forth.

No. 24,280.—F. A. CALVERT and CHARLES G. SARGENT, of Lowell, Mass.—*Improvement in Machines for Burring Wool and Ginning Cotton*.—Patent dated June 7, 1859.—In the engravings A represents the frame of a cotton gin, B the improved toothed cylinder, C the fluted guard, D the brush cylinder of the ordinary construction. These several cylinders are carried in suitable bearings in the frame A, and are driven at the proper relative speed, by cog wheels not shown in the engravings.

*Claim*.—A cylinder having spaces between the teeth for the accommodation of the seed, as set forth, in combination with a revolving guard, operating in the manner substantially as described.

No. 24,281.—J. C. CLAPP, of Seneca Falls, N. Y.—*Improvement in Corn Huskers*.—Patent dated June 7, 1859.—The operator is supposed to sit upon the bench A, with one foot on the lever, and to place the ear of corn in front of the concave F, holding the stalk in his right hand and the husks in his left hand. As he draws the but end against the crescent E, which serves as a gauge, a movement of his foot impels the carriage forward, carrying the ear against the point of the horizontal knife L, which severs it from the but and husks. At this moment the fly piece *a* darts forward, throwing the ear suddenly off, while the husks are still held by the left hand, by which means they are stripped entirely off the ear.

*Claim*.—The combination and arrangement of the carriage B, fly clearer *a*, cross lever H, concaves and gauge F E, blade L, and tread lever J, operating conjointly, substantially as and for the purpose set forth.

No. 24,282.—DECIUS W. CLARK, of Bennington, Vt.—*Improvement in Enamel Composition for Bricks, &c.*—Patent dated June 7, 1859.—The following are the proportions of the ingredients which compose this invention: 4 lbs. 11 oz. refined boric acid, 4 lbs. 8 oz. refined oxid of zinc, 7 lbs. 8 oz. calcined ground feldspar, 6 lbs. 9 oz. calcined and ground quartz, 6 lbs. 8 drachms washed Paris white, 1 lb. 2 oz. washed kaolin, or China clay, and  $\frac{1}{4}$  drachm oxid of cobalt.

*Claim*.—The enamel or glaze for pottery ware, or other articles formed of the ingredients and substantially as specified.



No. 24,283.—S. C. COFFIN, of Lawrenceville, Pa.—*Improved Method of Jointing Shingles.* Patent dated June 7, 1859.—This invention consists in the application, to shingle machines wherein a horizontal saw is used, of a separate transverse carriage, on which the sawed shingle is traversed past the saw for the purpose of jointing it.

*Claim.*—So combining with the horizontal saw B that saws the shingle from the bolt the transverse piece J, and carriages K upon it, so that the same saw that cuts the shingles from the bolt may be used for jointing said shingles, as set forth and explained.

No. 24,284.—ENOCH COLVIN, of Poultney, Vt.—*Improvement in Knitting Machines.*—Patent dated June 7, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the needle arm *d* and the iron rim upon the ring *e*, constructed as described, for raising each needle by itself, and completing each stitch before another is begun.

Second. The cylinder *o* for reversing and regulating the motion of the machine while forming the heel and toe.

Third. The combination of the notched wheel *t*, the toothed bar *u*, with its pointer *v*, the cylinder *o*, the elevating arm *n*, the elevating bar S, and cam thereon, and the pin on the wheel *l*, by means of all which the motion of the machine is reversed back and forth, and regulated so as to knit upon a straight hose flaps of the proper form for the heel and toe.

Fourth. The wheel P and the elevating arm *n* combined with the several parts and devices mentioned in the last preceding claim or paragraph, as above described, for setting in motion at the proper juncture the machinery for regulating the formation of the flaps for the heel and toe.

No. 24,285.—DAVID CONLAN, of New York, N. Y.—*Improvement in Light Shades for Billiard Tables.*—Patent dated June 7, 1859.—This invention consists in arranging the shades used over the lights in billiard rooms, &c., in such a manner that all the light is concentrated on the tables, while the space beyond the tables is left comparatively dark.

*Claim.*—As an improved article of manufacture, a shade for billiard tables, &c., having two reflecting parts B<sup>1</sup> B<sup>2</sup>, and otherwise made as shown and described.

No. 24,286.—THOMAS CRANE, of Fort Atkinson, Wis.—*Improvement in Rakes.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Improved harvesting rakes for gathering and elevating cut stalks of grain preparatory to binding the same into sheaves, when the said rake is composed of side handles, gathering fingers and swinging legs, or the equivalents of the same, substantially as set forth.

No. 24,287.—THOMAS DOUGHERTY, of Macon, Ga.—*Improved Lock.*—Patent dated June 7, 1859.—The nature of this invention consists in uniting the hasp and lock in one.

*Claim.*—The employment of the spring tumblers C, D, and E, when constructed and operated in the manner described, in connection with the bolt B, the said springs being detained by the key to let the bolt slide, as specified.

No. 24,288.—DAVID DE PRÉ, of Raleigh, N. C.—*Improved Chain Pump.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the endless chain for raising water, composed of the curved detachable links M, when said links are constructed and united in the manner and for the purposes set forth.

Second. Keeping the chain stiff between the upper and lower pulleys by means of projections R on the links, substantially as and for the purpose set forth.

Third. The combination of the curved links M with the peculiarly shaped curved buckets N, when constructed and operated substantially in the manner and for the purposes set forth.

No. 24,289.—WILLIAM B. DUNNING, of Geneva, N. Y.—*Improvement in Railroad Chairs.*—Patent dated June 7, 1859.—This invention consists in using a bed plate on the tie, so shaped with slots and raised portions in connection with clamps, as to hold the rail firmly in its place.

The inventor says: I *claim*, first, the peculiar form of a partly raised and double slotted bed plate, as described.

Second. I claim the peculiar form and position of the clamps, one part of them being confined and borne down on the tie by the weight of the rail and all above it, and the other part, viz., the jaw, resting upon the flange of the rail and holding it fast.

Third. I claim the combination of the several parts, as described, or their mechanical equivalent.

No. 24,290.—JAMES FAY, of Baltimore, Md.—*Improvement in Hydrants.*—Patent dated June 7, 1859.—In operating this hydrant, the handle A is turned down in such a manner as to depress the rod E, the ball F fitting tightly in the chamber P. The lower end of the rod E bears upon the stem *n*, and removes the valve *m* from the bottom of the thimble, the water



then passes in at pipe *z*, up through thimble *H*, and out at pipes *y* and *s*; when pressure is removed from rod *E*, the spring *J*, together with the force of the water, presses the valve *m* up to the thimble, and thus prevents the flow of water.

*Claim.*—The arrangement of the stock *L* and chamber *B*, as constructed with the India rubber ball *F*, rod *E*, opening in the top of box *I*, nut *G*, spring *J*, valve stem *n*, valve *m*, and thimble *H*, the several parts being used and operating conjointly, substantially in the manner and for the purpose specified.

No. 24,291.—WILLIAM FIELD, of Providence, R. I.—*Improvement in Horse Power Machines.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Arranging and supporting a hollow driving shaft, and the driven shaft passing through the driver, substantially as described, whereby both driver and driven shaft turn in the same direction, and both ends of the driver are fully supported by boxes independent of the shaft passing through it, while at the same time the bearing of the shaft passing through the hollow driver will be on the driver only at a point directly opposite its journal, so that any slight displacement of either shaft will not cause them to bind on each other so as to increase the friction of the machine.

No. 24,292.—ARCHIBALD FORD, of Newport, Ky.—*Improvement in Machinery for Opening Old Rope.*—Patent dated June 7, 1859.—This improvement consists in an arrangement for the preliminary opening of the rear ends of the rope.

*Claim.*—The elevated bar *K*, provided with cavities *k k*, arranged in the described relation to the feed mechanism and drum, and operating in combination with the latter, to preparatorily open the butts of the rope, as set forth.

No. 24,293.—GEORGE P. FRICK, of Baltimore, Md.—*Improved Mode of Starting City Railroad Cars.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the application of a lever, acting temporarily upon the axle of a railway carriage or other wheeled vehicle, in combination with the pulley and chain, substantially as set forth, and whether the pulley is of uniform or different diameters, as described.

I also claim such lever, in combination with the ratchet wheel and catch, substantially as set forth, in their application to railway or other wheeled vehicles.

I also claim the cord, whereby the lever may be loosened from the catch at the will of the driver, in combination with the said lever and catch pulley and chain, when applied to a railway carriage or other wheeled vehicle.

I also claim the combination of the catch and ratchet wheel with the chain and weight, described in the foregoing specification, whereby the engaging and disengaging of the catch is operated by the motion of the draft bar, substantially as described.

No. 24,294.—FELIX GELIN and CHARLES GELIN, of New York, N. Y.—*Improvement in Legs for Pianos.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The glass socket *F*, so mounted in the legs of musical instruments that the escape of sound from the instrument to the floor is checked, without injuring the appearance or endangering the strength or durability of the instrument.

No. 24,295.—T. W. GIBBONS, of Franklin, N. J.—*Improvement in Money Boxes for Stages, &c.*—Patent dated June 7, 1859.—This invention consists in having a drawer or till placed within a box, and arranged with a lever, change sides or plates, supplemental drawers, an alarm or signal, and an index dial, whereby passengers may deposit their fares in a drawer, and take the change therefrom, in view of the driver, without the latter having any control over the money.

The inventor says: I *claim*, first, the box *A*, provided with the drawers *B D*, the former having a flap or door *h* in its bottom, and arranged to operate substantially as and for the purpose set forth.

Second. The change slide or plate *G*, one or more, used in connection with tubes *s*, and arranged relatively with drawer *B*, to operate substantially as and for the purpose set forth.

Third. In combination with the drawers *B D* and change plate or plates *G*, the bell *g*, and index *n* and dial *o*, arranged substantially as and for the purpose set forth.

No. 24,296.—DAVID GLOVER, of Cass township, Schuylkill county, Pa.—*Improved Safety Cage for Coal Shafts.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction of the cage in two separate sections, separated at the guides, and so connected by hinges at the top of the bottom of the sill that, when the rope or chain used in hoisting breaks or the power ceases to operate, the cage shall open at the top where



the sections are joined, and the height and weight of each section shall operate as a lever and weight to force the iron shoe, on the ends of the sills and pieces B B, powerfully against and into the guides, and by this means entirely prevent the dropping of the cage and car down the shaft.

No. 24,297.—ROBERT GREAVES, of Philadelphia, Pa.—*Improvement in Cleaning Spinning Mule Carriage Tops*.—Patent dated June 7, 1859.—This invention relates to a self-acting apparatus for removing the “fly,” or loose particles of cotton, from the top board of spinning mule carriages; and consists in placing a cloth, made of Canton flannel or other similar material, in such a position that, as the mule carriage board travels to and from the roller beam, the wiper shall collect from its face all the fly that may have collected thereon.

*Claim*.—The described mode of cleaning mule carriage tops, or any mechanical equivalent therefor.

No. 24,298.—W. L. GREGORY, of Theresa, N. Y.—*Improvement in Wind Wheels*.—Patent dated June 7, 1859.—This invention consists in arranging two vanes in such relation to the wings that the position of the latter is regulated according to the force of the wind by the action of the vanes; one of which, the main vane, is placed loosely on the shaft, so that it places itself in the direction of the wind; while the other, the regulating vane, is firmly secured to the shaft, and is kept at right angles to the main vane by a weight, and the shaft is connected with the wings by means of pulleys and chains; so that, when the increasing force of the wind forces the regulating vane towards the main vane, the wings are turned out of the wind, whereby the speed of the wheel is regulated; and that the regulating vane returns to its original position, by the action of the weight as the wind slackens, whereby the wings are turned again so as to be in the most effective position.

*Claim*.—The arrangement of the main vane K and the regulating vane L, to operate in combination with the wings E, substantially as and for the purpose described.

No. 24,299.—ALBERT C. GRISWOLD, of Hartford, Conn., and WAIT R. GRISWOLD, of Durham, Conn.—*Improved Rocking Carriage*.—Patent dated June 7, 1859.—A are the rockers made on a greater or less curve, as circumstances may require; B are the seats or cribs, hung or suspended by the pins C to the rockers A, at a desirable point each way from the centre of the rockers; D is a railway track or framework, upon which it may be desirable to arrange and hold the rockers, or steady and guide them in place.

The inventor says: I *claim* the employment of the rockers A, in combination with the seats or cribs B, as and for the purposes described.

Also, the railway track or framework D, with the cords or rods E, springs F, when used as and for the purpose described.

Also, the employment of the elastic substance H, attached to the rocker, for the purpose as described.

No. 24,300.—JOHN W. HARRIS, of Durhamville, N. Y.—*Improved Paddle Wheel*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing paddle wheels for boats in such a manner that the paddles may be folded laterally upon the frame and the wheel thereby withdrawn from projecting beyond the sides of the boat, or extended at pleasure, whether the boat be in motion or at rest, the paddles H being connected to the framework A and D, substantially as described, and their outer edges of the form shown, the whole operating substantially as set forth.

No. 24,301.—WILLIAM A. HAWKES, of Corinth, N. Y.—*Improvement in Rotating Dumping Cars*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination of the rotating platform C, provided with dumping boxes L, with the shaft K, and gearing D E H b G i i<sup>1</sup> m, and the clutches d j; substantially as herein shown and described, so that the car may be propelled and the dumping boxes rotated by turning shaft K, as desired; all as set forth.

No. 24,302.—HENRY W. HENLEY, of New York, N. Y.—*Improved Mattress*.—Patent dated June 7, 1859.—This invention consists in the employment of a series of serrated sections in the manufacture of a mattress, which sections divide the mattress into compartments and form apertures or perforations running vertically through the mattress, for the ingress and egress of the air.

*Claim*.—The use or employment of the serrated section B B, when the same shall be combined for the purpose specified.

No. 24,303.—J. HERALD and C. B. TOMPKINS, of Trumansburg, N. Y.—*Improvement in Harrows*.—Patent dated June 7, 1859.—This invention consists in arranging two plates with suitable recesses and with a central hole, in such a manner that the same serve to secure the bars which constitute the harrow frame, at those places where they cross each other, by the same nut which secures the tooth to the plates.



*Claim.*—The arrangement of the plates B B<sup>1</sup> with recesses *a a*<sup>1</sup> and *b b*<sup>1</sup>, and projections *c c*<sup>1</sup>, and with a hole in their centre for the purpose of securing the bars A A<sup>1</sup>, and the tooth C, substantially in the manner specified.

No. 24,304.—CHARLES HEWITT, of Trenton, N. J.—*Improved Machine for Moving Iron at the Rolls.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The movable floors, platforms, or supports A B, for moving iron or other metal at the rolls while in process of manufacture, constructed and operated as described, or otherwise substantially the same.

No. 24,305.—GIDEON HOTCHKISS, of Windsor, N. Y.—*Improved Machine for Working Butter.*—Patent dated June 7, 1859.—In working this machine the crude butter is placed in the oblong bowl in quantities to suit the size of the machine, with one hand hold of the ladle and the other hold of the lever, when all parts of the bottom is arranged at pleasure with the ladle, which being guided by the hand, the lever being raised carries back the ladle; and when a portion of the butter is before the ladle the lever is brought down, by means of which the butter as compressed against the circular or concave back end and under the cope, moving and compressing the butter horizontally or parallel with the bottom, another portion is forced back and thus repeated until the mass is collected or passed through against the back C, which being the highest part of the machine, the butter milk or other liquids pass off through the pipe I, and the process repeated until finished.

*Claim.*—The combination of the lever stern ladle and oblong bowl by means of the revolving joint, the projecting cope and follower ladle, substantially as described.

No. 24,306.—WILLIAM H. HOWARD, of Philadelphia, Pa.—*Improvement in Loom Temples.*—Patent dated June 7, 1859.—This invention consists of two rollers, each having right and left hand screws, turning in bearings, or steps arranged to yield independently of and in contrary directions to each other, so as to allow the rollers to rise and fall in obedience to the varying tension of the warp caused by the constant opening of the threads at each stroke of the lay, thereby relieving the threads from the tendency to break and the loom itself from excessive strains.

*Claim.*—The rollers D and D<sup>1</sup>, twining in bearing or steps, arranged to yield independently of and in contrary directions to each other, on the opening of the warp threads, substantially as and for the purpose set forth.

No. 24,307.—ENOCH JACOBS, of Cincinnati, Ohio.—*Improvement in the Construction of Prisons.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A secret passage or guard chamber around the outside of an iron plate jail, and between said jail and a surrounding enclosure, constructed and arranged substantially as described for the purposes set forth.

No. 24,308.—JOSEPH K. KILBOURN, of Pittsfield, Mass., and EDWARD E. KILBOURN, of Litchfield, Conn.—*Improvement in Manufacturing Knitted Fabrics.*—Patent dated June 7, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The new knitted fabric described, composed of columns of stitches oblique to each other, having openings at the places where the oblique columns of stitches diverge, the same being a new article of manufacture.

No. 24,309.—T. E. KING, of West Andover, Ohio.—*Improved Saw Filing Machine.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The suspending the file holder upon arms, as herein set forth, so that it is susceptible of adjustment horizontally, vertically, and obliquely, and in combination with the curved faced slot in the holder, as described.

No. 24,310.—JOSIAH KIRBY, of Cincinnati, Ohio.—*Improved Bung Cutter.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the mode of pointing the lower or last end cut off the plug or bung by forcing it into a separate dog, made and used substantially and for the purpose described.

I also claim the mode of lifting the plug out of the dog, after it has been compressed, by means of rod G<sup>1</sup>, when operated in the manner and for the purpose described.

I also claim the mode of driving the plug out of the cutter into the compressing dog, by movable rod, as at *a*, Fig. 3, when operating in the manner and for the purpose described.

No. 24,311.—Suspended.

No. 24,312.—ALEXANDER LE MAT, of New Orleans, La.—*Improvement in Adjustable Hammers for Revolving Fire-Arms.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—Providing the hammer with a hinged head, so arranged that it shall present the same face in different directions for the purpose of discharging, in succession, different barrels, or a grapeshot pistol and a revolving fire-arm, as may be desired, and providing the same with small lateral wings for locking the revolving chambers in position, in the manner and for the purposes set forth.

No. 24,313.—ALEXANDER LE MAT, of New Orleans, La.—*Improvement in Automatic Fingers for Closing the Vents of Cannons, &c.*—Patent dated June 7, 1859.—This invention consists in providing the front end of the percussion lock with an apparatus made of a piece continuous with the hammer and subject to all the movements of the lock.

The inventor says: I *claim*, first, the apparatus B and B<sup>1</sup>, with automatic finger C, substantially as described.

Second. The inclined plane H, in the manner and purpose described, or, as an equivalent, the inclination of the slot of the percussion lock, for the purpose set forth.

No. 24,314.—JOHN LEMMAN, of Cincinnati, Ohio.—*Improved Machine for Sawing Circular Bevels.*—Patent dated June 7, 1859.—This invention relates to an adjustable rest or plane, upon a pivoted movable carriage or bed, with reference to the concave face of a dished saw, in such a manner that lumber may be sawed at any desired bevel.

*Claim.*—The adjustable rest *e*, hinged to the bed *f*, in the manner described, and adjustable vertically with reference thereto, substantially as and for the purposes set forth.

No. 24,315.—H. J. LOMBAERT, of Philadelphia, Pa.—*Improvement in Compound Railroad Axles.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The divided tubular axle A and A<sup>1</sup> and the solid undivided centre piece or mandrel C, when the same are constructed and combined together with each other and with the wheels B and B<sup>1</sup>, so that the two said tubular parts A and A<sup>1</sup> shall project through their respective wheels and form their journals, and also rotate out of contact and independently of each other, substantially in the manner and for the purposes set forth and described.

No. 24,316.—WARREN S. LOW, of Albany, N. Y.—*Improvement in Furnace Grate Bars.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the corrugated and circular removable face piece C with the body A of a furnace grate bar, in the manner and for the purposes set forth.

No. 24,317.—WILLIAM J. LYMAN, of East Hampton, Mass.—*Improved Shoe Sole.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the use, or application, or employment of a metallic in-sole to shoes, boots, &c.

No. 24,318.—H. H. LUTHER, of Warren, R. I.—*Improvement in Harvesting Machines.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, attaching the finger bar P to the frame J suspended on the shaft K, and fitted between bars J J on frame G, and arranged on shaft H, substantially as shown, so that the finger bar D and sickles may, when necessary, be elevated, placed directly over the main wheel and shaft, as described.

Second. Adjusting the finger bar P and sickles *r r* in a more or less inclined position, in order to cut the grass or grain the desired height, by having the finger bar attached to a circular frame G fitted on the arm of the driving wheel F and secured at the desired point by means of the lever I and projections, or any equivalent fastening.

Third. The arrangement and combination of the frames J G applied to the driving wheel F, in connection with the gearing *w t<sup>1</sup> t<sup>1</sup> u* and *v v*, respectively, on the wheel F, shafts *t t*, and in the frame J, substantially as and for the purpose set forth.

No. 24,319.—ROBERT MARCHER, of New York, N. Y.—*Improvement in Burnishing Mouldings.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Attaching a self-adjusting burnisher I to a reciprocating plate or carriage C, when used in connection with a moulding N suspended and attached to the machine, in the manner as shown, or in any equivalent way, to admit of being acted upon by the burnisher, for the purpose set forth.

No. 24,320.—W. S. MAYO, of New York, N. Y.—*Improvement in Machines for Finishing Bricks.*—Patent dated June 7, 1859.—This invention relates to an improved machine for giving a smooth, even surface to bricks previous to the burning of the same, after they have been properly dried.

*Claim.*—The combination of the box A, plunger B, and plates K, with or without the feed block F, substantially as and for the purpose set forth.



No. 24,321.—CHARLES MCBURNEY, of Boston, Mass.—*Improvement in the Manufacture of India Rubber Blankets or Aprons used in the Printing of Fabrics, Books, &c.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* bringing the blanket to a uniform thickness and smooth surface by passing it between a revolving emery roll and a revolving feed roll, so arranged with respect to each other that the surface of the feed roll shall be ground by the emery wheel, as set forth, for the purpose specified.

No. 24,322.—J. W. McLEAN, of Lebanon, Ind.—*Improvement in Rotary Harrows.*—Patent dated June 7, 1859.—This invention consists of the arrangement of the teeth on two harrows, revolving in opposite directions, so that they shall set obliquely to a perpendicular, and their points project out beyond the circumference of the rims of the frame, and the teeth of either harrow clear the teeth of its fellow of any obstructions or trash which may collect on it.

*Claim.*—The combination of the specified obliquely set teeth, with two or more harrow frames revolving in opposite directions, substantially as and for the purpose set forth.

No. 24,323.—SAMUEL J. REEVES, of Philadelphia, Pa., and MONTGOMERY C. MEIGS, of Washington, D. C.—*Improvement in Trusses for Roofs, Bridges, &c.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The mode of trussing or stiffening a curved or arch beam or rafter for bridges or roofs by means of tension rods or ties of metal, wood, or other suitable material, connected at their outer ends with the arched or curved beam or rafter at various points, and converging towards and connected together at their inner ends at a point within the space contained between the arc or arched or curved beam or rafter and the straight line joining its extremities, substantially as described and as represented in the drawing and model.

No. 24,324.—JAMES STEBBINS MOODY, of Cincinnati, Ohio.—*Improvement in Sewing Machines.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the employment of an endless belt, arranged and operated as described, to carry one or more hooks to draw the thread through the cloth, in the manner described.

I claim the tension collar G, embracing the thread and needle, and operating to hold the thread, in the manner set forth.

I claim alternately holding and releasing the double pointed needle by means of sliding keys *c* and *c*<sup>1</sup>, operating so as to pass through notches *d d* towards the ends of said needle at the proper times, arranged and operating substantially in the manner set forth.

No. 24,325.—M. NEWBAUER and P. ADELMAN, of New York, N. Y.—*Improvement in Apparatus for Drying Glue.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of a chamber of circular or polygonal form, which is provided with a fan blower, or its equivalent, to which air of the proper temperature is conducted by means of a pipe *b* and tube E, for the purpose of drying the cakes of glue, substantially as described.

No. 24,326.—WILLIAM OLDMAN, of Buffalo, N. Y.—*Improvement in Steam Boilers.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The central water space F<sup>1</sup>, in the combustion chamber F, arranged in relation to the annular water space F<sup>2</sup> and to the tubes D, or their respective equivalents, substantially as set forth, for the purpose of inducing an active circulation of the water radially among the tubes, with the advantages explained.

No. 24,327.—STUART PERRY, of Newport, N. Y.—*Improved Apparatus for Exhibiting Stereoscopic Pictures.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a movable frame work for holding a series of stereoscopic pictures, from which the pictures are brought to be inspected and then returned to it again by a mechanism operated by the user, substantially as described.

Second. I also claim bringing each individual picture, or pair of pictures, in succession, to the same point or place, before they are projected from their compartments to be exhibited, by mechanism substantially such as described.

Third. I also claim, in combination with a movable picture holder, a reciprocating carrying frame, that catches each picture, or pair of pictures, in succession, and carries them to the place where they are to be inspected, and returns them to their compartment again, substantially as described.

Fourth. I also claim, in combination with a box or case, containing within it a series of



pictures and mechanism for projecting them from said case, a framework on the outside of said box or case for receiving said pictures, substantially as described.

Fifth. I also claim the slots in the picture holder barrier *f*, and in the box or case, so that the picture, from its compartments in the picture holder, may be projected through both slots or openings to the outside of the box, substantially as described.

Sixth. I also claim the friction brake *t*, or its equivalent, for holding the picture holder and prevent it from moving until started by the crank, substantially as described.

Seventh. I also claim making the frame B, in sections or with an opening, for the purpose of introducing the pictures through said frame into the compartments of the picture holder as well as removing them therefrom, substantially as described.

Eighth. I also claim the clamps, as applied to single or double pictures, for the purpose of strengthening them, preventing their warping or bending, and thus facilitating their passage through the slot, which they must pass through, to the place where they are exhibited, as described.

No. 24,328.—EDWARD L. PERKINS, of Roxbury, Mass.—*Improvement in Machinery for Drying Paper*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A new mode of drying paper, which consists in feeding the paper from a roll outside of the drying chamber, through proper openings, to a series of rollers, arranged as described, and then conducting it over said rollers, vertically, through the apparatus, and subjecting it, during its passage, to a gentle current of heated air, produced by forming inlets at the bottom for the reception of the atmospheric air, which passes up and is heated by a suitable heating apparatus, and escapes readily through apertures at the top, as set forth, and then out of the drying chamber through proper openings to a receiving roller, in the manner substantially as described.

No. 24,329.—JOHN PFAFF, of Philadelphia, Pa.—*Improvement in Tail Pieces for Violins*.—Patent dated June 7, 1859.—This invention consists in a metal tail piece with an eye at one end, and with recesses, and a bar at the opposite end for the reception of the strings; the whole being constructed and applied to a violin.

*Claim*.—The metal tail piece A, with an eye *a*, adapted to the detachable pin *h*, recesses 1, 2, 3, and 4, for the reception of the strings, and with the rib *h*; the whole being constructed and applied to a violin, substantially as and for the purpose set forth.

No. 24,330.—SAMUEL M. RICHARDSON, of New York, N. Y.—*Improvement in Cutting Out Strap Hinges*.—Patent dated June 7, 1859.—This invention consists in constructing dies in such a manner that, as a strip of metal is fed into the press, the first blow punches the screw holes; also a relieving hole, which partially separates the strip at the point where the complete separation afterwards occurs, so that when said strip is slid along a gauged distance for the punches again to operate, a cutter completes the separation of the first hinge from the strip, while a properly formed die cuts the end of the hinge into the desired shape, and the relieving hole, previously punched, coming at the end of the hinge, separates the two pieces of scrap, allowing them to fall freely away from the press.

*Claim*.—The relieving die *d*, in combination with the shaping die *f* and cutter *g*, in the manner and for the purposes specified.

No. 24,331.—JOSEPH HALL ROHRMAN, of Philadelphia, Pa.—*Improved Dust Pan*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, a dust pan, having its bottom corrugated and its back edge seamed over, substantially as described, for the purposes of making the bottom of the pan rigid without extending any brace from the handle, and rendering unnecessary the wiring of the back edge of the pan.

No. 24,332.—CHARLES B. SAWYER, of Fitchburg, Mass.—*Improvement in Furnaces and Stoves*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the closed topped fire pots K, gas or combustion chamber X, fire or draft flues H, small gas openings *e*, and air-heating flues G, in relation to each other, substantially as shown and described.

Second. The arrangement of the horizontal ventilating flue J, ventilating chamber I, and exit ventilating flue O, and right angled draft flue F, in relation to each other and in the top of the furnace, as shown and described.

No. 24,333.—GEORGE SCHOTT and JOHN LOUDON, of New York, N. Y.—*Improved Spring Bed Bottom*.—Patent dated June 7, 1859.—This invention consists of a slat, with a hook at its end, combined with an India rubber or elastic band, passed through eyes on the bedstead; also, in forming projecting bearings on the undersides of the slats, in their middle or



at convenient points, in connection with a peculiarly formed intermediate bearing carrying an elastic strap.

The inventors say: We *claim* the arrangement of the eyes *d d*, elastic cord or strap 1, and hooks 2 2, on the ends of the slats *c c*, substantially as and for the purposes specified.

We also claim the studs 3 3 and 5 5, constructed and acting as specified, to sustain the slats *c c* on the strap or elastic cord 4, as set forth.

No. 24,334.—JOSEPH SEDGEBEER, of Cincinnati, Ohio.—*Improvement in Grinding Mills*.—Patent dated June 7, 1859.—This invention relates to the construction and arrangement of grinding teeth, which form the dress upon the grinding surface of iron mills.

The inventor says: I *claim*, first, constructing the rotating plate A, with the same dress or finish upon its grinding face as that of the stationary plate B, substantially as described, for the purposes set forth.

Second. I *claim* the diamond-shaped teeth *a b c e*, constructed and arranged substantially as and for the purposes set forth.

No. 24,335.—CHARLES W. SEELEY and BENJAMIN F. LOCKE, of Wellington, Ohio.—*Improved Manner of Securing the Bits of Bench Planes*.—Patent dated June 7, 1859.—This invention consists in adjusting a steel bit between the cap and bed piece, which cap and bed piece are similar to the common cap and plane bit now generally used, and usually designated as the double plane bit.

*Claim*.—Stopping the upper end of the interposed bit below the screw, and upsetting it so as to catch into the cross serrations in the bed piece, as set forth.

No. 24,336.—M. SEMPLE, of Philadelphia, Pa.—*Improvement in the Mode of Switching Off Railroad Cars from one Track to Another*.—Patent dated June 7, 1859.—The nature of this invention consists in switching the cars from one track to another by vertical inclined planes, and not by the bearing of the car wheels on the rails alone, as is now done by the movable switch.

*Claim*.—The immovable switch or turnout J P, in combination with the guide bars G, when arranged and operating substantially as described.

No. 24,337.—PETER SHANK, of Jefferson township, Ohio.—*Improved Machine for Raising Water*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the horizontal float wheel, the crank motion, (as produced by the three pins,) which gives six motions of the pump to one revolution of the wheel, and the horizontal double pump, substantially as described, for raising water.

No. 24,338.—DEXTER C. SLATER, of Lawrence, Mass.—*Improvement in Operating Machinery by Dog Power*.—Patent dated June 7, 1859.—This invention consists in the use of an inclined head wheel, shaft, cam, and lever, arranged for applying dog power to the propelling of light machinery.

*Claim*.—The arrangement and combination of the wheel G, shaft F, cam H, and lever I, substantially as and for the purpose set forth.

No. 24,339.—DE WITT STEVENS, of Newark, N. J.—*Improved Cheese Cutter*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the platform B, with the projecting rings *g*, to operate in combination with the corrugated cutting edge of the knife, substantially as and for the purpose described.

Second. The arc D, arranged in combination with the platform B, with the handle C, and with the knife F, so that the cheese on the platform can be cut up in slices of any given weight, substantially as set forth.

Third. The arrangement and combination of the lever I, the link J, and the slide G, for the purpose of operating the knife F, substantially as specified.

No. 24,340.—W. D. TEWKSBURY, of Cuylersville, N. Y.—*Improved Rocking Cradle*.—Patent dated June 7, 1859.—This invention consists in arranging on the side of a cradle a hinged arm with two prongs which rest on the floor, and this arm is attached to the escapement or verge of a clock work, and two escapement wheels, which receive motion from a common clock spring, are alternately arrested by coming in contact with the verge, so that they raise the cradle alternately on one side and then on the other; and that, by this arrangement, a rocking motion is imparted to the cradle.

*Claim*.—The two escapement wheels *h* and *k*, arranged in combination with the verge E and with the arm F, and operating substantially in the manner and for the purposes described.

No. 24,341.—ALFRED TICHENOR, of Newark, N. J.—*Improved Method of Printing Bank Notes*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, the making bank notes and other engraved plates, or sections of plates, with tongue and groove or dowel joints.

Second. The locking together tongue and grooved bank note or other engraved plates, by a "chase," having its sides formed with tongue and groove or with dowels made to match or correspond to the ends and sides of the tongue and grooved plate, which chase is made in pieces fitted together and furnished with set screws *e e*, substantially as described.

No. 24,342.—RUGGLES S. TORREY, of Bangor, Me.—*Improvement in Bee-Hives*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Providing the troughs in the tops of the comb bars, arranged with the series of conducting tubes for conveying the feed to the troughs, and with apertures or slots for the free exit of the moisture to the condenser, in the manner and for the purpose described.

No. 24,343.—WILLIAM S. WATSON, of Madison, Ind.—*Improvement in Brick Machines*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination and arrangement with a stationary pressing block *K*, of an intermittently reciprocating press box, formed with one or more chambers *I J*, and provided with one or more plungers *L L<sup>1</sup>*, having a joint motion with the press box and an independent movement thereto, essentially as and for the purpose set forth.

Second. The combination, with the intermittently reciprocating press box, of the top and bottom holding slides *b b<sup>1</sup>*, or either of them, arranged to move conjointly with the press box and independently of it, substantially as specified.

Third. Mounting the intermittently reciprocating press box with a feed box, having one or more chambers *M M<sup>1</sup>*, essentially as and for the purpose set forth.

No. 24,344.—T. F. WESTON, of Salem, Mass.—*Improvement in Machine for Finishing Leather*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination and arrangement of the devices herein described, or their mechanical equivalents, for changing the angle of the tool while the machine is in motion, so as to cause it to operate upon the latter, first with a sharp edge, to take out its inequalities, and then with a dull or blunt edge, to smooth the leather, the successive operations producing the peculiar effect desired, for the purposes as set forth.

Second. The arrangement of devices herein described for giving positive motions to the tool, for lifting it from and holding it down upon the bed, the same consisting of the sliding bar and friction box, operating as set forth.

No. 24,345.—ROBERT F. WHITE, of New York, N. Y.—*Improved Omnibus Register*.—Patent dated June 7, 1859.—This invention consists in arranging a spring platform in such relation to a hand lever, a bell and ratchet wheel, that whenever a passenger deposits his fare on the platform and pulls the lever, the platform flies out so that the driver can reach the money, he being advised of this fact by the stroke of a hammer against a bell. The number of fares received by the driver is registered on the index plate.

*Claim*.—The spring platform *B*, arranged in combination with the hammer *K* and with the index *k*, and operated by the lever *F*, or its equivalent, substantially in the manner and for the purpose specified.

No. 24,346.—JOHN M. WILSON, of Philadelphia, Pa.—*Improved Lock Attachment*.—Patent dated June 7, 1859.—This invention consists in a peculiar arrangement of the parts, in combination with an ordinary lock in such a way as to prevent the lock being picked, and also prevent access to its working parts, so that impressions in wax cannot be taken with the view of constructing keys to fit the lock.

*Claim*.—The arrangement, in combination with a lock *A a* and door *B d*, of the box *C*, keyholes *c b*, wards *e*, guard *E*, plate *F*, pivoted stops *G G h h i i*, and springs *H H*, the whole being constructed and arranged for united operation, in the manner and for the purpose set forth.

No. 24,347.—SAMUEL WISWALL, of Hyde Park, Vt.—*Improved Washing Machine*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination, within the oscillating cylinder *B*, of a receiving chamber *d*, having plates *e e*, and a door *f*, when said door *f* is corrugated on one side and hinged to one of the plates *e*, so that said door *f* may serve as a rubbing board and also as a presser; all substantially as shown and described.

No. 24,348.—JOHN YOUNG, of Joliet, Ill.—*Improvement in Cultivators*.—Patent dated June 7, 1859.—This invention consists in the combination of the screw extension *A*, on the bottom of the standard *B*, with the oblique slotted castings *C C*, attached to the front side of the cross bar *D* of the beam *E*; also, in the combination of the stationary vertically perforated bar *G*, with the adjustable rake or harrow *H*, arranged on a cultivator, whereby



the harrow teeth can be cleared of all obstruction by raising the rake or harrow, so that its teeth rise through the vertical perforations in the transverse bar.

The inventor says: I *claim*, first, the combination of the screw extension A, on the bottom of the standard B, with the oblique slotted castings C C, attached to the front side of the cross bar D of the beam E, substantially as and for the purposes set forth.

Second. The combination of the stationary vertically perforated bar G, with the adjustable rake or harrow H, arranged on a cultivator, substantially as and for the purposes set forth.

No. 24,349.—JOHN G. CLARK, of Augusta, Ga., assignor to Himself, D. G. COLTING, and SAMUEL W. HATCH, of said Augusta.—*Improved Burglar's Alarm Pistol*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a pistol arranged on a vertical suspension guide of a hammer, so that the explosion of its cap and the firing of its charges may be accomplished by concussions of the pistol and hammer, substantially as and for the purposes set forth.

Second. Holding the pistol suspended by the means and in the particular manner described, for the purpose set forth.

No. 24,350.—J. D. CUSTER, of Norristown, Pa., assignor to Himself and J. M. ROBERTS, of Perth Amboy, N. J.—*Improvement in Machines for Tempering Clay*.—Patent dated June 7, 1859.—This invention relates to an improvement in driving or propelling the wheel whereby power other than animal, such as water and steam, may be applied in a simple and economical way.

*Claim*.—The arrangement and combination of the stationary toothed rim O, encompassing the pit A, the frame H, with the gearing *k M l* attached to its outer ends; the pinion *b* of the shaft N gearing into the rim O, and the rod or shaft F connected with the frame H, the hollow shaft *g*, on the shaft B, and the belt *e i*, passing around the pulleys K *f h j*, substantially as and for the purpose set forth.

No. 24,351.—WILLIAM GOODSOE, of Manchester, Mass., assignor to Himself and ISAAC AYRES, of said Manchester.—*Improved Steering Apparatus*.—Patent dated June 7, 1859.—This improvement has for its object to enable the helmsman to secure his helm in position, and again instantly to release it, when required.

*Claim*.—The combination of the toothed segment M, and the curved way P, operating as set forth, for the purpose specified.

No. 24,352.—C. HARRIS and PAUL W. ZOINER, of Cincinnati, Ohio, assignors to Themselves and J. LANGSTAFF, of said Cincinnati.—*Improvement in Stoves*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination of the damper G, chamber *f*, double walled case *a*, and pipe E, substantially as shown, so that the damper G, which pertains to the oven, shall, when drawn out, extend across the bottom of the pipe E, and cause the products of combustion to circulate as described, and when closed, shall permit a more direct draft, for the purposes set forth.

No. 24,353.—GEORGE L. INGERSOLL, of Cleveland, Ohio, assignor to J. E. INGERSOLL, of said Cleveland.—*Improved Apparatus for Heating Water*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the double cylinder heater C C, the same being united by the plates G F H I, so as to form the space J J for the ascension of the heat, and by the pipes D E for the passage of the water, the heating space being covered by the cap K, and the parts here named being arranged as set forth.

I also claim, in combination with the two cylinders C C<sup>1</sup>, the ingress pipe O, extending to near the bottom of the cylinder C, the exit pipe O<sup>1</sup>, and the pipe N, in connection with the pipes D E, for the purpose of establishing a circulation and rapid heating of the water.

No. 24,354.—IRA MERRITT, of Abington, Mass., assignor to Himself and L. S. MERRITT, of South Weymouth, Mass.—*Improvement in Shoe Knives*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The described knife holder, in combination with an extensible blade, so arranged that as the blade is worn it may be protruded, as set forth, for the purpose described.

No. 24,355.—CHARLES MILLER, of St. Louis, Mo., assignor to HENRY DANFORD, of said St. Louis.—*Improvement in Spirit Gas Burners*.—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the valve over the tube and wick, for the purpose of extinguishing the flame, or regulating its size and altering its direction, in the manner set forth.

No. 24,356.—FELIX MILLER and ALOIS WIRCHING, of New York, N. Y., assignors to FELIX MILLER and H. H. HAYDEN, of said New York.—*Improved Diaphragm for Photographic*



*Cameras.*—Patent dated June 7, 1859.—This invention relates to the manner of operating a number of curved plates placed within a tube in front of the lens, so as to form apertures of different sizes for increasing or diminishing the intensity of light in the camera from the object in taking photographic pictures.

*Claim.*—The arrangement and combination of the plates  $a a^1$ , the notched plate C, and springs  $m$ , as and for the purpose shown and described.

No. 24,357.—JEDEDIAH MORSE, of Canton, Mass, assignor to the S. P. RUGGLES POWER PRESS MANUFACTURING COMPANY, of Boston, Mass.—*Improvement in Power Printing Presses.* Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the improvement in the construction of each of the platen rails  $x^3 a^3$ , the same consisting in the chute  $k$ , and a notch or depression  $l$  arranged therein, and with reference to the rollers or tapes, substantially in manner and for the purpose specified.

I also claim the arrangement and combination of the slider R with the operating cam and the pin or stud O on the rocker toggle, such slider being actuated by a foot treddle  $n$ , a spring  $\gamma$ , and the cam  $r$  of the toggle, substantially as described.

I also claim the mode of insuring the return movement of the toggles, and their gradual forward motion, after each impression has taken place, the same being accomplished by the notched wheel  $u$ , or its notch  $x$ , as described.

I also claim the mode of constructing the gears  $a^1$  and  $b^1$  for operating the frisket carrier, viz: with the toothed arcs  $c^1 c^1 d^1 d^1$  and the concave and convex arcs  $e^1 e^1$  and  $f^1 f^1$ , unprovided with teeth, the whole being arranged so as to operate together, substantially as specified.

I do not claim the subject of the United States patent No. 7,205, but I claim the combination of the two, or any other suitable number of wheels  $r^2 r^2$ , lever nippers  $t^2$ , (applied respectively to them,) and their opening and closing bars  $x^2 y^2$ , or mechanical equivalents for such bars, the same being substantially as and for the purpose described.

I also claim the specified mode of constructing each of the nippers  $v v$  for receiving the sheet of paper from the table G, viz: so that each jaw may move away from the other while the upper is being raised, the same producing the advantages, not only of insuring the passage of the lower jaw underneath the sheet of paper simultaneously with that of the other jaw over it, but of both jaws closing upon the paper at one and the same time so as not to lift it out of place.

I also claim the mode of constructing the lower jaw  $g^4$  of each pair of nippers  $v$ , viz: with a lip or bend  $h$  arranged thereon, and for the purpose described.

I also claim the mode of applying and operating each of the points  $l^2$ , viz: hinging or jointing it to the table G, and combining with it a stop  $m^2$  and lever  $k^2$ , or the equivalents therefor, the whole operating or being made to operate substantially as described.

I also claim the improved method of operating the frisket carrier, the same consisting in causing it to descend and pass in an inclined position under the delivering tapes and rollers while the nippers  $v v$  may be approaching the sheet table G, the same enabling the press to be made lower and shorter than when the frisket carrier is moved horizontally under the said delivering tapes or rollers.

No. 24,358.—WILLIAM NOYES, Jr., of West Newbury, Mass., assignor to S. C. NOYES & Co., of West Roxbury, Mass.—*Improvement in Machinery for Cutting Comb Teeth.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, in combination with the saw, or the same and its peripheral guide or guides, a mechanism or means of pressing or bending the saw laterally, substantially as and for the purpose specified.

I also claim the mode of producing the lateral and longitudinal movements of the carriage of the comb carrier, viz: by means of the cam and its screw thread periphery, arranged and operating in conjunction with a rack applied to said carriage, substantially as described.

No. 24,359.—LEWIS PLANER, of New York, N. Y., assignor to Himself and JOSEPH AUGER, of said New York.—*Improvement in Machines for Converting Oscillating Motion into Direct Circular Motion.*—Patent dated June 7, 1859.—This invention consists in a novel arrangement of a dog, a lever, and a spring, in combination with each other and the smooth rim of a wheel, whereby an oscillating movement, imparted to the lever by suitable means, causes the dog to operate with certainty to turn the wheel in one direction.

*Claim.*—The grooved dog F, having its tail resting in a recess  $b c$ , or equivalent resting place, in the lever E without being pivoted or otherwise attached thereto, and having a spring G applied in combination with it and the said lever, and the whole being applied and combined with the wheel A and its axle E, substantially as described.

No. 24,360.—THOMAS SHAW, of Philadelphia, Pa., assignor to Himself and JOHN C. BAILEY, of said Philadelphia.—*Improvement in Moulds for Pressing Glass.*—Patent dated June 7, 1859. This invention consists in forming on the plunger of glass moulds a shoulder coinciding with the upper edge of the recess in the base of the mould, and in limiting the downward move-



ment of the plunger, so that vessels or other glass articles pressed in the mould shall have a clear, smooth, and solid edge, and the article shall be invariably of the same thickness.

*Claim.*—Forming on the plunger B a shoulder *f* of a size corresponding to that of the upper edge of the recess in the base A of the mould, and limiting the downward movement of the plunger, so that the said shoulder shall coincide or be slightly below the said upper edge of the recess, substantially in the manner and for the purpose set forth.

No. 24,361.—JACOB J. SMITH, of Philadelphia, Pa., assignor to himself and I. HENRY PUGH, of said Philadelphia.—*Improved Plug Bedstead Fastening.*—Patent dated June 7, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a double plug fastening for bedsteads, consisting of two distinct parts A and A, so constructed as to be adapted for being driven or secured into the post and rail respectively, and also fitted with a wedge shaped dovetail tenon *d* and a corresponding groove *e*, operating together so as to cause the end of the rail to be drawn tightly against the post in the downward pressure of the said rail after they are connected together, all substantially in the manner and for the purpose set forth and described.

Second. I also claim making the post plug A<sup>1</sup>, with the inclined dovetail groove *g* across in one side of the same, so as to operate in combination with the wedge shaped tenon *e* on the rail plug A, substantially in the manner and for the purpose set forth and described.

No. 24,362.—ANTHONY WALLACH, of New York, N. Y., assignor to Himself and ADOLPH WALLACH, of said New York.—*Improvement in Hooks for Vest Chains.*—Patent dated June 7, 1859.—This invention consists in a clasping hook and bolting pin so fitted that there is no possibility of removing said hook so long as the parts remain perfect without drawing back and unbolting the clasping hook.

*Claim.*—The clasping hook *c*, in combination with the bolt *i*, in the body *b* of the vest chain hook, for the purposes and as specified.

No. 24,363.—PLEASANT ARMSTRONG, of Camden, Ala.—*Improved Washing Machine.*—Patent dated June 14, 1859.—This invention consists in the arrangement of the complete stationary rounds of the convex swing frame on two semi-circular lines of different diameters; also, in the arrangement of the journals of the shaft of the convex swing frame in the slots of the main standards of the box or tub, and in the slots of auxiliary perpendicularly sliding standards, which are arranged in guides against the outside of the main standards and pivoted by their lower ends to a treadle which vibrates up and down.

The inventor says: I *claim*, first, the arrangement of the complete stationary rounds of the convex swing frame on two semi-circular lines of different diameters, so that the rollers on the smallest semi-circle shall stand above and opposite the spaces between the rollers on the largest semi-circle, in combination with the arrangement of the stationary rounds of the concave, substantially as and for the purposes set forth.

Second. The arrangement of two auxiliary treadle standards with the main standards of the tub, in the manner described and for the purpose set forth.

No. 24,364.—JOHN A. BARRINGTON, of Fredericktown, Ohio.—*Improved Machine for Printing Addresses, &c.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a cylinder constructed with grooved ribs, or their equivalents, for holding forms of type, presenting them at a proper point to perform the office of printing, and afterwards allowing them to be delivered from the cylinder, substantially as described.

Second. In combination with the cylinder B, I claim the ribs *k*, arranged upon an endless chain in such manner as to receive the forms of type, as described.

Third. Securing the forms *i* within the ribs *b* in such manner as to present said forms properly for printing by means of the follower *j j n*, catch *j*<sup>2</sup>, and spring *j*<sup>3</sup>, substantially as described.

Fourth. Adjusting the forms of type for printing, and delivering them from the cylinder after printing, by means of a reciprocating bar, operating substantially as described, or its equivalent in effect.

Fifth. The inclined feed wheel W, constructed with adjustable spring conveyors *v v*<sup>1</sup>, and operating substantially as described.

Sixth. Regulating and adjusting the speed of the endless apron T by means of the inclined disk *t*, friction wheel *t*<sup>1</sup>, set screws V<sup>1</sup> V<sup>2</sup> V<sup>3</sup>, and crank screw V, all constructed, arranged, and operating substantially as described, for the purpose set forth.

No. 24,365.—VICTOR BEAUMONT, of New York, N. Y.—*Improved Gauge for Measuring the Pressure of Fluids.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, so arranging, respectively, dome-shaped elastic disks of one or more spring chambers in pressure gauges as that the pressure of steam or other fluid within said chamber is indicated by the motion of the disk or plate, which presents its convexity to the pressure.

Second. The manner, substantially as described, of guiding the free end of a spring consisting of one or more chambers, expanding by pressure from within, in order to prevent it from vibrating in any direction but that of its axis.

Third. In pressure gauges with a hollow spring chamber mechanism, I claim partially filling the space inside of chambers with a solid substance or substances, in the manner and for the purposes set forth.

No. 24,366.—JAMES M. BOTTUM, of New York, N. Y.—*Improved Instrument for Measuring the Strength of Watch Springs*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—An arbor, having a measuring spring affixed thereto, together with an index, substantially as described, and an attachment for attaching the hair spring to be measured, combined and arranged in the manner and for the purposes set forth, and constituting a ready means of determining the exact force of said hair springs, as specified.

No. 24,367.—WILLIAM OLAND BOURNE, of New York, N. Y.—*Improved Ore Separator*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a sieve bed, in which the opening or openings for the passage of the air or water through it are so contracted as to enforce an uniform action of the air or water through the entire surface of the sieve bed, which may be made of sheet metal, or of any textile material, either separately or in combination, or of their equivalent, as set forth.

Second. The application of a vibrating and shaking motion to a sieve bed, in combination with a blast or current of air or water, in the manner and for the purpose described.

Third. The described adjustable blades for agitating the substance, on the sieve bed and for regulating the discharge of the refuse substances over the front edge of the table, as described.

Fourth. The separation of metals or other heavy substances from ores or other materials, when upon a sieve bed, by the gravitation of the lighter substances towards and over the front or waste edge when acted upon by a current of air or water through a sieve bed, in the manner and for the purpose set forth.

No. 24,368.—E. C. BRACKETT, of Newton Corner, Mass.—*Improved Marine Hand Propeller*.—Patent dated June 14, 1859.—The oars are operated so as to be raised, or plunged into the water, by a lever H, which has its fulcrum near the top of the vertical beam B, the shorter arm of which extends out from the vessel and is pivoted to a connecting rod N, which is carried down and pivoted to a bent arm P, fixed at right angles to the line of the oar blades.

*Claim*.—The arrangement and combination of the adjustable oar B, arms D, oscillating shaft E, hinged blades F, rods G, arms K P, rod N, and lever H, as and for the purposes set forth and described.

No. 24,369.—WILLIAM BRAMWELL, of New York, N. Y.—*Improved Valve*.—Patent dated June 14, 1859.—This invention consists in combining with a swinging valve, a screw slide and connecting link, whereby the said valve can be turned up entirely out of the way of the passing current of fluid or liquid, or pressed down into its seat with the combined power of a toggle joint and screw.

*Claim*.—The sliding nut *k*, actuated by the screw *i*, in combination with the hinged valve *m* and the toggle links *l l*, substantially as specified.

No. 24,370.—JOSEPH FRANCIS BROUARD, of Havre de Grace, France.—*Improvement in Reefing Sails*.—Patent dated June 14, 1859; patented in France, February 2, 1855.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, supporting the rolling yard F (Fig. 12, sheet No. 3) between its points of suspension, by the hook N, the said hook being constructed and operated as described, for the purpose of staying the rolling yard and holding it in position, when the sail attached to it is acted upon by the wind, as set forth.

Second. The construction of the boom iron, shown in Fig. 9, sheet No. 3, for the purpose of placing the boom in position, to prevent the chafing of the sail, as described.

No. 24,371.—ROBERT BROWN, of New London, Conn.—*Improvement in Projectiles for Killing Whales*.—Patent dated June 14, 1859.—This invention consists of the flukes working on a pivot on the shank of the bomb, supported by the ribs and a projection on the flukes inserted into the flange that fits against the barrel of the bomb when screwed together, lines rove through the ribs on the shank at the lower or wad end, with a groove



or indentation along the bomb for the line, that it may be inserted into the gun with the bomb, and at the explosion of the bomb have the shank as a harpoon, with the line attached, in the whale.

*Claim.*—The flukes on the shank of the bomb, the line attached thereto, the groove or indentation in the barrel of the bomb, for the line, as stated.

No. 24,372.—J. S. BUTTERFIELD and SIMEON MARSHALL, of Philadelphia, Pa.—*Improvement in Self Priming Gunlocks.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the extension *g* on the carrier *c*; in the manner and for the purpose as substantially set forth.

Second We claim disconnecting each primer from the roll, with the raising of the hammer, in the manner and for the purpose substantially as set forth.

Third. We claim the adjustable centre projection *h h* and thumbscrew *q q*, arranged and operated in the manner and for the purpose as substantially set forth.

No. 24,373.—ROGER S. CADWELL, of Andover, Ohio.—*Improved Method of Attaching the Capping to Fence Posts.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The projection or tongue *A*, formed on the top of the post, in connection with the mortise *l* in the capping, for attaching the said capping to the post, and securing it by a batten, as described.

No. 24,374.—THOMAS CHAMPION and THOMAS MOTLEY, of Washington, D. C.—*Improved Mode of Fastening Letters to Sign Boards, &c.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the placing or casting on the back of letters projections with solid cast or wrought shanks therefrom.

We claim holes in said projections to fasten by screws, nails, or rivets, substantially as described.

No. 24,375.—ISAAC S. CLOUGH, of Brooklyn, N. Y., and SAMUEL R. BURRELL, of New York, N. Y.—*Improved Fly Trap.*—Patent dated June 14, 1859.—This invention consists in constructing a trap for the purpose of catching and retaining flies and mosquitoes

*Claim.*—The combination of the stationary cone, revolving catcher, and start and receptacle, when constructed as described and for the purpose specified.

No. 24,376.—THOMAS CRANE, of Fort Atkinson, Wis.—*Improved Sugar Cane Press.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the pressure rollers *B C* with the main bearing wheel *A* of a frame, which is so proportioned and supported that it can be rotated around a pivot post; but this I only claim when a fluid receiving vessel *a a*, conducting tube *i*, an annular channel *j*, and a delivery spout *k* are combined with the said frame, substantially in the manner and for the purpose represented and described.

No. 24,377.—SAMUEL S. CROCKER and GEORGE E. MARSHALL, of Lawrence, Mass.—*Improvement in Manufacturing Paper.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the combination of internally heated drying cylinders *a*, with a steam box, or boxes, arranged for the purpose of continuously first thoroughly drying paper, and then superficially moistening it, by the direct application of steam prior to the operation of calendering.

Second. The combination of a steam box or boxes, so arranged as to moisten paper superficially by the steam therein contained, with rolls, which calender by pressure as described.

No. 24,378.—CHARLES CROSSLEY, of Ellington, Conn.—*Improvement in Looms.*—Patent dated June 14, 1859.—My improvement consists in the application to a Brussels carpet loom of a peculiar combination and arrangement of devices, intermediate between the lay and the harness or heddles, the object of which is to throw the worsted or tuft-forming thread to the right and left alternately, over and above the cotton warp threads.

The inventor says: I *claim*, first, the combination of the series of vibrating tuft formers *K K<sup>1</sup> K<sup>2</sup>* and the vibrating reed *G H*, arranged and operating substantially as above described.

Second. The combination of the weights *3* and *4*, the knotted cord and slotted arm *5*, for the purpose of controlling the set-off of the tufting yarn beam, as described.

No. 24,379.—JOHN DAINES, of Birmingham, Mich.—*Improvement in Drain Tile Machines.*—Patent dated June 14, 1859.—The nature of this invention will be understood by referring to the claim and engravings.



The inventor says: I *claim*, first, the bar G and hooks D, in combination with the cross bar E, when used for the purpose of opening the lid C, automatically, as described.

Second. I claim the bar B combined with the frames M, in the manner mentioned, with the levers L, for cutting off the tile by the returning of the plunger.

No. 24,380.—HORACE B. DAVIS, of Lexington, Mass.—*Improved Horse Bracket*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The improved mode of fastening and confining it to the foot, by having the points of attachment bear directly upon the shoe, so as not to injure the ankle or fetlock by galling on the hoof by compression, and also the machinery by which the bracket is adjusted to the size of the foot, and held more firmly and securely than by any other mode of attachment now known.

No. 24,381.—E. R. DENNISTON, of Middletown, N. Y.—*Improved Milk Can*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As an improved article of manufacture, a milk can, having its cover C hinged to a flanch *f*, and provided with a plate *h*, stopper *k*, and having the guard hoop B attached to the body of the can *b*, all as shown and described.

No. 24,382.—PATRICK S. DEVLAN, of Reading, Pa.—*Improved Churn*.—Patent dated June 14, 1859.—G is the float, which consists of a wooden disk, perforated and having projections *g*, the whole so formed as to float and move up and down with the mass of cream when disturbed, and have many projections and surfaces to collect the particles of butter as they are formed.

*Claim*.—The employment in a churn, in which the cream is acted upon by a blast only of a float G, substantially as and for the purpose described.

No. 24,383.—CHRISTIAN H. EISENBRANDT, of Baltimore, Md.—*Improvement in Attachments to Locomotive Engines, for Removing Objects from the Track*.—Patent dated June 14, 1859.—This improvement consists in attaching to the front of a locomotive engine a suspension net work fender, connected with a lifting platform, provided with a hinged part or frame, forming a compound device, and having a stuffed cushion or inflated sack deposited thereon. This is intended to preserve life and remove obstacles from the track.

*Claim*.—The double suspension lifting platform, composed of the parts *c c c<sup>2</sup>, d d, e e, ff, gg, hh, J J, K K, L L, m m*, the yielding net work or flexible fender guard, or its equivalent *iii*, when constructed, combined, and arranged substantially in the manner set forth and described.

No. 24,384.—CHARLES FOSTER, of Eldridge's Hill, N. J.—*Improvement in Operating Switches on Railroads*.—Patent dated June 14, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The mode of operating switches by means of movable cams *i i*, or their equivalents, on the car, acting on a cam A, or its equivalent, connected by means of levers with the switch rail *c*, substantially as described.

No. 24,385.—H. B. GILL, of Ogden, N. Y.—*Improvement in Machines for Dressing Millstones*.—Patent dated June 14, 1859.—The arm *o* works on a longitudinal slot in the lever and is pivoted at *h*. The opposite extremity is formed of the segment of a circle, and passes through the end of the slide plate N. As the arm forms the place of contact with the cam M in actuating the lever G, the raising or lowering of it diminishes or increases the force of the blow, which is given in part by the aid of the lever and pick in falling.

*Claim*.—The combination and arrangement of the pivoted segmental arm O and slide N with the striking lever G and cam M, or its equivalent, substantially in the manner and for the purpose set forth.

No. 24,386.—THOMAS I. GOFF, of Warren, R. I.—*Improvement in Machines for Making Hay*.—Patent dated June 14, 1859.—This invention consists in the use of a gathering and a revolving rake fitted in a frame, which is mounted on wheels and arranged and combined, whereby the grass, as it is left by the mowing machine, may be expeditiously turned for the purpose of being properly cured.

*Claim*.—The combination of the gathering rake D and revolving rake E, when arranged for joint operation, substantially as and for the purpose set forth.

No. 24,387.—GEORGE D. GREENLEAF, of Chateaugay, N. Y.—*Improvement in Ventilators*. Patent dated June 14, 1859.—The object of this invention is to ventilate apartments that are heated by stoves, by allowing the impure air to escape into the pipe of the stove by which the apartment is heated, the impure air escaping through the stove pipe with the products of the combustion of the stove.



*Claim.*—In combination with the cylinder A, bell shaped casting G and plates B D, the cup J, and register *f*, for the purpose specified.

No. 24,388.—DEXTER D. HARDY, of Cincinnati, Ohio.—*Improvement in Rotary Engines.*—Patent dated June 14, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the rings  $e^1 e^2 e^3$ , operating in the described combination with the pipes *s s*, to pack the revolving shaft C in its connection with the stationary cylinder A, by the use of steam or water pressure, as explained.

Second. The combination and arrangement of the revolving shaft C, containing the receiving and discharge ports J K, with the stationary cylinder A B and valves E E, substantially as described.

No. 24,389.—HENRY HERSH, of Lancaster, Pa.—*Improvement in Horse Rakes.*—Patent dated June 14, 1859.—C is the frame which is attached to the axle to support the shafts D, cleaner frame E having an eye G formed by a clip surrounding the end of the frame, in the eye of which the axle B revolves; H are the teeth, which are of steel, one end on the one side of the axle bent downwards, and the opposite end bent upwards, or reversed, so as to form a letter S; the teeth are fastened to the axle by ordinary screws and staples, and revolve with the axle.

*Claim.*—The arrangement and combination of the S shaped teeth H, lock I, revolving axle B, and clearers M, as described and for the purposes set forth.

No. 24,390.—HENRY CHARLES HOWELLS, of New York, N. Y., and JOSEPH CHARLES HOWELLS, of Madison, Wis.—*Improved Omnibus Register.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the employment of a yielding platform to determine the value of the entry or fare, and, in combination with doors or equivalent devices, to secure the registration of persons standing upon it, previous to their ingress or egress, substantially as specified and set forth.

Second. We also claim the employment and use of the circular or segmental doors, or equivalent devices, having within the area of their action a yielding platform, operating substantially as set forth and specified.

Third. We claim, in combination with the yielding platform G, an operative lever N and vertical rod M and puppet Q, or their equivalents, substantially as set forth and for the purpose specified.

Fourth. We claim the pin or bolt *s*, in combination with the arm O, attached to the vertical rod M, or their equivalents, for communicating motion to the registering levers S and T, by the action of the jointed arm P, substantially as specified and set forth.

Fifth. We also claim the registering levers S and T, operated as set forth, or their equivalents, and in combination with the registering ratchet wheels U and V, and the spring pawls *m m*, together with the double dial X, for registering the whole or half entries or fares, substantially as set forth and specified.

Sixth. We also claim the stationary brushes, and the arrangement and combination of levers and rods, or their equivalents, for operating the doors and steps, substantially as set forth and described.

No. 24,391.—SOLON P. HUBBELL, of Unadilla, N. Y.—*Improvement in Sowing Machines.*—Patent dated June 14, 1859.—This invention consists in the arrangement and combination of devices for the purpose of sowing plaster, lime, and various kinds of grain.

The inventor says: I *claim* the combination of the bar I, having teeth W, angular notches X, and clearers V, with hopper D, its pins Y, and slide blocks O; the whole being constructed and arranged as and for the purpose set forth.

I also claim, in combination with the hopper D, pins Y, slide blocks O, and regulating plate E, the reciprocating bar F, with its clearers R R<sup>1</sup> and stirrers S; these several devices being constructed and arranged for operation conjointly in the manner and for the purpose described.

No. 24,392.—RICHARD HUMPHREYS, of Jonesborough, Tenn.—*Improved Tuning Key Board.*—Patent dated June 14, 1859.—This invention consists in combining, on a neat rectangular board, any desired number of octaves of properly tuned reeds, similar to those used in melodians, to represent a corresponding number of octaves of the natural scale of musical notation for the white keys of the pianoforte, and another set of correctly tuned reeds representing the semi-tones of the octaves first named for the black keys of the pianoforte, in such a manner as to enable the musician, by comparing the tones of his instrument with those of the key-board, to detect and correct the least departure from the correct tone.

*Claim.*—As a new article of manufacture, the described compound tuning reeds, necessary to represent the corresponding keys in the general scale of musical notations, substantially as described.



No. 24,393.—HENRY L. KENDALL, of Providence, R. I.—*Improvement in Wood Screws.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a wood screw, having a thread of a ratchet tooth shape, in combination with wide spaces between the convolutions thereof, on a stem cylindrical, or nearly so, and on a point of any suitable form; substantially as set forth.

I also claim making the threaded point of a wood screw in such a manner that the thread thereof (except the terminal convolution) shall be of the same, or nearly the same, depth on its upper and lower sides, to give the screw a firmer hold of the wood, especially on its first entrance, than it would have if the threads on the point were made of gradually less depth toward the apex, substantially as set forth.

I also claim so forming the thread of a wood screw that it shall be of the same depth on the upper and under sides, on the point and on the stem, (except the terminal convolution of the point, which is contracted rapidly in depth and width,) substantially as set forth.

No. 24,394.—DANIEL LEAVITT, of Chicopee, Mass.—*Improvement in Breech Loading Fire-Arms.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Effecting the locking and unlocking of the upwardly opening breech, and the starting of the same from its seat to open it, by means of a detached lever having a locking dog *f*<sup>1</sup> to enter a notch in the breech, and a toe *g* to act against the bottom of the breech, substantially as described.

No. 24,395.—JAMES S. McCURDY, of Brooklyn, N. Y.—*Improvement in Sewing Machines.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of a reciprocating needle with a pair of loopers, or their equivalent; the combination as a whole operating in such manner that each successive needle-loop is encircled by a tight coil of the thread of the preceding loop, substantially as described.

Second. The combination and arrangement of two loopers, substantially such as described, with a driver, operating substantially in the manner and for the purpose described.

Third. Constructing and operating one of the loopers in such manner that a supplementary movement is imparted to it while the other is at rest, for the purpose of tightening the stitch.

No. 24,396.—H. T. MERRILL, of Galena, Ill.—*Improvement in Musical Instruments.*—Patent dated June 14, 1859.—This invention consists in the employment, in combination with a vertically sliding name board, or board occupying the usual position of the name board, of a pianoforte or other keyed instrument, extending the whole length of the key board, of a fixed board called the gamut board, having represented upon it the base and treble staves, and the indicating letters of the notes arranged above their respective keys; said staff board being so arranged behind the name or its equivalent as to be exposed by sliding up, and concealed by sliding down the last mentioned board.

*Claim.*—The gamut board *C* applied above and behind the keys, in combination with a sliding name board *B*, or its equivalent, substantially as specified.

No. 24,397.—RUFUS S. MERRILL, of Lynn, Mass.—*Improvement in Lamps.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—In coal oil burners of otherwise ordinary construction, the combination with a flat wick tube, of the removable director, constructed as described, with inclined side walls and vertical ends, the latter being corrugated or grooved to fit the ends of the wick tube, as a means of securing the director to the wick tube, and for directing or conveying the heated vapors mixed with atmospheric air to the sides of the flame, substantially in the manner and for the purpose set forth.

No. 24,398.—LEMAN C. MINER, of Hartford, Conn.—*Improvement in Hanging Carriage Bodies.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the application of the double jointed shackle *H*, to the front axle, whereby the vertical position of the spring and axle is sustained, and the fifth wheel and appendages dispensed with.

Second. The back axle braces with double joints *B B*, to admit a free and easy vertical motion of the springs and supporting the axle in its upright position, substantially in the manner as described.

No. 24,399.—ELY MOORE, of Slabtown, S. C.—*Improvement in Ploughs.*—Patent dated June 14, 1859.—This invention consists in attaching to the common plough beam *A* of wood, an elongated iron brace *B*, terminating at one end in a clevis *C* at the end of the beam, and at the other in an iron foot *D*, which takes the place of the wooden foot *E* in the common plough.



*Claim.*—The arrangement of the beam A, brace B, clevis C, foot D, stock E, and ring F, the whole being constructed as described for the purposes specified.

No. 24,400.—JAMES D. OSBORN, of Constantine, Mich.—*Improvement in Machines for Binding Grain in Bundles.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A binding knot composed of three loops passed through each other, when said passing of the loops through each other is effected by machinery driven or moved from any of the moving parts of a harvesting machine, and whether accomplished by the means herein stated, or by their substantial equivalents.

No. 24,401.—DUBOIS D. PARMELEE, of New York, N. Y.—*Improvement in Vulcanizing Caoutchouc.*—Patent dated June 14, 1859.—In preparing the composition used in this invention the inventor says: I take caoutchouc, or gutta percha, or their compounds, masticated and mixed with sulphur, according to any convenient method known or practiced heretofore, and after shaping the same into any desired form, I immerse it in a solution either of the coal of naphtha, bisulphuret of carbon, chloroform, or sulphuric ether, saturated with bromine.

*Claim.*—The preparation and use of the ingredients described with bromine, whether combined or not with sulphur, substantially as described and for the purposes set forth.

No. 24,402.—A. P. PITKIN, of Hartford, Conn.—*Improved Steam Pressure Regulator.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the forming a connection with the reduced pressure pipe or chamber A, and diaphragm spring or piston B, or their equivalents, for the purpose of opening and closing a passage C, between the high and reduced pressure pipes or chambers A and D, as and for the purpose described.

Also, the combination of passage C, piston or valve E, rod I, lever F, diaphragm spring or piston B, and safety valve H, arranged to operate in relation to each other as and for the purpose described.

No. 24,403.—R. B. PRINDLE, of Coventry, N. Y.—*Improvement in Devices for Securing the Clevis to Ploughs.*—Patent dated June 14, 1859.—This invention consists in a method of fastening clevises to plough beams.

*Claim.*—The arrangement of the pin C, feather or rib *c*, spaces *e e*, clevis B, beam A, and groove *a*, as described, for the purposes set forth.

No. 24,404.—JOSEPH HOFFACKER and JOSEPH RICHARDS, of New York, N. Y.—*Improvement in Keys, &c., for Piano Fortes.*—Patent dated June 14, 1859.—This invention consists in improvements of the finger keys and of the action of the piano forte.

The inventors say: We *claim*, first, the construction of the key board, by substituting, instead of the usual keys, knobs connected with the main levers, substantially as described.

Second. The pivoted rod *a*, in combination with the main levers *m*, substantially as described.

Third. The construction of the damper O, substantially as set forth.

Fourth. The construction of the trigger *n*, and its action on the damper O, substantially as described.

Fifth. The construction of the hammer *s*, and its action in combination with the principal lever *m*, substantially as described.

No. 24,405.—DANIEL J. RIKER, of Harlem, N. Y.—*Improvement in Clips for Carriage Thills.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Extending the plate *c* of the carriage clip, in the form of a spring, to the eye of the shafts, and causing said spring to operate on the aforesaid eye, in the direction of the pull, to keep the parts of the bolt and eye in contact, for the purposes and as described.

No. 24,406.—JOHN N. SAWTELL, of Chicopee, Mass.—*Improvement in Speeder and Stretcher Flyers.*—Patent dated June 14, 1859.—A description of this invention is too long for a place in this publication. (See engravings and specification.)

*Claim.*—The new article of manufacture described for a flyer for spinning frames, when constructed essentially in the manner and for the purposes set forth.

No. 24,407.—NOAH SEITZ, of Mellmore, Ohio.—*Improvement in Ventilating Corn Houses.*—Patent dated June 14, 1859.—This invention consists in a certain combination of devices, whereby a free passage of air through the body of the corn is obtained, and rats and other vermin excluded.

*Claim.*—The arrangement of the openings O and O<sup>1</sup>, with the wire grating, in combination with the secondary perforated floor *d*, lathing *c*, and ventilator *f*, substantially as and for the purposes set forth.



No. 24,408.—ALEXANDER SHOEMAKER, of Carey, Ohio, assignor to JAMES G. HUNT, of Reading, Ohio.—*Improved Saw Set*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the adjustable arm O, with the fingers and adjusting screw, in combination with the spring trip hammer.

I also claim the spring I, and the trip hammer, in combination with the adjusting frame L, and rollers N N, and adjusting screws; these several devices I claim, when arranged substantially as set forth for the purposes described.

No. 24,409.—ISAAC C. SHULER, of Amsterdam, N. Y.—*Improvement in Constructing Sheet Metal Coffins*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of strengthening the lower part of a sheet metal coffin, by folding over and soldering together, consecutively in several thicknesses, the surplus metal of the sides and ends of a sheet metal tray *c*, forming a rim all round the outside circumference of the base, and fastening the walls of the coffin firmly thereto. I claim, also, the arrangement of fastening to the under side of this tray, or bottom of the coffin, the frames *b b*, for the purpose of stiffening it.

Second. The arrangement of placing on the inside of a sheet metal coffin a metal tray *d*, with scrolled edges, which rests on a flange formed by turning in the walls of the coffin all round their lower edges, and fastening this tray firmly thereto and also to the walls, for the purpose of strengthening the structure. I also claim the bars *b*, for strengthening this tray.

Third. The arrangement of scrolling, or folding outwardly, and soldering, consecutively, each fold of the surplus edges of the walls of a sheet metal coffin, forming a rim all around the upper edge of the walls, for the purpose of strengthening and securing the same in straight lines for jointing, substantially as described.

Fourth. The arrangement of forming on the inside of the upper edges of the walls of a sheet metal coffin, a scrolled rim on the piece *e*, for the purpose of more firmly supporting the air tight cover, and also for the purpose of securing the cover by screws as well as by solder when desirable.

Fifth. The arrangement of fastening on the outside of a sheet metal coffin between the stiffening rims of the upper and lower edges of the walls, the studs or pillars *o*, at the corners and along the sides and ends in any required number, according to the size of the coffin, for the purpose of stiffening the sheet metal, in order that the structure may sustain a heavy weight.

Sixth. The arrangement of scrolling and soldering together the surplus edges of the air tight cover of a sheet metal coffin, and beading the same, which, on being turned under, serves to fit the grooves *i*, as well as to stiffen the cover; also the stiffening bars *b*, substantially as described.

Seventh. The arrangement of pressing a recess in the sheet metal all round the windows of a sheet metal coffin for receiving and supporting the glass. I also claim the arrangement of supporting the glass, by a flange formed by the extension of a second inside sheet of the double cover.

Eighth. The arrangement of fastening the glass in these recesses, by means of metal sashes fastened to the coffin lid, as described.

Ninth. I claim the flanges formed on the outer edges of the sheet metal blinds *m m*, for the purpose of closing around the metal sash, and securing the glass from the intrusion of dust and from other annoyances.

Tenth. I am aware that I have claimed the bisection of a hinged cover for the joint of the lid of a sheet metal coffin, according to the brakes in the side walls; I claim the cover *j*, as applicable to a coffin with straight side walls, in two hinged sections, as described.

No. 24,410.—ANDREW SIMMONS, of Nora, Ill.—*Improvement in Seeding Machines*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the boxes T, in relation to the agitators C, plates N and O, and in combination therewith the hollow drill tooth V, the several parts being so constructed as to form a broad cast seed planter and drill.

No. 24,411.—AZEL SMITH, of Westfield, Ohio.—*Improvement in Cultivators*.—Patent dated June 14, 1859.—This combined plough and cultivator is so constructed that it may be readily changed from one form of cultivator to another, or to several kinds of ploughs.

*Claim*.—The adjusting brace plates C C, frames B B, and cutters D D, when arranged as described, and in combination with the adjustable mould boards.

No. 24,412.—JOHN M. SPOONER, of Springfield, Mass.—*Improvement in the Construction of Sled Runners*.—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Making both of the runners and the bearers of a sled or sleigh, or other similar vehicle, of one continuous piece or rod of steel or other metal, substantially as set forth.



No. 24,413.—ENOS STIMSON, of Plainfield, Vt.—*Improvement in Seeding Machines*.—Patent dated June 14, 1859.—The inventor says: By this invention two different kinds of seed may be sowed simultaneously, one broadcast and the other in hills or drills. Turnip seed, for instance, may be sowed broadcast, while wheat or rye is sowed in drills, and either the broadcast distributor or the other may be used separately, when desired, by throwing the respective driving parts out of gear.

*Claim*.—The arrangement and combination of the shaft F, box E, shaft M, arm O, and box N, as and for the purpose shown and described.

No. 24,414.—WILLIAM MONT STORM, of New York, N. Y.—*Improvement in Breech Loading Fire-Arms*.—Patent dated June 14, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* such an arrangement of the links, as described, and their connection with the breech piece and lever, that they shall jam forward and firmly hold the former against the rear of the bore of the barrel after it has ceased its motion transversely to the latter, and, *vice versa*, release the breech piece (in opening the breech) before its momentum commences.

Second. I claim the perforated breech piece, in the manner and for the purpose described.

Third. I claim arranging the horn or head of the hammer, in the manner and for the purpose described.

No. 24,415.—R. SUTTON, of East Avon, N. Y.—*Improvement in Running Gear of Sleds*.—Patent dated June 14, 1859.—The back bolster F is braced at each end by a rod *o*, said rod being attached to opposite sides of the collar G, and the front ends of the back runners are connected by the curved rods *p p* with the collar G, said rods being pivoted to the collar, and having journals *q* at their back ends, which are fitted loosely in the back runners.

*Claim*.—The arrangement and combination of the sliding collar G, rods *o*, reach E, sliding bolster F, pendants *i*, links *j*, and runners B, as shown and described.

No. 24,416.—ISAAC C. TATE, of New London, Conn.—*Improved Stop Cock*.—Patent dated June 14, 1859.—This invention consists in the application of a spring, or its equivalent, placed in the centre division to raise the package or valve from its seat.

*Claim*.—The application of the spring A, in the manner substantially as set forth and described, and for the purpose described.

No. 24,417.—LEWIS C. TERRY, of Chenango, N. Y.—*Improvement in Whiffletree Hooks*.—Patent dated June 14, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* a hook, pivoted or hinged to its supporting eye, which is cut away or flattened on its back, in the manner described, so that the point of the said hook, being in contact, or nearly so, with its said holding eye, will securely confine a link, a ring, a staple, a trace, or similar object, in all positions, excepting when turned back upon the said flattened or eccentric part of the eye, substantially as set forth in my description.

I also claim the right, in addition to the above, to so construct the hook and eye that the hook shall have but one motion, viz: a horizontal motion directly around the circle formed by the said eye, so that the said hook shall not drop or work from side to side; and the exclusive right to use the same in either or both the forms above mentioned and described, for all purposes for which they may or can be used, when constructed substantially as set forth.

No. 24,418.—JOSEPH THIRLWELL, of Galesburg, Ill.—*Improvement in Cultivators*.—Patent dated June 14, 1859.—At the extreme end of the frame A, a chain is passed over the tongue and fastened to the frame on each side, for the purpose of raising the cultivator from the ground when a change of position is required. Upon the underside of the frame are six teeth, three on each side, with shanks passing up through the frame and secured by nuts at the top. Also a brace extends back from each tooth and is secured to the frame by a bolt or otherwise.

*Claim*.—The arrangement of the frame A A, the iron bows B B, the hinge bow C, the tongue braces D D, and fitting chain F, when constructed and used in combination for the purposes set forth.

No. 24,419.—FRANKLIN VEAL, of Hallettsville, Texas.—*Improvement in Seeding Machines*.—Patent dated June 14, 1859.—This invention consists in arranging the hopper box and a harrow and smoothing roller in such a manner that all of them, or each for itself, can be operated from the driver's seat, the hopper box being hinged and provided with a lever, whereby the box can be brought in such a position that the flapboard or valve is not opened by the cam, or that the same is opened for the purpose of discharging seed, and the harrow is suspended from a rope or chain in such a manner that the same can be lifted clear from the ground by means of a hand lever.

The inventor says: I *claim*, first, the arrangement of the windlass K, the hand lever H,



and the lever N, in combination with the smoothing roller L, the hopper F, and the harrow M, and in such relation to the driver's seat I that they can be operated from the same, substantially as and for the purpose described.

Second. The combination of the fan cylinder  $ff^1$  with the hopper, substantially as and for the purpose described.

No. 24,420.—DAVID WARREN, of Gettysburg, Pa.—*Improvement in Railroad Car Couplings* Patent dated June 14, 1859.—This invention consists in the employment of a rock shaft beneath one of the trucks, to which are attached depending arms, which, by contact with the rails in event of the departure of the car from the same, will turn the shaft and lift the other arm connected with the coupling bolt, so as to separate the cars.

*Claim.*—The arrangement of the adjustable plate  $a$ , as constructed with the pin  $b$ , arm A, rock shaft R, and guards B when the same are operated and used substantially in the manner and for the purpose set forth.

No. 24,421.—LYMAN WHITE, of Davenport, Iowa.—*Improvement in Rock Drills.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, placing the bearings  $e$  of the shaft D, to which the box M and drill carriage N are attached, in bars C C, which are fitted in annular parts  $c$  of the supports B and arranged substantially as shown, so as to admit of the facile adjustment of the drill P to any angle or position required.

Second. The employment or use of the racks E on the bars C C, in connection with the wheels F G on the shaft D, the screws H attached to the sliding bearings  $e$  by the bars  $f$ , the wheels I on the upper ends of the screws H, and the pins  $o^1$  on the cranks J, the whole being arranged substantially as shown, to feed the drill to its work.

No. 24,422.—GILBERT YATES, of West Dresden, N. Y.—*Improvement in Car Couplings.*—Patent dated June 14, 1859.—The inventor says: To use my invention, put the coupling link into one of the coupling pieces of one car, then take hold of the downward part of the rod B and turn it upward, thereby raising the coupling pin up; then run the cars together and let loose the rod, and the coupling pin will drop into its place and the cars will be coupled together.

*Claim.*—The combination of the chains H H, clasps J J, with the bent and lifting rods B B, grooved parts C C, and chains H, arranged in relation to each other, substantially in the manner and for the purposes set forth.

No. 24,423.—WILLIAM ZIMMERMAN, of Quincy, Ill.—*Improvement in Grain Hulling Machines.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The conduits arranged to receive the grain scoured or operated upon by the first or each revolving scourer, when operated on a horizontal shaft, and conduct it to the centre or central part of the second or next revolving scourer, and so on in succession through the whole series of scourers, until it passes out of the machine.

No. 24,424.—DANIEL D. BADGER and WILLIAM S. SAMPSON, of New York, N. Y., assignors to DANIEL D. BADGER, aforesaid.—*Improvement in Grain Bins.*—Patent dated June 14, 1859. The lower part of the bins A rest upon arches B C, composed of brick, stone, or iron, which arches are placed one above the other, the upper surface of the upper arches B being so fashioned as to form conical bottoms for the bins, and also conical bottoms for the spaces  $A^1$  between the bins. The centres of these conical bottoms are provided with apertures D through which the contents of the bins and spaces are discharged, the apertures being provided with suitable valves for that purpose.

*Claim.*—The arrangement and combination of the metallic bins A, in the manner and for the purposes substantially as shown and described.

No. 24,425.—JOHN E. COFFIN, of Portland, Me., assignor to A. F. GERRISH, of said Portland.—*Improvement in Machines for Shaping the Backs of Books.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the sliding holding jaws and the reciprocating roller carriage, substantially as described.

Second. Combining the toggle mechanism which operates the clamping jaws and the screw which operates the roller carriage with a cam and pulley, or its equivalent, on the same shaft, in such manner as to make a machine for shaping the backs of books, which is perfectly continuous and automatic in its operation, and to and from which the books only require to be introduced and removed by the attendant at the proper stage in its operation, substantially as described.

No. 24,426.—JOSEPH W. COX, of Malden, Mass., assignor to HORACE H. DAY, of New



York city.—*Improved Machine for Cutting India Rubber into Threads.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, in combination with the concave rotary cutter, substantially as described, the employment of a tube placed in the concavity thereof, substantially as described, for the discharge of a jet of water against the cutting edge, as described.

Second. I also claim the carriage, with its divided clamps and follower, substantially as described, in combination with a rotary cutter, substantially as described, or any equivalent cutter, for the purpose set forth.

Third. And, finally, I claim, in combination with the carriage, clamp, and follower, the mechanism, or any equivalent thereof, for operating the follower, substantially as described.

No. 24,427.—DANIEL DUNHAM, of Pawtucket, R. I., assignor to D. D. SWEET, JAMES BROMILY, and E. W. FRENCH, of said Pawtucket.—*Improved Machine for Boring Blind Slats.*—Patent dated June 14, 1859.—This invention consists in arranging a rack made of a series of converging slats, in such relation to the sliding carriage on which the blind slats or other similar articles are fastened for the purpose of laying out the spaces for holes or mortises, that the length of these spaces can be regulated by moving the rack in or out, and that the carriage can be adjusted by means of a suitable gauge to correspond to different spaces; and the sliding carriage is arranged in such relation to the boring or mortising machine, that by the operation of the treadle which serves to depress the augur or chisel, the dog which retains the rack in its position is released and allowed to follow the action of a weight, and to move the distance of one space.

The inventor says: I *claim*, first, the rack J, or its equivalent, arranged in combination with the sliding carriage F, and with the dog o, as described.

Second. The lever M, arranged with the nose  $p^1$ , in such relation to the treadle D, that by its action the dog o is operated, as specified.

No. 24,428.—BENNET HOTCHKISS, of New Haven, Conn., assignor to Himself and F. S. COLLINS, of said New Haven.—*Improvement in Trip Hammers.*—Patent dated June 14, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my improved means of operating the hammer; that is, by an air spring cylinder, substantially as described, or its equivalent, applied to the piston and combined with mechanism, by which a rapid reciprocating rectilinear motion may be imparted to such cylinder, essentially in manner and so as to operate the piston and hammer as specified.

I also claim, in combination with the piston trip hammer, the air spring cylinder and the mechanism for imparting to the latter reciprocating rectilinear motions, as described, mechanism substantially as specified, for varying the altitude of the path of movement of the cylinder under circumstances as explained, such mechanism, as above described, consisting of an eccentric bearing shaft H, applied in boxes I I, and to the crank shaft G of the cylinder B, substantially as specified.

No. 24,429.—JOB JOHNSON, of East Brooklyn, N. Y., assignor to CHARLES D. ARCHIBALD, of London, England.—*Improvement in Composition for Cementing Iron.*—Patent dated June 14, 1859.—The inventor says: I take quick and caustic lime, free from earthy or foreign substances, and add to it an equal quantity of bone dust, or baked bones finely divided, and a like quantity of charcoal, of which I prefer oak. I then mix these ingredients intimately, and expose them to the influence of the weather for one or two days, according to the hygrometric condition of the atmosphere, dry weather being most favorable.

*Claim.*—The combination and use of lime, bone dust, and charcoal, in the manner and for the purposes substantially as described.

No. 24,430.—FRANCIS MILWARD, of Cincinnati, Ohio., assignor to H. HOMAN, W. L. THOMAS, and D. D. HARDY, of said Cincinnati.—*Improvement in Spinning Tops.*—Patent dated June 14, 1859.—This invention is a philosophical toy, designed to illustrate, in a compact and inexpensive form, various motions and forces incident to gyroscopes and to spinning tops.

*Claim.*—A combined gyroscope and spinning top, constructed and operating substantially in the manner set forth.

No. 24,431.—DANIEL NICHOLS, of Onarga, Ill., assignor to CHARLES RUMLEY and EDWARD RUMLEY, of said Onarga.—*Improvement in Seeding Machines.*—Patent dated June 14, 1859.—This invention consists in combining with a plough a seed planter, so arranged that it can be made adjustable according to the depth to which the seed is to be planted, at the same time adapting itself to the irregular surface of the ground and the motions of the plough in turning over the sod.

*Claim.*—The combination and arrangement of hinged bars E H, slotted arc I, driving wheel J, and auxiliary seed hopper F, when the same are arranged and operating in the manner and for the purposes specified.



No. 24,432.—JOHN S. PALMER, of Providence, R. I., assignor to Himself and CHARLES S. CAPRON, of said Providence.—*Improvement in Rolling Metal for Jewelry.*—Patent dated June 14, 1859.—This invention consists in arranging a tapering die with a suitable groove in such a manner that when the stock is placed on the same, and it, together with the die, is passed through between a pair of pressing rollers, these rollers take first on the middle of the groove, and it is drawn out towards one end and formed as directed by the groove, and by turning it the other end is rolled out in the same manner.

*Claim.*—The employment of a tapering die A in combination with the pressing rollers, substantially as and for the purpose specified.

No. 24,433.—E. T. QUIMBY, of New Ipswich, N. H., assignor to Himself and NEWTON BROOKS, of said New Ipswich.—*Improved Attachment for Alarm Clocks.*—Patent dated June 14, 1859.—The object of this invention is to arrange a clock in such a manner that it can be adjusted to give a warning at certain given intervals.

*Claim.*—First, the wheel A, or its equivalent, having a series of projections *a* which, or some of which, can be covered up or removed, and operating in combination with the hammer B, substantially as and for the purpose described.

Second. The arrangement of the slides F to operate in combination with the wheel A and with the hammer B, substantially in the manner and for the purpose specified.

No. 24,434.—GEORGE W. RICHARDSON and JAMES W. WHITE, of Grayville, Ill., assignors to Themselves and GEORGE M. WEED, of White county, Ill.—*Improvement in Corn Harvesters.*—Patent dated June 14, 1859.—This invention consists in the combination of screw threaded terete rollers, flaring plates or guides, vertical flanges, and gathering wheels.

The inventors say: We *claim* the combination of the gathering wheels L L, terete rollers H H, stripping plates M, and guide plates N, as set forth.

And we also claim the combination of the fender or guide plates N meeting the points of the rollers H, with the terete rollers and stripping plates, as set forth.

No. 24,435.—ROBERT ROSS, of St. Albans, Vt., assignor to Himself and GEORGE J. STANARD, of said St. Albans.—*Improved Water Wheel.*—Patent dated June 14, 1859.—This invention consists in having a gate fitted in the water passages of the wheel, and arranged so that the dimensions of said passages may be varied by an ordinary regulator or governor, and the speed of the wheel rendered uniform.

*Claim.*—The plate or gate F placed within the water passages *a* of the wheel provided with the vertical projections *f* at the issues *e*, and attached to the rod E within the shaft C of the wheel, substantially as and for the purpose set forth.

No. 24,436.—HENRY WEBB, of Cincinnati, Ohio, assignor to S. L. WILDER, of said Cincinnati.—*Improvement in Railroad Bars.*—Patent dated June 14, 1859.—This invention relates to certain improvements in the construction and arrangement of railway bars, by means of which the use of chairs is dispensed with, and a desirable elasticity is given to the track.

*Claim.*—The angular rail herein above described, when constructed so as to be convertible and present a new surface after the first surface has been worn out, in the manner and for the purpose specified.

No. 24,437.—THOMAS BAILEY, of New Orleans, La.—*Improvement in Actuating the Movable Parts of Fire-Arms.*—Patent dated June 14, 1859; patented in England, December 3, 1858.—The claim and engravings explain the nature of this invention.

*Claim.*—Combining a toothed wheel or pinion on a travelling centre and working between guides, with a pair of racks, one of which is stationary and the other movable, having connected to it the part of the fire-arm to be moved, the toothed wheel changing its position or travelling in the same place with the guides, substantially as set forth.

No. 24,438.—JOHN K. BARNEY, of Warren, R. I.—*Improved Instrument for Gauging Casks.*—Patent dated June 21, 1859.—The claim and engravings explain this invention.

*Claim.*—The calliper rod, fig. VIII, the slides IX and X, the triangular calliper, bracket, and pins, as described, and their combinations in the instrument, by which the true diameter at the bung can be obtained however thick the sediments therein may be. The inventor says: I do not confine myself to the particular manner of confining the parts in the instrument, but to the principles of construction of the instrument.

No. 24,439.—RICHARD C. BRISTOL, of Chicago, Ill.—*Improvement in Slide Valves for Steam Engines.*—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the construction and arrangement of the partial rollers E, when sustained in their respective positions, substantially in the manner and for the purposes set forth.

I also claim the described arrangement of the supported back piece B, loose face piece A,



cut off means D, and the united passages *a b a b* in the respective parts A B, whereby the parts A B are allowed to work to a limited extent relatively to each other without effecting the action of the steam, nor allowing an escape of the same through the joint.

I also claim, in connection with the above arrangement of the several parts, the described method of adjusting the parts A B relatively to each other; that is to say, working the parts A B for a period in a free relation and then tightening the union by the set screws C C, or their equivalents, until it becomes rigid, substantially as shown and described.

No. 24,440.—JOHN BURGE, of Terre Haute, Ind.—*Improvement in Sugar Mills*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination and arrangement of one large and two or more small cylinders with the strippers for stripping the leaves off the cane and the scraper or separator for cleaning the cylinder and carrying off pressed cane, the whole constructed and operating as and for the purpose substantially as described.

No. 24,441.—WILLIAM BURTON, of Cazenovia, N. Y.—*Improved Double Seaming Machine*. Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the use of a working head in combination with a disk or "former," when arranged to produce an outward or eccentric draft, and at the same time accomplish the turning down of the double seam, substantially as and for the purpose set forth.

Second. The working head *a b c d*, in combination with the shaft, which is adjustable up and down, and supports a taper or straight sided "former" or disk, and with the working head frame adjustable longitudinally, substantially as and for the purposes set forth.

No. 24,442.—O. S. CAMP, of Fairfield, Iowa.—*Improved Boiler*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A boiler made of double walls and a single top and bottom, said top having flanges to fit against each wall, and the communication between the interior of the inner boiler and the space between the walls being made by closed passages, such as described.

No. 24,443.—MARION CARPENTER, of Cincinnati, Ohio.—*Improvement in Railway Chairs*.—Patent dated June 21, 1859.—This invention consists in the construction of the chair and the parts contained therein for sustaining the elastic cushion and metal follower.

*Claim*.—The combination of the lugs *h h k k* with the base piece S for sustaining the elastic cushion and its follower in the manner and for the purpose set forth.

No. 24,444.—JAMES W. CHAPMAN, of Trinity Spring, Ind.—*Improvement in Sugar Mills*.—Patent dated June 21, 1859.—This invention consists in the arrangement of two or more compressing wheels or cylinders in pairs, so that they can have a lateral adjustment and be brought closer together and separated at pleasure while the machine is in motion.

*Claim*.—The combination and arrangement of the forked lever crushing wheels B B, bearings and table or bed timber, the table being prepared with notches to receive the projections on the seat of the bearings and key wedge, substantially as set forth.

No. 24,445.—C. G. CONOVER, of Jefferson, Wis.—*Improved Shingle Machine*.—Patent dated June 21, 1859.—This invention relates to certain improvements in that class of shingle machines in which the shingles are rived or cut from the bolt by means of a reciprocating knife, and has for its object the riving of the shingles from the bolt, the tapering of them in proper form, and also the jointing of them by a novel automatic mechanism.

The inventor says: I *claim*, first, the employment or use of the fence F, in combination with a reciprocating splitting knife O, and reciprocating or shoving plate N, arranged to operate substantially as and for the purpose set forth.

Second. The reciprocating splitting knife O, shoving plate N, tapering knives E E, jointers *o*, and clamp K, combined and arranged to operate substantially as and for the purpose specified.

Third. Operating the bolt carriage G, by means of the revolving arm I, on the shaft B, and the obliquely toothed rack *a*, at the underside of the carriage G, substantially as described.

No. 24,446.—REUBEN DANIELS, of Woodstock, Vt.—*Improvement in Straw Cutters*.—Patent dated June 21, 1859.—The feed roller D extends across the feed box B, near its discharge end and its axis *a* is fitted in a swinging or adjustable frame E, which works on pivots or centres *b*, at the sides of the framing A. The feed roller is formed of a cylinder *c*, the periphery of which is provided with teeth *d*, placed in longitudinal and parallel rows, the teeth of alternate rows being in line with each other circumferentially with the cylinder *c*, while the teeth of the intermediate rows are also in line with each other and with the spaces between the alternate rows first mentioned.

The inventor says: I *claim*, first, the combination, with the roller D, of the convex teeth *d*,



having the major diameter of their bases arranged parallel with the axis of the roller D, as and for the purpose shown and described.

Second. The arrangement and combination of the roller D, cutter C, and cylinder E E<sup>1</sup>, substantially as and for the purpose shown and described.

No. 24,447.—NATHANIEL EAMES, of Hanover, Pa.—*Improvement in Machines for Hulling Clover*.—Patent dated June 21, 1859.—This invention consists in the construction and arrangement of different kinds of a clover huller.

*Claim*.—The combination of the screen D with the cylinder B, when said cylinder is provided with a spiral groove *i i*, and a spiral strip of rubber H, the same being constructed, arranged, and operating substantially in the manner and for the purpose specified.

No. 24,448.—HENRY EHRENFELD, of New York, N. Y.—*Improved Device for Converting Reciprocating into Alternate Circular Motion*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, arranging the lever C, and dog B, in combination with the grooved wheel A, or its equivalent, in such a manner that the dog acts on the wheel entirely independent from the centre, or hub, of the wheel, and that the lever can be brought in such a position as to impart motion to the wheel in either direction, substantially as and for the purpose specified.

Second. In combination with the lever C, dog B, and wheel A, I claim the arrangement of the groove *d*, or its equivalent, in the hub of the wheel, for the purpose of keeping the dog in the proper position, and to prevent the lever from tipping over sidewise, substantially as specified.

No. 24,449.—A. H. EMERY, of Mexico, N. Y.—*Improvement in Cheese Presses*.—Patent dated June 21, 1859.—This invention consists in constructing a press for the purpose of pressing cheese, and for pressing cotton, tobacco, hay, or for any other purpose where it can be advantageously used in an effectual manner, by means of an arrangement of cams in combination with a system of wheels and axles, so that by the use of a weight or any other power applied thereto, a continued and downward pressure is had and obtained by means thereof.

The inventor says: I *claim* the method of moving the follower *f* upwards, by means of the weight *h*, the cords *i i*, and the pulleys *j j*, the whole arranged and operated as and for the purposes described and set forth.

I also claim the arrangement of the arm *a*, the ratchet *w*, the pinion *t*, the crank arm *v*, together with the wheel *p*, with the cogs either on the inside or outside, the whole being arranged and operated as and for the purposes described and set forth.

No. 24,450.—A. H. EMERY, of Mexico, N. Y.—*Improved Sash Fastener*.—Patent dated June 21, 1859.—This invention consists in providing for windows a cheap and durable fastener manufactured from drawn pipe.

The inventor says: I *claim* the construction of a window sash spring and fastener of drawn pipe, with the end *g*, and the end *h*, arranged and fastened therein, as described.

I also claim the construction of the knob rod, or bolt *c*, as and for the purpose described and set forth.

No. 24,451.—THOMAS EVANS, of Watkins, N. Y.—*Improved Attachment of Handles to Tin Pails*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Forming metallic ears for pails, buckets, and other vessels, with concentric angular corrugations, surrounding the bail orifice, in combination with the flattened hook at the end of the bail, provided with an additional bearing against the surface of one or more of said corrugations, and the drop opening or downward continuation of the outer corrugation, substantially in the manner and for the purposes shown and described.

No. 24,452.—P. H. FREYLINGHOUSEN and JAMES G. HEILMAN, of Johnstown, Pa.—*Improvement in Corn Planters*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The perforated wheels G, when hung to the sliding bars I, and situated in respect to the hopper *a* and wheels H, and otherwise arranged as set forth, so that on moving the said bars I inwards, the wheels G may be drawn out of gear, and the orifices of the hopper at the same time closed by the wheels.

No. 24,453.—JOHN H. GAGE, of Nashua, N. H.—*Improved Roll for Forming Tires*.—Patent dated June 21, 1859.—This invention consists in the peculiar construction and relative arrangement of the parts composing the roll. The roll is used for rolling tire, the flanges B C are intended to form the sides, the recesses *o*, the flange, and the part L, the tread of the tire.

*Claim*.—The combination of the flange B, recess or depression O, wide shoulder or tread



L, flange C, and short shoulder D, with a series of thin metallic disks F, said parts being constructed, arranged, and operating relatively to each other, substantially in the manner and for the purpose set forth.

No. 24,454.—HENRY P. GENGEMBRE, of Allegheny, Pa.—*Improvement in Retorts for Distilling Coal Oils*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the use of an L shaped retort, combined with charging boxes, crusher, and discharging tube, as described, capable of being subjected to a degree of temperature at the end of the horizontal part at which the residuum of the substance under treatment is discharged higher than at the upright part at which the coal is charged, the whole so arranged as to avoid the admission of atmospheric air.

Second. The combination with my retort, constructed substantially as described, of a crusher suited to the material to be distilled, placed within the retort at a point intermediate between the points where the heat is highest and lowest, for the purpose of breaking up the coal or other substance before the process of distillation is complete.

No. 24,455.—H. H. GOODWYN, of New Orleans, La.—*Improvement in Sewing Machines*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the loosely fitted double conical sleeve D, with the soft leather or elastic backed and bearing eye *c*, and a spring pressure, whereby the spool is brought to a proper centre, and the requisite tension produced, the cone sleeve revolving simultaneously with the spool and pivoted arm, and the friction or tension being obtained by the action of the outer end of the double cone against the elastic eye, in the manner and for the purpose described.

Second. The arrangement with the above of the peculiar spring pressure described, consisting of the pivoted or rocking standard B, rod *f*, spring *i*, and rosette or nut *h*, for operation together and with the spool, in the manner described.

Third. The attachment to the stationary shell or outer case G of the tension arm *p*, substantially in the manner and for the purposes described.

Fourth. Hanging the bobbin F on, and so as to rotate together with, a cylinder *l*, when the same is combined with a spring *m*, inducing friction in the run of the bobbin, and operating in connection with a tension arm or elbow *p*, acting on thread from the bobbin, as described.

No. 24,456.—SAMUEL F. GOLD, of Cornwall, Conn.—*Improved Apparatus for Heating Buildings*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* constructing the generator of a series of similar cast metal sections, each complete in itself, and united, substantially as described, so that the capacity of the generator will be governed by the number of sections used, and may be increased or diminished by adding or removing any desired number of the internal sections.

I also claim constructing these sections so that, when united, there will exist the chambers E rising above the water line, and out of the draft of the furnace, substantially as and for the purposes set forth.

I further claim, in combination with the generator, the supplementary steam chambers, made up of flat cast metal sections, substantially as specified.

No. 24,457.—JACOB GOVE, of Milford, N. H.—*Improvement in Tanning*.—Patent dated June 21, 1859.—This invention consists of an apparatus for stirring the liquor in the tanning vat, and arranged so that the top of the vat will be left entirely unobstructed for the purpose of allowing the hides to be freely handled and the vat to be covered or boarded over if desired, while at the same time the liquor shall be stirred from the bottom of the vat.

*Claim*.—Stirring the liquor or tanning fluid in the vat by means of a stirrer, constructed, arranged, and operated substantially in the manner set forth.

No. 24,458.—JOHN GREENWOOD, of Rochester, N. Y.—*Improved Machine for Chamfering Barrel Heads*.—Patent dated June 21, 1859.—This invention consists in placing rotating clamps, in which the stuff is secured, in a sliding frame, and using in connection therewith a cam and rotating disk shaped saw and cutters, the whole so arranged as to render the manipulation of the machine easy, and perform the desired work expeditiously.

*Claim*.—The arrangement of the sliding frame B, clamps C D, cam F, lever G, and gearing E *h*, substantially as shown, in connection with the circular disk shaped saw Q, and cutters R R, the whole being arranged for joint operation, as and for the purpose specified.

No. 24,459.—THOMAS HALL, of Boston, Mass.—*Improved Electro-Magnetic Machine*.—Patent dated June 21, 1859.—This improvement relates solely to the connection of the battery and the machine, by means of an elastic bar or spring, and the movable or switch connec-



tion, by which the machine is started or stopped at pleasure, both the battery and the machine being inclosed in the same box.

*Claim.*—The combination of the spring connecting bar H and the switch O, placed between the machine and the battery, and operating with reference to each other, substantially as described.

No. 24,460.—JOEL T. HAM, of Covington, Ky.—*Improvement in Connecting Iron Girders of Bridges.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, combining the posts and braces with the chords by means of the metal saddles E E<sup>1</sup>, and the metal stirrups or straps F F<sup>1</sup>, applied substantially as described, whereby the expansion and contraction of the chords, pests, and braces, by changes of temperature, are provided for.

Second. The India rubber blocks or springs L L, applied between metal blocks M N, in combination with the saddles and stirrups, substantially as and for the purpose set forth.

No. 24,461.—A. HOTCHKISS, of Sharon, Conn., and JOHN P. ADRIANCE, of New York, N. Y.—*Improvement in Guard Fingers for Harvesters.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the angular cavity D, for the free admission of the front end of the face plate C, to permit its shoulders, at the rear end, to be inserted, whereby the ends of said plate are firmly secured, substantially in the manner and for the purpose specified.

Second. Confining the back end C<sup>2</sup> of the steel face plate C, by bending down the metal of the finger at *a a* upon the reversely beveled edges of C<sup>2</sup>, in the manner and for the purposes described.

No. 24,462.—DANIEL H. HULL, of Plantsville, Conn.—*Improved Trace Fastener.*—Patent dated June 21, 1859.—This invention consists in riveting to the outside of a trace, where it is placed upon a button on the end of a whiffletree, a metal plate of a somewhat elliptical form, or of any other suitable shape, and forming the cock eye of the usual size and shape in the plate so as to admit the flat button of the whiffletree, and securing the trace to said button by means of a spring lever or latch.

*Claim.*—The combination and arrangement of metal plate A, spring latch C, spring D, and knob F, substantially in the manner and for the purposes set forth.

No. 24,463.—W. S. HUNTINGTON, of Andrusville, N. Y.—*Improved Snow Plough for Railroads.*—Patent dated June 21, 1859.—This invention consists in the use of scrapers attached to shafts which have springs connected with them and arranged in such a manner that the scrapers, as the car moves along, are kept to their work, and are made to cast the snow from the inner sides of the rails, and at the same time allowed to yield or give to pass over any obstructions, and also rendered capable of being elevated above the rails when not required for use.

*Claim.*—The employment or use of the plates or scrapers E E, attached to arms D of the shafts C, which shafts have springs G attached, and are connected to an adjusting bar I, by means of the arms F and rods H, the whole being applied to a car, and arranged to operate as and for the purpose set forth.

No. 24,464.—E. A. JEFFERY, of Corning, N. Y.—*Improvement in Tools for Fastening Bale Hoops.*—Patent dated June 21, 1859.—The object of this invention is to facilitate the application of locks to the end of hoops, and enable the ends of hoops to be drawn towards each other with considerable force commensurate with the strength of the operator, so that the hoops when locked may fit snugly to the bale before the same is relieved from the pressure.

The inventor says: I *claim*, first, the employment or use of the combined pliers and die B, constructed and arranged substantially as and for the purpose set forth.

Second. The combination of the pliers and hammer A, with the pliers and die B, arranged for joint operation, substantially as described.

No. 24,465.—WILLIAM JOHNSON, 2D, of Hampstead, N. H.—*Improved Chamfering Tool.*—Patent dated June 21, 1859.—The tool exhibited in the engravings is composed of a knife carrier A, a stationary edge bearer B, a sole rest C, a spring presser D, and a knife E, the said knife being provided with a handle *a*.

*Claim.*—Supporting the knife F, and adjusting it with reference to the sole rest and the edge bearer, viz: by means of a carrier A and adjusting screws *h h i*, applied and arranged with respect to the sole rest C, the edge bearer B, and the presser B<sup>1</sup>, substantially as described.

No. 24,466.—K. H. KINNE, of Mexico, N. Y.—*Improved Apparatus for Cutting Teeth in Saws.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim* the movable curved switch *p*, in conjunction with the curved groove *F*, for the purpose of adapting the machine to the cutting of teeth, on setting or sharpening the teeth of straight as well as circular saws, substantially as described.

I also claim operating and feeding the burr, by means of the shaft *Q*, turning within the hollow screw shaft *D*, when applied to a saw sharpener, substantially in the manner and for the purpose described.

I also claim the bed piece or anvil *c*, for the purpose of supporting the saw teeth while being sharpened, substantially as described.

I also claim, in combination with the burr *E* and the anvil *c*, the clamps *ff* for gauging and firmly holding the saw whilst being acted upon, substantially as described.

No. 24,467.—DAVID KNOWLTON, of Camden, Me.—*Improved Ship's Capstan*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Fixing the shafts of the stud gears in a revolving plate, arranged to turn with the barrel and head when they are locked together, and to be stationary when they are unlocked, in combination with two stud gears, by which the head and barrel are turned in the same direction, when used as a geared or simple capstan.

No. 24,468.—ANDREW LANERGAN, of Boston, Mass.—*Improvement in Exhibition Rockets*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* making the rocket with a match *b*, arranged and fixed in the choke, and protected or covered by a plane or thin disk *c*, having no opening into the choke, nor any cavity or recess to hold the match or catch sparks, as described.

And I particularly claim attaching the match, as described, to the inner surface or side of the choke, or arranging the attachment *d* therein, and with respect to the lower end of the match, substantially as described, the same not only enabling the match to be confined to the choke of the rocket, but to have a portion of it, after breakage of the cap, capable of being bent downward out of the choke, into a convenient position for being fired.

No. 24,469.—ALBERTUS LARROWE, of Cohocton, N. Y.—*Improvement in Sled Brakes*.—Patent dated June 21, 1859.—The evener *X*<sup>1</sup> is pivoted to the brake rod at *F*. When the horses pull, the strain on the evener causes the brake rod to move forward together with the ferrule. This motion of the brake rod pulls the upper part *L* of the rod *L O J* forward, so as to raise the hooks or breaks *Q* at the ends of the rod above the ground and keep them in this position as long as the horses pull. The fulcrum of the rod *L O J* is at the lower ends of the brake eyes *R R*.

The inventor says: I *claim*, first, constructing the brake eyes *R R* in the peculiar form shown and described, and for the purposes set forth.

Second. The combination of the brake eyes *R R* with the brake *Q*, substantially as described.

No. 24,470.—LUCIUS LEAVENWORTH, of Trumansburg, N. Y.—*Improved Whip and Line Holder for Guiding Horses Without the Use of the Hands*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the rein hooks or knobs *a a*, which are united by one or more cross bars or braces, and which are provided with a whip socket, or without the same, in such a manner that a frame is formed, which, by the aid of suitable shoulder straps, or their equivalents, may be secured to the body of a person, substantially as and for the purpose described.

No. 24,471.—HARVEY LOCKE, of South Boston, Mass.—*Improved Cork Machine*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of a reciprocating knife stock *E*, when provided with necessary knives, and arranged in combination with a rotating mandrel *N*, traversing clamp *H*, and feed spout or trough *f*, so that, as the knife stock moves back and forth, pieces of cork *a*\* will be cut from the bar or slab *T*, and said pieces turned in suitable conical form, substantially as described.

Second. I claim, in connection with the reciprocating knife stock *E*, attaching the mandrel *N* and head *u* to an adjustable bar *O*, fitted in the framing *A*, and arranged substantially as described, so as to admit of the adjusting of the pieces of cork *a*\*, more or less obliquely, with the knife *c*, and vary the taper of the corks as may be desired.

Third. I claim placing the clamp *H* in a reciprocating plate *G*, operated by the lever *Q*, from the wheel *C* and the lever *R*, from the reciprocating knife stock *E*, substantially as shown and described, for the purpose of giving the traversing movement to said clamp, to convey the pieces of cork *a*\* from the jaws *n*<sup>1</sup> *o* to the mandrel *N*.

No. 24,472.—JAMES K. LUM, of Spookumchuck, W. T.—*Improvement in Wind Mills*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment or use of the fly or frame *I*, placed on the arbor *J*, and having



the ends of the cords *i* passing through it and attached to said arbor; said cords being also attached to the rope *W* of the weight *P*, the fly being operated by the wind wheel in such a manner as to admit of a simultaneous rotation of the arbor *J*.

No. 24,473.—*J. C. LYON*, of Auburn, N. Y., and *HENRY F. PHILLIPS*, of Seneca Falls, N. Y.—*Improvement in Grinding Mills*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the arrangement and combination of the clasp *i*, pin *j*, screw *k*, hand wheel *J*, and shaft *C*, whereby the said shaft and grinding cone *D* may be readily adjusted and firmly secured, whether the machine is in operation or at rest, as set forth.

Second. The arrangement and combination of the double flanged pulley *a*, shaft *C*, fork *n*, rod *m*, and shell *L*, as herein shown and described, so that by the adjustment of the shaft *C* the shell *L* will also be adjusted.

No. 24,474.—*PERRY MARCY*, of Tunkhannock, Pa.—*Improvement in Potato Diggers*.—Patent dated June 21, 1859.—This invention consists in constructing and arranging the several parts of this machine as named in the claim and shown in the engravings.

*Claim*.—The arrangement of the inclined smooth belt *N*, tightening pulley *u*, shield *o*, ratchet wheel *J*, levers *a a*, and bars *I I*, provided with teeth *i i i*, the whole being constructed and operated substantially in the manner set forth.

No. 24,475.—*JAMES MASSEY*, of Thomasville, Ga.—*Improvement in the Construction of Driving Shafts for Mills, Cotton Gins, &c.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Suspending the driving shaft *C*, in the manner described, to allow it to rise or fall with the floor, to which it is attached, operating substantially in the manner set forth and for the purposes described.

No. 24,476.—*THOMAS J. MAYALL*, of Roxbury, Mass.—*Improved Drainage Pipe*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Combining, with a stationary washing bowl sink, washing tub, or other similar articles, the elastic drainage pipe, terminating in a wedge shape, for the purposes and in the manner described.

No. 24,477.—*H. D. McGEORGE* and *D. S. GREER*, of Morgantown, Va.—*Improvement in Corn and Cane Harvesters*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Providing a corn or cane harvester with a vertical reciprocating cutting apparatus, for the purpose of cutting the stalks into two or more pieces, substantially in the manner described.

No. 24,478.—*ANDREW T. MERRIMAN*, of Chicago, Ill.—*Improvement in Machines for Sawing Stone*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Lowering the saw frame by means of the long screws *s s* acting on the sliding bars *f f*, and the stiff connecting rods *r r* hung with the hinge joints at the saw frame, and the sliding bars *f f*, (instead of chains or ropes,) for the purpose of holding the saw frame steady and prevent any jumping motion, all in the manner described.

No. 24,479.—*PURCHES MILES*, of New Britain, Conn.—*Improved Window Curtain Fixture*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the compound hanging bracket, capable of being raised up to permit the opening and closing of blinds, or for other purposes, as described.

Second. Constructing and combining the parts, as described, so that the bracket can be attached to the top, side, or back of the window frame, and at either side of the window.

Third. Holding the band against a pulley having a friction surface, by an arm or arms, as set forth.

No. 24,480.—*RICHARD MONTGOMERY*, of New York, N. Y.—*Improvement in Corrugating Metallic Sheets*.—Patent dated June 21, 1859.—The inventor says: My improvement will be readily understood from Figs. 1 and 2, where, it will be seen, the corrugations *A B* are not straight, as in my former patent, but are waved, so that each of the ribs *A B* of the corrugated plates has a double curvature—one in the direction of its length, and one across its width.

*Claim*.—The waved corrugated wrought metal plate for boilers, as herein described, in combination with flat margins of greater thickness than its middle, substantially as described.



No. 24,481.—JOHN R. NEWBROUGH, of St. Louis, Mo.—*Improved Instrument for Adding Numbers.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the bent arm K, underlying the dial G, so as to operate it without obstructing the vision.

Second. The stud Q, operating in the described connection with the pawl j, to permit the backward motion of the dial, for the purpose set forth.

Third. The combination and arrangement, substantially as set forth, of the rib N, cavity n, catch i, and teeth h, operating, as explained, to shift the obstructing plate at each revolution of the dial and arrest the reverse motion of the latter at the right instant in setting the machine.

Fourth. The described arrangement and combination of the pins p p and hook O, operating in the manner and for the purposes set forth.

No. 24,482.—S. VAN RENSSELAER NEWMAN, of Covington, N. Y.—*Improvement in Machines for Harvesting Beans.*—Patent dated June 21, 1859.—This invention consists in the employment or use of rotary sickles peculiarly arranged for cutting the bean stalks, and using in connection with said sickles guide plates, an endless conveying chain, platform, and discharging plate or rake, the whole being placed in a mounted frame and arranged in such a manner that the beans may be cut and discharged in gavels on the ground.

The inventor says: I *claim*, first, the employment or use of the rotary sickles K K, provided with scolloped shaped teeth, and arranged to operate substantially as and for the purpose set forth.

Second. The combination of the endless chain of rods O with the rotary sickles K K.

Third. The combination of the rotary sickles K K, endless chain of rods O, platform Q, with or without the rake o, placed in a mounted frame A and arranged for joint operation.

No. 24,483.—ANDREW O'NEILL, of Portsmouth, Va.—*Improved Fire Back for Stoves and Fireplaces.*—Patent dated June 21, 1859.—This invention relates to the construction and arrangement of a radiating fire back, also in combination with the back to a hooded damper.

*Claim.*—The hooded damper c in combination with a radiating fire back A, constructed and arranged substantially as described, for the purpose set forth.

No. 24,484.—JOSEPH B. PALSER and GARDNER HOWLAND of Fort Edward, N. Y.—*Improvement in Apparatus for the Manufacture of Paper Pulp.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, having the pipe b, which passes through the hollow journal of the boiler, divided by a partition, so that the steam may find exit through one compartment of the pipe and the contents of the boiler through the other compartment, as set forth.

Second. The employment of the perforated diaphragm p p<sup>1</sup>, when arranged substantially as described, to protect the pipes h h<sup>1</sup> s s<sup>1</sup>, and strain the liquids from the "stock," as and for the purposes set forth.

Third. The arrangement of the boilers J J<sup>1</sup>, with the surrounding envelope, substantially as shown and described, so that the resultant liquids of the boiling may be evaporated, and also employed to cool down the boilers and surrounding envelope, as set forth.

Fourth. The arrangement of the basin g g below the boiler, to receive the falling liquid, as and for the purposes described.

Fifth. The injection of the steam arising from the boiling of the alkaline and other contents of boiler J<sup>1</sup> into boiler J, and *vice versa*, substantially as and for the purposes shown and described.

Sixth. The arrangement of the warming chamber S between the two boilers, and the combination therewith of the pipes T V W W<sup>1</sup>, as and for the purposes described.

Seventh. The arrangement and combination of the boilers J J<sup>1</sup>, furnace A, and doors D D<sup>1</sup>, E E<sup>1</sup>, F F<sup>1</sup>, so as to apply the furnace heat to either or both boilers at pleasure, substantially as shown and described.

Eighth. The combination of the cylindrical bottomed vats K K<sup>1</sup>, having the chimneys N N passing through them, with the boilers J J, as and for the purposes described.

No. 24,485.—JAMES PEELER, of Tallahassee, Fla.—*Improvement in Machines for Sowing Fertilizers.*—Patent dated June 21, 1859.—When the wheel turns round, the corrugations of the strip F catch the metallic strip x on the board d and elevate the bar, and consequently the apron; and as the end of the strip x falls from one corrugation to another, an up and down motion is communicated to the apron, and the manure is shaken off by this operation as it continues.

*Claim.*—The arrangement of the frame A, wheels B B, axle C, and apron D, attached to the frame by means of straps a and c, with the bar d, metallic strip x, corrugated wheel F, bar i, chuck J, hopper E, and slide L, the whole being constructed and placed in the relative positions set forth, and operating in the manner specified.



No. 24,486.—JAMES PEELER, of Tallahassee, Fla.—*Improvement in Cultivators*.—Patent dated June 21, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement of the bars D and E, beam A, handles B B, and standard C, the bar E forming a brace, a colter, and a landside, and bars D being provided with an inclined or tapering point, on which any style of blade may be secured, the two bars being pivoted together at  $x$ , and the whole operating substantially in the manner and for the purpose specified.

No. 24,487.—ALBERT PHILIPP, of Mayville, Wis.—*Improvement in Machines for Cutting Sugar Cane*.—Patent dated June 21, 1859.—The operation of this machine is as follows: The machine is drawn through a field planted with sugar cane, and as the upper cutters  $H^1$  come in contact with the canes they draw them in between the prongs of the arms M and the tops of four canes are cut simultaneously, and these tops are deposited on the endless aprons  $p$  and carried off. After the tops of the canes have thus been cut, the lower cutters begin to act, and as the tops are cut off before the canes are deposited on the platforms  $C^1$ , the canes are ready for bundling without subjecting them to any further operation.

*Claim*.—The arrangement of the cutters  $H^1$  with the forked arms  $I^1$  and with the endless apron  $p$ , in combination with the cutters H, the forked arms I, the reels J, and the additional platforms  $C^1$ , to operate substantially in the manner and for the purpose specified.

No. 24,488.—RENSSELAER REYNOLDS and GORDON B. REYNOLDS, of Stockport, N. Y.—*Improvement in Brakes for Power Looms*.—Patent dated June 21, 1859; antedated February 8, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* applying and arranging the two faces of the brake relatively to its centre of motion, and the said centre of motion relatively to the centres of the crank and cam shafts, in the manner substantially as described, whereby the brake is not only rendered automatic in case of recoil after the stoppage of the loom by the action of the protector, but self liberating when the loom is started again, as fully set forth.

No. 24,489.—WILLIAM RICE, of Philadelphia, Pa.—*Improved Filter*.—Patent dated June 21, 1859.—This invention consists in a certain arrangement of two casings, with perforated plates on the inside and a body of sand confined between the plates, together with a system of pipes and three way cocks, whereby the water may be conducted first in one direction and then in another through the sand, and thereby cleansed.

The inventor says: I *claim*, first, the general arrangement of the two casings, the perforated plates, the wire gauze, body of sand, system of pipes, and three cocks, as described.

Second. Confining a body of sand D between the perforated plates B and  $B^1$  by means of a ring C, constructed in the manner set forth, or any equivalent thereto, by which the said ring may be made to compress the body of sand without disturbing the said perforated plates.

Third. The orifices  $m m$ , at the lower ends of the pipes H and  $H^1$ , for the purpose specified.

No. 24,490.—CHRISTIAN RITTER, of Reading, Pa.—*Improvement in Cider Presses*.—Patent dated June 21, 1859.—This invention consists in separating the juice or fluid, such as cider, wine, lard, or tallow, out of its pomace and cracknels, and securing the flow of the juice or fluids out of the inner part of the bulk, in much less time than by other processes now in use.

*Claim*.—The application of the chamfered and grooved inner slats and partitions, with their fastenings and arrangements, which will produce the intended effect.

No. 24,491.—PHILIP C. ROWE, of Boston, Mass.—*Improved Brush for Washing Windows*.—Patent dated June 21, 1859.—This invention consists of a brush constructed with a spray jet tube and a water conductor or pipe so applied to its stock and handle that water may be led into the brush and discharged among the bristles thereof, and against the window, or the surface against which the brush may be operating.

*Claim*.—The hydraulic window-washer, or brush, constructed with the spray jet tube, and the conduit or pipe applied to its stock and handle, substantially in manner and to operate as specified.

No. 24,492.—W. G. RUGGLES, of Worcester, Mass.—*Improvement in Cooking Ranges*.—Patent dated June 21, 1859.—This invention is an improvement on a cooking apparatus patented by this inventor May 18, 1858; and it is designed to carry out more perfectly in the present invention the principles set forth and involved in the former one.

*Claim*.—The arrangement and combination of the oven D, provided with a central hollow shelf  $b$ , the oven G provided with a hollow shelf  $m$ , fire-chamber B, damper E, chambers  $h d$ , flues C H  $n n^1$ , substantially as and for the purposes shown and described.



No. 24,493.—PAUL A. SABBATON, of Albany, N. Y.—*Improved Door Frame for Furnaces.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention

*Claim.*—The combination of the mouth of the furnace of the door frame A and door B, when the said door frame is provided with an opening larger than the door into which the door shuts, so as to close against the furnace, or against a shield or false frame C, as and for the purposes set forth and described.

No. 24,494.—HENRY SAUERBIER, of Newark, N. J.—*Improved Tool for Planing and Finishing the Edges of Boot and Shoe Soles.*—Patent dated June 21, 1859.—This invention consists in combining in one the two tools used by shoemakers, termed the edge plane and the collis, in such a manner as to enable workmen to use both alternately without laying either out of hand.

*Claim.*—The combination of the collis and edge plane, substantially in the manner and for the purpose specified.

No. 24,495.—WILLIAM SCHNEBLY AND THOMAS SCHNEBLY, of Hackensack, N. J.—*Improvement in Harvesting Machines.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement and combination of the inclined tapering discharge trough I, with the concave or curved platform and raker reel, whereby the grain is made to fall from the machine in compact gavels, as shown and described.

No. 24,496.—WILLIAM SCHNEBLY, AND THOMAS SCHNEBLY, of Hackensack, N. J.—*Improvement in Harvesting Machines.*—Patent dated June 21, 1859.—The inventors say: By this mode of attaching the cutter bar *j* to the fingers I, the teeth *k* are kept in close contact with the upper surfaces of the fingers I without the aid of a cap or top bearings on the upper surface of the sickle, and consequently no obstruction is offered to the passage of the cut grass or grain over the sickle. The friction which also attends the employment of the top bearings or cap on the sickle is avoided.

*Claim.*—The employment, in combination with the pendulous levers *d d*<sup>1</sup>, of the toggle levers *g g*, as shown, whereby the levers *d d*<sup>1</sup> may, without shifting their axes of motion *f f*, be thrown in or out of connection with the drivers B B.

No. 24,497.—JONAS SMITH, of Westport, Conn.—*Improved Water Wheel.*—Patent dated June 21, 1859.—A represents the wheel which is formed by having buckets *a* between two annular plates *b b*, placed one over the other, and secured by arms *a*<sup>1</sup> concentrically to a vertical shaft B placed in a proper framing.

*Claim.*—The arrangement and combination of the annular gate D, when provided with the tangential vertical plates *i*, stationary rim C, interposed between the gate D and wheel A, when provided with buckets *a*, having lips *c*, all as shown and described, for the purposes set forth.

No. 24,498.—JOSEPH SMITH, of Cincinnati, Ohio, and G. B. GRIFFIN, of Madison, Wis.—*Improvement in Measuring Faucets.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, operating the plunger by means of the cam grooves on the face of wheel G, in connection with the pins on the sleeve, when both are constructed and operated in the manner and for the purpose set forth.

Second. The serrated circular register plate H, in connection with the ratchet *p*, and pointer *m*, the same being arranged and operated substantially in the manner and for the purpose specified.

Third. We claim the disk *c*, constructed as described, in combination with the inlet pipe B, and the outlet pipe C, the same being used substantially in the manner and for the purpose fully set forth.

No. 24,499.—JOHN G. STEPHENSON, of Buffalo, N. Y.—*Improved Machine for Jointing Staves.*—Patent dated June 21, 1859.—This invention consists in the use of yielding planers, feed rollers, and a pressure plate, arranged for joint operation, whereby staves are jointed in a perfect manner.

*Claim.*—The adjustable plates I I, with yielding cutter stocks or plates K K, attached in connection with the feed rollers D D, and yielding pressure plate *c*, or its equivalent, the whole being arranged to operate substantially as and for the purpose set forth.

No. 24,500.—J. C. STODDARD, of Worcester, Mass.—*Improvement in Cultivators.*—Patent dated June 21, 1859.—The object of this invention is to obtain a scraper wheel that may be rendered available for earthing various kinds of plants, and its operation otherwise modified according to the work required of it.



*Claim.*—The arrangement and combination of the slotted adjustable reversible blades *h*, arms *E*, and hub *e*, as and for the purposes shown and described.

No. 24,501.—GILES M. STONE, of Fredericksburg, Va.—*Improved Panoramic Attachment for Clocks to Indicate the Comparative Time in all Longitudes.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of the invention.

The inventor says: I *claim*, first, the chronometer dial divided off into twenty four equal parts for indicating the twenty four hours of day and night, by one revolution of the index point, substantially as set forth.

Second. The revolving disk representing the northern or southern hemisphere, for indicating the relative time of day or night, at any and all localities thereon, in the manner specified.

Third. The combination of the revolving disk with the twenty four hour dial, for demonstrating the cause of day and night by the diurnal revolutions of the former, representing the revolutions of the earth on its own axis, substantially as described.

No. 24,502.—JOHN F. STURDY, of Attleborough, Mass.—*Combined Case for Pen, Pencil, Knife, Tooth Pick, &c.*—Patent dated June 21, 1859.—The object of this invention is to combine within a case of peculiar construction a knife, pencil, tooth pick, and pen, whereby the several parts may be very compactly arranged in a durable manner, and a case obtained equally as portable as an ordinary pencil case.

*Claim.*—The case *A*, constructed as shown and provided with the blade knife *i*, operated by the spirally slotted tube *f*, pencil tube *l*, tooth pick *m*, and pen slide *n*, arranged and combined to form a new and improved article of manufacture.

No. 24,503.—WILLIAM H. TOWERS, of New York, N. Y.—*Improved Clothes Pin.*—Patent dated June 21, 1859.—This invention consists in forming the clamp in two parts, and jointing them together at one end in such manner as to enable their opposite pronged ends to be separated from each other before being applied to the line, and when closed upon the same to clamp the clothes securely in their place.

*Claim.*—The described improved article of manufacture, to wit: a clothes clamp formed of two parts *A*, jointed together at their upper ends, substantially as set forth.

No. 24,504.—CYRUS B. THAYER, of Boston, Mass.—*Improved Apparatus to Hold and Turn the Leaves of Books and Music.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination and arrangement of the wedge acting back pieces *B B* and clamps *C C*, with their connecting dovetail tongues and grooves *b b*, substantially as described, so that simply raising the clamps, shall unclamp, and depressing them shall clamp, the music sheets, as specified.

I also claim the arrangement and combination, substantially as specified, of the leaf turning cords *D D D*, arms *G G G*, lever *E*, and catch *m*, for the purpose set forth.

No. 24,505.—GEORGE S. TIFFANY, of Palmyra, Mich.—*Improvement in Machines for Digging Potatoes.*—Patent dated June 21, 1859.—This invention consists in arranging in front of a plough for digging potatoes an inclined fork, so that the points of its teeth will rest upon the point of the shovel, or plough, and allow the earth and potatoes to pass freely on the plough, but effectually prevent the potatoes from falling off, at the same time it is so arranged with respect to the machine that it is always in position to act.

*Claim.*—The hinged fork *P*, in combination with the plough *L*<sup>1</sup>, when the same are arranged and operate as and for the purpose set forth.

No. 24,506.—CHARLES N. TYLER, of Washington, D. C.—*Improvement in the Manufacture of Gas.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* combining hydrogen gas with the volatile and easily condensable products of coal, resin, tar, &c., in their nascent state, in the manner and for the purposes substantially as set forth.

No. 24,507.—FRANKLIN VEAL, of Hallettsville, Texas.—*Improvement in Cultivators.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Arranging the dovetailed projections *i*, at equal distances from the cutting edges of the shears, in combination with the slots *j* and recesses *k* in the arms and for the purpose of securing the shares to the arms, and to render them reversible, substantially as described.

No. 24,508.—JULES JEAN BAPTISTE VERGNE, of Paris, France.—*Improved Screw Propeller.* Patent dated June 21, 1859.—This invention consists in arranging the grooving or fluting, or ribs in the form of a series of steps rising one above the other as they approach from the centre towards the periphery.



*Claim.*—The arrangement of the grooving fluting or ribs in the form of a series of steps, substantially as and for the purpose set forth and described.

No. 24,509.—ANTON VON SCHUTTENBACH, of St. Petersburg, Russia.—*Improvement in Fluid Lamps.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the gas holder or gasometer A, the vessel I, the pipe N, with its branches, the pipe F, the chamber H, the chimney I, the oil reservoir A, and the burner G, the whole being applied and made to operate together, substantially as specified.

No. 24,510.—EDWARD WALCOTT, of Providence, R. I.—*Improvement in Gas Retorts.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination with the lid D, of the projecting incline plane *a a*, substantially as and for the purpose set forth and described.

Second. The employment, for securing the lid of the mouthpiece of the retort in place, of a horizontal eccentric or cam G and lever H, attached to and combined with a cross bar F, and applied to the mouthpiece of the retort, substantially as described.

No. 24,511.—F. F. WAGNER and P. P. DICKINSON, of Harrisburg, Pa.—*Improvement in Railroad Car Seats.*—Patent dated June 21, 1859.—In order to change the seat into a sleeping couch, the arms D<sup>1</sup> are inclined as much as convenient for the person occupying the seat, and the cushions F and F<sup>1</sup> are unfolded in order to have a convenient support for the legs as well as for the head, and in this position the arms D, together with the cushions, are retained by the notched bars G.

*Claim.*—The arrangement and combination of the wheels I<sup>1</sup> J, arms D D<sup>1</sup>, cushions E E<sup>1</sup>, and bars G, as and for the purpose shown and described.

No. 24,512.—AMBROSE WARD, of Altoona, Pa.—*Improvement in Body Bolsters for Railway Cars.*—Patent dated June 21, 1859.—The inventor says: Instead of mortising the sills and bolsters together, and throwing the weight upon the extremities of the bolsters, I combine with the ends of the sills G two inclined truss timbers F, which extend from the inner sides of the sills G downward to and against lugs K, which rise vertically from the centre plate D, with which they are cast, and of which they are a part. The sills G, trusses F, and centre plate D, are all firmly combined, or held together by means of transverse tension I, of wood or iron.

The inventor says: I *claim*, first, the arrangement and combination of the trusses F, centre plate D, sills G, and tension rods I, substantially as and for the purpose shown and described.

Second. Providing the centre plate D with lugs K, protecting flange or cap *b*, lateral bearing flange *e* at the centre, fitting into cup in plate B, the vertical bearing flange *d*<sup>1</sup>, fitting into the cup or groove in plate B, the whole combined and arranged as and for the purposes shown and described.

No. 24,513.—D. WARREN, of Gettysburg, Pa.—*Improved Method of Opening and Closing Farm Gates.*—Patent dated June 21, 1859.—The catch D is provided with a slot and, just above this slot, with a curved piece marked *a*, which has its convexity downwards; catch D is pivoted to post B near its top, in such a manner that it will drop of its own gravity when desired; S is a staple driven in the top of post B, over the bar *d*, to prevent its moving too far from one side or the other, or to keep it from coming off the post.

*Claim.*—The arrangement of the lever F, and bar *d*, with the bar E, and falling catch D, as constructed, substantially in the manner and for the purpose described.

No. 24,514.—HENRY WELLS, of Walnut Grove, Ill.—*Improvement in Cultivators.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the share F, mould boards G G, rods H H and I I, the latter having the parts *d d* formed on them, the said parts passing respectively through the bar C and beam A, thus making a very firm structure, in the manner and for the purpose set forth.

No. 24,515.—SOLON R. ATKINS and D. H. HULL, of Plantsville, Conn., assignors to D. H. HULL aforesaid.—*Improved Trace Fastener.*—Patent dated June 21, 1859.—This invention consists in fixing to the ends of the traces, where they are attached to the buttons on the end of the whiffletree, a metallic box corresponding to the size and shape of the trace.

*Claim.*—The metallic box A, having a semicircular ring B on its end, and provided with a slide C, which is to be operated by a knob H, and held against the neck of the button on the whiffletree by springs D E, all arranged and operating in the manner and for the purposes set forth.

No. 24,516.—WILLIAM BROWN, of Shelbyville, Ind., assignor to Himself and FONTAIN G. ROBERTSON, of said Shelbyville.—*Improved Device for Feeding Bees.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—As a new article of manufacture, the bottle stopper, consisting of the cork A, tube



B, and cup D D, secured together by the screw and nut C, substantially as described and for the purposes specified.

No. 24,517.—WALTER HUNT, of New York, N. Y.—*Improvement in Heels for Boots and Shoes.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* making the external form of the heels of boots and shoes of a metallic shell with an inner flanch at the upper edge, to fit over the usual heel seat of the sole and between that and the counter or back portion of the upper, substantially as described, and to be provided with an inner core, and the whole to be secured to the heel seat, substantially as described.

I also claim, in combination with the shell and upper flanch, and inner core, substantially such as described, making the said shell with an inner flanch at the lower edge, substantially as and for the purpose specified.

And I also claim, in combination with a heel constructed substantially as above described, and consisting of the shell with the upper and lower flanches and the enclosed core, the employment of a rotating top lift, substantially as and for the purpose specified.

No. 24,518.—WILLIAM M. JEFFERS, of Elmira, N. Y., assignor to Himself and WILLIAM L. GIBSON, of said Elmira.—*Improvement in Double Cannon for Chain Shot.*—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The use of a partition intermediate between the breech and muzzle of the piece, in combination with the slot *c*, so arranged that the charge of the barrels shall mingle at the fuse, so that immediately on the ignition thereof the expansive force shall be wholly expended in projecting the two balls, and not weakened by a continuous connection between the barrels, substantially as and for the purpose shown and described.

No. 24,519.—ROBERT H. MATHIES, of Boston, Mass., assignor to A. N. CLARK, of Beverly, Mass.—*Improvement in Water Gauges for Steam Boilers.*—Patent dated June 21, 1858.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination, with the partition that separates the upper and lower main tubes of the gauge, of the independent steam and water tubes or courses, arranged to unite the spaces in the main tube, substantially as specified and for the purposes set forth.

No. 24,520.—H. K. MOORE, of Malden, Mass., assignor to A. W. ADAMS and G. W. DANE, of Boston, Mass., and W. G. HOWE, of Haverhill, Mass.—*Improvement in Water Gauges for Steam Boilers.*—Patent dated June 21, 1859.—This invention consists in combining with "Hoyt's single balanced valve" an auxiliary steam receiving space and two or any other suitable number of raised or nipple valve seats, the same being designed to overcome a difficulty incident at times.

*Claim.*—Combining therewith the auxiliary steam space *t* and the nipple or raised valve seats *s s*, arranged substantially as specified.

No. 24,521.—E. L. PRATT of Philadelphia, Pa., assignor to Himself and R. B. FITTS, of said Philadelphia.—*Improved Cheese Cover.*—The claim and engravings explain the nature of this invention.

*Claim.*—As an improved article of manufacture, for the purposes described, a ventilating cover constructed of tin plate or other suitable material, so as to protect articles placed therein from the rays of light and heat and the ravages of animals or insects, and at the same time secure perfect ventilation by means of a series of small perforations at or near the base or bottom for the inlet of cool air, and another series of perforations at or near the top for the escape of warm air, moisture, and gases, as set forth and described.

No. 24,522.—ARCHIBALD PUTNAM and JAMES H. PUTNAM, of Wellsville, Ohio, assignors to Themselves and PHILIP F. GEISSE, of Wellsville aforesaid.—*Improvement in Railroad Turn Tables.*—Patent dated June 21, 1859.—This invention consists in the application of an adjustable spindle to compensate for wear, and equalize the bearings of the table.

*Claim.*—The adjustable spindle *g*, applied and adapted in the manner and for the purpose set forth.

No. 24,523.—LAURENCE SCHRODER, of Cincinnati, Ohio, assignor to JOHN H. SCHRODER & Co., of said Cincinnati.—*Improved Lock Guard.*—Patent dated June 21, 1859.—This invention relates to certain improvements in lock guards, intended to be inserted within the locks of doors for the purpose of preventing them from being opened by means of other keys; and at the same time being made adjustable so as to be used in any ordinary lock.

*Claim.*—The arrangement of the several tumblers, in combination with intervening springs, which vary the spaces between said tumblers and operate the lock, in the manner and for the purpose substantially as set forth.



No. 24,524.—JOHN W. SMITH, of Washington, D. C., assignor to Himself and JESSE H. WHITEHURST, of Baltimore, Md.—*Improvement in Gas Retorts*.—Patent dated June 21, 1859.—This invention relates to that class of apparatus in which oil or other fatty matter is introduced into a retort placed in a stove or furnace for the purpose of generating illuminating gas for domestic use.

*Claim*.—The described arrangement of the pipes  $e$  and  $e^1$ , when combined with the retort and condensing chamber, in the manner and for the purpose set forth.

No. 24,525.—ROBERT WILLIAM SIEVIER, of Upper Holloway, Middlesex county, England, assignor to WILLIAM LILLEY, of Ohio.—*Improved Smelting Furnace for Iron*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the use of the exhaust pipe, in connection with a fan pump, or other means, to exhaust the foul air and gases, and cause a current of air to pass through the bottom or apertures of the furnace of sufficient density for the smelting and purifying iron and other ores, in the manner and for the purposes set forth.

I also claim the exhaust fan, constructed and operating as explained.

I further claim the use of the movable crucible, as described and for the purposes set forth.

No. 24,526.—BENJAMIN TOLMAN, of Pembroke, Mass., assignor to Himself and ASA F. RAMSDELL, of said Pembroke.—*Improved Edge Plane for Boots and Shoes*.—Patent dated June 21, 1859.—This improvement consists in a new arrangement of devices for supporting the cutter and its gauge.

*Claim*.—The improved edge plane, as constructed, with cutter and gauge bearings, flanges and confining devices arranged on the stock and with respect to the cutter and gauge, substantially as specified.

No. 24,527.—CHARLES TEUESDALE and A. J. SENNETT, of Cincinnati, Ohio, assignors to WILLIAM RESOR and JACOB RESOR, of said Cincinnati.—*Improvement in Patterns for Casting Stove Covers*.—Patent dated June 21, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing patterns for stove covers and centres with an opening in their under sides, by means of which a draw bar  $f$  may be withdrawn from the mould before removing the pattern, and also with a perforation  $g$ , substantially as and for the purpose set forth.

No. 24,528.—JAMES N. ALLEN, of Providence, R. I.—*Improvement in Constructing Rims and Field Pieces for Watch and Locket Cases*.—Patent dated June 28, 1859.—The inventor says: My invention consists in taking a piece of sheet metal stock as it comes from the plate workers and cutting it into narrow strips, as shown in Fig. 1; I then take a piece of one of these strips, equal in length to the circumference of the rim which I desire to make, and solder the two ends together; after shaping it upon a mandrel I have it in the form shown in Fig. 2; by means of a suitable die and former I swedge it into the form of a male rim, or into the form of a female rim as I may desire.

*Claim*.—Making the rim and field piece for watch or locket cases from a strip of sheet metal, substantially as described.

No. 24,529.—C. M. ALEXANDER, of New Albany, Ind.—*Improvement in Vapor Lamp Burners*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of a retort, having converging sides, and constructed substantially in the manner set forth, with an inlet pipe, an outlet pipe, and a burner, for the purpose of forming a gas generating apparatus, to be used in connection with fluid lamps, as fully described.

No. 24,530.—JOSHUA C. BEAN, of Grayville, Ill.—*Improvement in Seeding Machines*.—Patent dated June 28, 1859.—A represents the frame of the machine, arranged upon wheels B. Transversely across the frame is arranged a cylindrical seed hopper C, having an opening in front, provided with partitions  $d$ ; within the hopper is arranged a shaft  $e$ ; passing at right angles through the shaft  $e$  are arms  $i$ , provided at their extremities with cups  $i^1$ , by means of which the seed contained in the hopper may be discharged.

*Claim*.—The arrangement of the hopper C and arms  $i$   $i^1$ , in combination with the inclined equalizer, the whole being constructed substantially as and for the purposes set forth.

No. 24,531.—WILLIAM BEAUMONT, of Paterson, N. J.—*Improvement in Gas Retorts*.—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Making all that part of a retort which is most subject to expansion and contraction, corrugated, to prevent fracture, as described.

No. 24,532.—EDWARD BECK, of Allentown, Pa.—*Improved Contrivance by which the Workman Operates Scroll Saws*.—Patent dated June 28, 1859.—This invention consists in the



peculiar means employed for operating the saw, whereby the operator may drive the saw, and at the same time have perfect control over the work, so that the same may be readily manipulated and properly presented to him by the saw.

*Claim.*—The oscillating platform L, connected with the shaft C by means of the strap *h h* and pulley D, or their equivalents, the arm E, pitman F, and spring I, arranged for joint operation, substantially as and for the purpose set forth.

No. 24,533.—HENRY BETTS, of Hamilton city, Canada West.—*Improvement in Railroad Bars or Rails.*—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The angle rail, in combination with the outside bar, where the space between them is filled in with cement prepared by boiling sand and coal tar in such proportions as will best resist the action of the elements, cold, heat, and moisture, and the wear of the wheels.

No. 24,534.—MILTON B. BIGELOW and ANSON HARDY, of Boston, Mass.—*Improved Fireproof Desk.*—Patent dated June 28, 1859.—The purpose of this invention is to give greater or more certain and convenient security to valuable papers and other articles than is afforded by the fireproof safes now in use.

The inventors say: We *claim* the movable table *d*, or any device essentially the same, in combination with the fireproof case *a a a*, said table being constructed and made so as to operate in the manner substantially as and for the purposes specified.

We also claim the slide *f*, or any device essentially the same, in combination with the movable table *d* and the fireproof case *a a a*, for supporting or assisting to support said movable table, whenever said table is drawn out to the position shown in Fig. 2, said slide and table being connected and made so as to operate in the manner and for the purpose substantially as specified and shown.

We also claim the brackets *q q*, or any device substantially the same, in combination with the fireproof case *a a a*, for supporting or assisting to support the movable table *d* and the slide *f*, in the manner and for the purpose substantially as shown and explained.

No. 24,535.—NELSON BIRDSALL, of Port Jervis, N. Y.—*Improved Spring Hinge.*—Patent dated June 28, 1859.—This invention consists in so combining and arranging a spring with a hinge that it shall automatically close the door or entrance, while, at the same time, it is invariably out of the way.

The inventor says: I *claim* the combination and arrangement of the spring E, and adjusting pieces G and H, applied to a hinge, as described and specified.

I also claim inserting within the spiral spring E the tubular spring I, as described, for assisting the action of the spiral spring and preventing it from setting or getting out of plane with the other parts, as set forth and specified.

No. 24,536.—L. E. BURDIN, of Paris, Ky.—*Improvement in Ploughs.*—Patent dated June 28, 1859.—The inventor says: In practice the cone A is caused to revolve freely on the shaft or spindle E by the action of the soil upon the same, which lessens the draft very materially.

*Claim.*—The arrangement of the beam M, the handles N, the standard K, brace H, share B, landside F, cone A, spindle or shaft E, braces C and G, and lug *o*, as described for the purpose set forth.

No. 24,537.—ALEXANDER CAMPBELL, WILLIAM CAMPBELL, and JAMES CAMPBELL, of Harrison, Ohio.—*Improvement in Corn Planters.*—Patent dated June 28, 1859.—This invention consists in a peculiar arrangement of gravitating slides and their accessories. Each seed aperture becomes visible to the operator just as it is on the point of discharging, so that he can see whether each slide is effective; also the levers J J assist the eye in judging of the perfect action of the valves, and afford the means of the temporary working of the valves by hand should occasion require.

*Claim.*—The described arrangement of the inclined slides or valves H H<sup>1</sup>, levers J J<sup>1</sup>, adjustable rods *o o*, and cam wheel K *k*, for the purpose explained.

No. 24,538.—JAMES A. CAMPBELL, of New Orleans, La.—*Improved Job and Card Printing Press.*—Patent dated June 28, 1859.—This invention consists in the peculiar mode of constructing and operating the inking roller frame, and the distributing and impression cylinder of a printing press.

The inventor says: I *claim* fastening the cylinder permanently on its solid axle E, and also fastening the ends of this axle securely into the slides F.

I also claim, in combination with the cylinder L, the revolving of the roller frame H on the solid axle E as its working centre, while the axle itself does not revolve, either by eccentric wheels, which are to be used when the cylinder vibrates, or by plain ones when it is stationary.



I also claim the eccentric wheels G and G<sup>1</sup> in combination with the cylinder L, for the purpose specified.

I also claim the cranks R and connecting rods D in combination with the cylinder L, the inking frame H, and the eccentric wheels G and G<sup>1</sup>.

I also claim the combination of the cranks S, the connecting rods T, the slots Y, the pins W, and the bottoms X, with this press, as specified and described.

No. 24,539.—WILLIAM I. CANTELO, of Burlington, N. J.—*Improvement in Stoves*.—Patent dated June 28, 1859.—This invention consists in a certain combination and arrangement of an exterior casing, an inner casing adjustable vertically, a fire pot and cone shaped grate, so that by raising or lowering the said inner casing the amount of ignited fuel may be increased or diminished at pleasure.

*Claim*.—The exterior casing A and inner adjustable casing H, in combination with the fire pot F and cone shaped grate G, when the several parts are arranged substantially as and for the purpose set forth.

No. 24,540.—THOMAS F. CHRISTMAN, of Wilson, N. C.—*Improvement in Machines for Hoisting Bricks*.—Patent dated June 28, 1859.—This invention consists in the use of buckets attached to an endless chain revolving on rollers placed one above the other for elevating the bricks to the required height.

*Claim*.—The combination of the rollers D D with the saddle and buckets E F, supported by rollers J J, the whole combined and described as a machine for elevating brick, and made to operate in the manner as set forth.

No. 24,541.—GILES CRAMTON, of Marshall, Mich.—*Improvement in Seed Planters*.—Patent dated June 28, 1859.—This improvement consists of a mode for regulating the distances each way at which the corn is to be planted, and for ensuring the correct planting of the first and subsequent hills in every row planted, by the use of a pair of cone pulleys, with an intermediate driver operating by friction, in connection with a system of spring stops W, the several parts being arranged and operated relatively to each other.

*Claim*.—The application and use of the pulleys P<sup>1</sup> P<sup>2</sup> P<sup>3</sup>, in combination with the adjustable hanger T, tension bar R, lever H<sup>2</sup> and yoke U, with its spring stops W W, the whole being arranged, constructed, and operated substantially as and for the purposes specified.

No. 24,542.—CALEB B. DAVIS, of Lawrenceburg, Tenn.—*Improvement in Machines for Sowing Fertilizers in Drills*.—Patent dated June 28, 1859.—The design of this machine is to put lime or any other kind of manure into the ground.

*Claim*.—The arrangement of hopper A, wheels B<sup>1</sup> B<sup>2</sup>, frame C C, handles D D, shoe E, handle of shoe H, pins on wheel b b, and axletrees G G, as described for the purposes set forth.

No. 24,543.—AURELIUS DICKINSON, of Claremont, N. H.—*Improvement in Apparatus for Purifying Gas*.—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The washer constructed as described with horizontal plates B B corrugated, or with their bottoms partly or wholly concave, with upright plates projecting above and below said plates, and dipping into the water below said plates, and with orifices so arranged in the highest portions of the said horizontal plates as to cause the collection of the gas in the concave portions of the said plates below and around said orifices, substantially as described.

No. 24,544.—GEORGE DIEFFENBACH, of New York, N. Y.—*Improvement in Bases for Artificial Teeth*.—Patent dated June 28, 1859.—This invention consists in making a compound applicable to dental bases and to other articles, capable of developing and retaining color or color, s incorporated into the compound, while the same is in a soft state, after the curing or hardening of the same.

*Claim*.—The composition of matter consisting of sulphate of alumina and other ingredients, substantially as described for the purposes set forth.

No. 24,545.—GEORGE DIEFFENBACH, of New York, N. Y.—*Improvement in the Process for Coloring Artificial Teeth*.—Patent dated June 28, 1859.—This invention consists in coloring a certain composition of matter, of which sulphate of alumina forms an indispensable ingredient, by incorporating the color into the composition while in its plastic or uncured state, and by developing the said color in the cured or hardened composition through the agency of solar light.

*Claim*.—Developing the color of a curved or hardened composition, by the agency of solar light, when the coloring matter is incorporated into the said composition while in its plastic or uncured state, substantially as described.

No. 24,546.—WILLIAM T. DE GOLYER, of Schenectady, N. Y.—*Improvement in Connecting*



*Boards for Roofs, &c.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Covering the joints of boards or planks for roofing, by means of sheets of metal bent in the form shown at *a b c*, so that the strips of wood or other packing used shall lie on as well as against the flanges turned on said sheet metal, as represented.

No. 24,547.—JOHN H. DUHME, of Cincinnati, Ohio.—*Improvement in Furnaces.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the flue spaces *A A*<sup>1</sup>, controlled by dampers *H* and *G*, for the purpose of increasing and perfecting the combustion, substantially as set forth.

No. 24,548.—J. HENRY FERGUSON, of Baltimore, Md.—*Improvement in Cartridges.*—Patent dated June 28, 1859.—The object of this invention is the production of a water proof and inflammable cartridge, adapted more especially to small arms. This object is effected by the application of a chemically prepared inflammable and water proof paper for the purpose of making the cartridge.

*Claim.*—A water proof and inflammable cartridge, made substantially as described.

No. 24,549.—BENJAMIN C. FITZHUGH, of Frederick, Md.—*Improvement in Harvesting Machines.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of a rake and reel revolving on the same shaft, when the rake is so made as to deliver the cut material in a line oblique to the swath of the machine, substantially as described.

No. 24,550.—MOSES R. FLANDERS, of Parishville, N. Y.—*Improvement in Grain Cradles.*—Patent dated June 28, 1859.—This invention consists in the novel mode of attaching the finger standard to the snath and bracing the fingers, whereby the several parts are rendered capable of being readily adjusted to suit the operator.

*Claim.*—Attaching the finger standard *B* to the snath *A* by means of the rod *C* and eye *b*, secured respectively to the standard and swath, in connection with the compensating or adjustable braces *H J*, the whole being constructed substantially as and for the purposes set forth.

No. 24,551.—PETER FONTAIN, of Philadelphia, Pa.—*Improvement in Gas Purifiers.*—Patent dated June 28, 1859.—This invention has for its object the regulating and cleansing of the stream of gas as it flows from the meter, in order that a steady current of pure gas may flow to the burner.

*Claim.*—The receptacle or receiver *E*, in combination with the filtering and purifying apparatus, arranged and operating substantially as described for the purpose set forth.

No. 24,552.—JOHN GALT, of Philadelphia, Pa.—*Improved Reciprocating Propeller.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim combining the buckets *E E* and *E*<sup>1</sup> *E*<sup>1</sup> with the frames *D D*<sup>1</sup> and with the dividing rods *F F*<sup>1</sup>, or their equivalents, by means of cross heads *G G*<sup>1</sup> and *H H*<sup>1</sup>, link connections *f f f*<sup>1</sup>*f*<sup>1</sup>, and slots *c c c*<sup>1</sup>*c*<sup>1</sup> and *d d d*<sup>1</sup>*d*<sup>1</sup>, substantially as and for the purpose specified.

I also claim the construction of the propellers with the frames *D D*<sup>1</sup> of flaring form, and with their buckets fitted to the smaller front portions thereof, substantially as and for the purpose specified.

I also claim constructing the driving rods, each in two parts, one of which, connected with the buckets, is capable of being connected with, or disconnected from, the other at pleasure, for the purpose either of closing the buckets before the backward movement, and opening them before the forward movement of the propeller frame *D* or *D*<sup>1</sup> commences, or of causing the closing of the buckets before the forward, and the opening of them before the backward movement, as may be desired, and thereby enabling the action of the propeller to be reversed without reversing the engine.

No. 24,553.—W. H. GRAY, of Dover, N. H.—*Improvement in the Let Off Motion of Looms.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The board plate *K* and springs *n n*, applied to the breast beam of the loom, and combined with a clutch, by which the yarn beam can be thrown into gear with the cam shaft or crank shaft of the loom, to operate substantially as and for the purpose described.

No. 24,554.—CHRISTIAN GINGRICH and JOSEPH K. GINGRICH, of Aunville, Pa.—*Improvement in Rotary Harrows.*—Patent dated June 28, 1859.—This invention consists in arranging clearers upon the weighted arm of a rotating harrow, so as to precede the traveller or fric-



tion roller which supports the weight and keeps the annular ring, upon which the traveller rolls, clear of dirt in using the harrow.

*Claim.*—The clearers H, in combination with the roller G and ring B, when arranged substantially as and for the purposes set forth.

No. 24,555.—C. P. GRONBERG, of Montgomery, Ill.—*Improvement in Raking Attachment for Harvesters.*—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The peculiar arrangement of the mechanism, namely: the reciprocating rack bar D and semi-circular toothed bar *d*, in connection with the bent rake shaft E, provided with a spring *h*, arm *m*, and part pinion G<sup>1</sup>; and semi-circular bar *j* on the support *e*<sup>1</sup>, provided with the teeth *k* and a projecting arm *n* for joint operation, substantially as and for the purpose set forth.

No. 24,556.—HEINRICH GUTH, of New York, N. Y.—*Improvement in Alcohometers.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—An alcohol indicator, substantially such as described, by which the evaporation of a fixed quantity of alcoholic liquid is made to indicate the exact percentage of alcohol contained in the said liquid, for the purpose set forth.

No. 24,557.—JAMES HARRISON, JR., of New York, N. Y.—*Improvement in Machines for Making Upholstery Springs.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, giving one or more of the forming rollers a positive rotary motion at a velocity which causes its or their periphery or peripheries to move faster than the periphery of that part of the mandrel in conjunction with it or them at any time in the operation, substantially as and for the purpose set forth.

Second. Connecting the axle of the roller *g*<sup>2</sup>, or any of the forming rollers, by a link and two universal joints, with a shaft having a longitudinally sliding and also a rotary motion, for the purpose of giving the said roller a rotary motion and a motion along the mandrel, and allowing it to accommodate its position to the varying diameter of the mandrel, substantially as described.

No. 24,558.—I. F. HOLLOWAY, of Saline Mines, Ill.—*Improved Ship's Capstan.*—Patent dated June 28, 1859.—The object to be obtained by this invention, is so arranging it that it can be readily lowered below deck and covered with a plate when it is not wanted, thus leaving the deck of the vessel clear.

*Claim.*—A capstan having a vertical movement, as well as a rotary one, substantially in the manner and for the purpose specified.

No. 24,559.—MARCUS L. HORTON, of Lebanon, N. H.—*Improvement in Stoves.*—Patent dated June 28, 1859.—This invention consists in so combining and arranging an elevated oven with a cooking stove, as that while the flame and hot products of combustion shall be made to pass entirely around and heat the oven, a current of air shall also be heated and made to pass around the oven to be conducted away for the purpose of giving warmth elsewhere; at the same time a portion of such heated air shall find its way into the oven to equalize its temperature and act as an absorbent of moisture.

*Claim.*—The ventilator I, with valve *h* and hood *g*, as arranged and in combination with chambers H H<sup>1</sup>, E E<sup>1</sup>, and flues G G, and D, operating as described and for the purpose set forth.

No. 24,560.—D. L. HUBBARD, Glastenbury, Conn.—*Improvement in Apparatus for Tanning.*—Patent dated June 28, 1859.—This invention consists in the use of a wheel or cylinder having a periphery formed of slats and placed within a proper vat, the whole being so constructed that the hides may be turned and all their parts may be properly exposed to the action of the tannin, and fresh bark added, as well as spent bark allowed to be removed from the liquor in the vat without agitating the liquor sufficiently to deteriorate it by the absorption of the oxygen.

The inventor says: I *claim* the wheel or cylinder B, having its periphery formed of oblique slats *c*, placed within the vat A, and arranged to operate as and for the purpose set forth.

I further claim in combination with the wheel or cylinder B, constructed as described, the apron C for the purposes specified.

No. 24,561.—WILLIAM G. W. JAEGER, of Baltimore, Md.—*Improvement in Apparatus for Condensing Coal Oils.*—Patent dated June 28, 1859.—This invention consists of certain improvements in the condensation of vapors in the process of distilling coal oil.

The inventor says: I *claim* the employment of a fan blower, when the same is used to draw the vapors from the retort in the manner and for the purpose set forth.



Second. And in combination with the fan blower or draft so used, I claim the escape pipe  $x$  and trap  $a^1$ , arranged and operating as set forth.

No. 24,562.—J. C. JEFFRIES, of Mount Vernon, Ind.—*Improved Bedstead Fastening*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The construction and application of a bedstead fastening formed with male and female plates  $a a, g g$ , figures 2 and 3, provided with tongues  $b b, h h$ , and hooks  $c c, i i$ , when arranged in combination with a post and rail, substantially in the manner as set forth and described.

No. 24,563.—EDWARD C. KNIGHT, of Philadelphia, Pa.—*Improvement in Arranging Couches in Railroad Cars*.—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the mode of arranging berths or couches over backs of railroad car seats, substantially as set forth.

Second. I claim the manner of supporting the backs of the seats by slides E and rod F, for the purpose shown and described.

No. 24,564.—MELVIN W. KNOX, of Sheriden, N. Y.—*Improved Crosscut Sawing Machine*.—Patent dated June 28, 1859.—These improvements relate to a machine for sawing fire wood by hand power into suitable lengths for domestic use.

The inventor says: I *claim*, first, the arrangement of the several parts of a sawing machine, as herein described, whereby the operator can manage the sawing, elevating and depressing the saw and opening and closing the clamp without changing his position in relation to the machine.

Second. The guides O and blocks  $r$ , when arranged in combination with the saw, in the manner specified.

No. 24,565.—ISAAC W. LAMB, of West Novi, Mich.—*Improvement in Braiding Machines*.—Patent dated June 28, 1859.—This invention consists of a machine for the braiding of whip lashes and other articles, in a manner similar to that in which the braiding is performed by hand.

The inventor says: I *claim*, first, the combination of the two sets of shuttle carriers K K K<sup>1</sup> K<sup>1</sup>, rotating in opposite directions in concentric circles, and the shuttle changers N N<sup>1</sup>, having the movements described; the whole operating substantially as set forth.

Second. The construction of the shuttles, each with two openings  $r s$  and with a spring dog  $u$  entering both openings, to operate in combination with the inclined surfaces and stops of the shuttle carriers and shuttle changers, substantially as and for the purpose described.

Third. The combination with the shuttles of the nippers  $v v$  and their several appendages and appliances, by which their bite or friction upon the plaits are regulated and rendered uniform, substantially as and for the purposes described.

No. 24,566.—WILLIAM D. LUDLOW, of New York, N. Y.—*Improvement in Preserve Cans*.—Patent dated June 28, 1859.—This improvement consists in an arrangement and combination of the lugs and key by which the cover is held down.

*Claim*.—The described combination of the key D with the lugs E attached in the manner shown to the sides of a cavity  $a$  in the top of the can, in order to prevent the disruption of the said lugs during the act of closing the can, to avoid projections above or beyond the periphery.

No. 24,567.—WILLIAM H. MAIN, of Liverpool, Ohio.—*Improvement in Machines for Folding and Packing Wool*.—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The herein named devices for rolling fleece into a compact cylindrical form, namely: the combination of the belt G, rod H, hooks I, and pins K, the same being operated by means of the windlass E and screw S, in the manner and for the purpose set forth.

No. 24,568.—GARDINER MAYNARD, of Ilion, N. Y.—*Improvement in Cultivator Teeth*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement of the tooth A, stay C, and wrought iron stem and brace B, when the stem is welded between the wings of the tooth and made to form a brace, substantially as set forth, the whole being constructed and used in the manner specified.

No. 24,569.—CHARLES MCBURNEY, of Roxbury, Mass.—*Improvement in Packing for Stuffing Boxes of Pistons*.—Patent dated June 28, 1859.—In describing this improvement, the inventor says: I take 25 pounds of India rubber, 2 pounds of sulphur, and from 4 to 8 pounds of silica or plumbago. With this compound, after it is suitably ground and mixed, canvas,



or other suitable fabric of cotton, or linen, or hemp, is coated upon each side, and a sufficient number of plies of such fabric are united by a heavy pressure or by rolling.

*Claim.*—A packing for stuffing boxes, composed of canvas or India rubber, as set forth.

No. 24,570.—SAMUEL MILLS and GEORGE E. MILLS, of New York, N. Y.—*Improvement in Machines for Pulverizing Minerals.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A series of circular grooved and roughened metallic plates, working upon their edges, side by side, in a trough or cylinder, the circle being larger than the plates, which having an alternating motion in combination with each other and the cylinder, and in connection with the rock shafts and levers for operating the same, substantially as described, and for the purposes set forth.

No. 24,571.—THOMAS MITCHELL, of Lansingburg, N. Y.—*Improved Machine for Finishing Hair Brush Handles.*—Patent dated June 28, 1859.—This invention consists in the use of rotating cutters, guards and guides, and clamps, combined with patterns, the whole being arranged whereby the backs or stocks of brushes may, by manipulation, be shaped and cut in proper form.

The inventor says: I *claim* the rotating cutter wheels D D and guards and guides F, in combination with the clamps G K, provided with patterns H H<sup>1</sup>, arranged substantially as and for the purpose set forth.

I also claim centring the unfinished brushes in the clamp G by means of the bristles *i*, in connection with the strip or plate J and the inner edge of the pattern H or its extension H<sup>2</sup>, substantially as described.

No. 24,572.—MARIE HELOISE NICOLAS and LOUISE JOSEPHINE CHAMPAGNE, of Thibodeaux, La.—*Improvement in Defecating Sugar Juices.*—Patent dated June 28, 1859.—This invention consists in the employment, in the bleaching and defecating of sugar juices, of the combination of sulphur and lime.

*Claim.*—The employment, in the bleaching and defecating of sugar juices, of the described combination of sulphur and lime, prepared in the manner substantially as set forth.

No. 24,573.—HENRY S. NORTH and JOHN O. COUCH, of Middletown, Conn.—*Improved Animal Trap.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the combination of the many chambered cylinder A with the breech pin C by means of a central counter-bore in the said cylinder meeting the chambers *a a*, and a groove or recess *c* all around the end of the breech pin, substantially as described, whereby communication is made between the chambers of the cylinder and all are enabled to be fired at once with a single vent.

Second. Fitting the hammer in the form of a ring to slide along the exterior of the breech pin C, as described.

Third. The combination, with the hammer applied to slide along the exterior of the hollow breech pin, of a rod B, sliding through the centre of the cylinder and within the breech pin, and a spring sear *j* attached to the said rod and working through a slot K in the breech pin, substantially as described.

Fourth. The combination with the hammer applied outside of the hollow breech pin of a collar *g*, or its equivalent, applied within the breech pin, and having pins or cars *h h* projecting through slots *i i* in the sides of the breech pin behind the hammer, and a helical spring F applied within the breech pin behind the said collar, or equivalent, substantially as described.

Fifth. The extension of the central rod B which carries the sear directly through the cylinder and through the hollow breech pin, so that it may be operated either by a pull at its front end or by a push at its rear end, substantially as described.

Sixth. In combination with the many chambered cylinder A, hollow breech-pin C, hammer E, central rod B, sear *j*, and spring F, and collar *g*, as described, we claim the stock D and trigger *p*, applied as described, to make a weapon that can be baited and set for shooting game by the seizure of the bait, or that can be used in the hand like an ordinary pistol or firearm, as set forth.

No. 24,574.—CHARLES PECK, of New Haven, Conn.—*Improvement in Tool Holders for Lathes.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the tool rest *g* with the segment *i*, or their mechanical equivalents, so as to elevate or depress the cutting instrument, when arranged substantially in the manner and for the purpose described.

Second. I claim the T slotted bed plate, with the tool rest *g* connecting the tool posts *d d*, when combined substantially in the manner described, so as to allow the cutting tool to be placed at any required angle horizontally.



No. 24,575.—GEORGE RACE, of Norwich, N. Y.—*Improved Clothes Dryer*.—Patent dated June 28, 1859.—This invention consists in the employment of a hollow post, which incloses the arms on which the materials to be dried rest, together with devices for raising, extending, and lowering said arms.

The inventor says: I *claim*, first, the employment of a hollow post enclosing the arms of the reel, in which the arms may be elevated and depressed through its top, in the manner and for the purpose set forth.

Second. The combination of the sliding head H and the arms D, hinged to said head at their lower extremities, and connected by cords, or other equivalent connection, at their upper extremities, substantially as and for the purpose described.

Third. The combination with the foregoing of the cord and pulleys, the pinion *m*, rack F, and latch *t*, for elevating and securing the head H in the hollow post, when the whole is constructed and operated substantially in the manner set forth.

No. 24,576.—WILLIAM RAYMOND, of Marlboro', N. H.—*Improved Machine for Driving Hoops, on Pails, &c.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of a driver, when either fixed or turning loosely in its bearings, and operated by means of a jointed lever or otherwise, so as to press against and drive the hoop upon the tub when a rotary motion is given to said tub, as described.

No. 24,577.—WILLIAM RESOR, of Cincinnati, Ohio.—*Improvement in Cooking Ranges*.—Patent dated June 28, 1859.—This invention relates to certain improvements in regulating the draft in cooking ranges and stoves.

*Claim*.—The peculiar construction of the plate A B, which constitutes the upper plate of the stove, forming as it does the plate of the stove, the arched roof of the damper chamber, and part of the chimney pipe, in the manner and for the purpose set forth.

No. 24,578.—DELOS E. RICE, of Detroit, Mich.—*Improvement in the Mode of Lifting Stamps for Crushing Ores*.—Patent dated June 28, 1859.—This invention consists of a box, or band B B, Fig. A, and in the section figure S, which moves freely up and down upon the stem, or rods R R, attached to the stamp head P. Between the rods R R, and inclosed in the box, or band *b b*, are three wedges, as seen in the section figure S.

*Claim*.—The application of the folding wedges *c c* and *w*, in combination with the band *b b*, or their equivalents, substantially as described, thereby producing as desired a uniform lift of the rods together with the stamp head.

No. 24,579.—ALEXANDER RICKURT, of Schoharie, N. Y.—*Improved Machine for Turning Hubs*.—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the graduated scale 1, in combination with the index 2, and the sliding frame and hub blank and mandrel, operating in connection with the cutters, in the manner and for the purpose described.

Second. I claim the constructing the sliding sleeve with an opening at the angle, so as to slide over and upon the large cutter on the shaft, so as to cut any required size of hub without change of knife, as described.

And I claim the constructing the sliding sleeve (or cutter and stock) to pass over and mask the fixed knife on the shaft, in connection and combination with the making one of the sides of the sleeve thicker and heavier than the other, in order to approximate to an equipoise of the shaft.

Third. I claim the setting and adjusting (by means of the slot and screw bolt in 19) the arm 18, so as to cut any required length of hub, and so arranged upon the bar 19 as to allow it to vibrate, for the purpose of bringing up the cutters to the hub, or throwing them back when required, and without interfering with the screw or the adjustment of the arm.

No. 24,580.—WILLIAM I. RIVERS, of Sumpter District, S. C.—*Improvement in Cotton Cultivators*.—Patent dated June 28, 1859.—This plough is to enable the planter to thoroughly pulverize the land, breaking up the clods of earth, at the same time tearing out all grasses of all kinds, being more especially adapted to the joint grass, with which some cotton lands are infested, and at the same time making the drill in which the cotton is to be planted.

*Claim*.—The handles 1, helves 2, beam 3, foot bar 10, plough 20, harrow 45, roller frame 6 7, and roller 8, when the whole are arranged for joint operation, as described and for the purpose set forth.

No. 24,581.—CHARLES B. SAWYER, of Fitchburg, Mass.—*Improved Apparatus for Heating, Cooking, and Ventilating*.—Patent dated June 28, 1859.—By means of the dampers and flues connected with the range and oven, all vapors arising from the process of cooking are conveyed at once to the chimney, and are therefore prevented from mixing with the air by which rooms are warmed, so that by the use of this combined furnace, range, and ventilator



the air passing through the rooms may be fresh and 'pure, even through the process of cooking.

*Claim.*—The combination of the oven O and range e, with the fire pot d, fire flues T, and warm air pipes P Q S, substantially as described.

No. 24,582.—PHILO B. SHELDON, of Prattsburg, N. Y., assignor to Himself and I. T. UPSOM, of Huron, N. Y.—*Improved Broom Clasp.*—Patent dated June 28, 1859.—The claims and engravings explain the nature of this invention.

The inventor says: I *claim* the feathers or ribs g g in combination with the screw threads of the shanks ff, and with the handle D constructed as described, for the purposes specified.

I also claim the combination of the conical screw shanks ff, conical screw ferrule s, and screw bolts and nuts m n, arranged substantially as and for the purpose set forth.

I also claim the wires B B attached to the jaws A A, and arranged in combination therewith, in the manner and for the purpose described.

No. 24,583.—ADON SIDDALL, of Ransom, Mich.—*Improvement in Corn Huskers.*—Patent dated June 28, 1859.—This machine is designed to shell corn, either wet or dry, large and small, with the same facility; and the cobs are discharged from the machine separate from the corn.

*Claim.*—The arrangement of the stirrup M, with the levers J J for operating the adjustable sliding pressure bar H, in the manner described for the purpose set forth.

No. 24,584.—WILLIAM SKENE and ROBERT SKENE, of Louisville, Ky.—*Improvement in Power Pulley Presses.*—Patent dated June 28, 1859.—This invention consists in arranging a scroll with a conical right and left hand screw windlass, in such relation to the follower of a press, that a weight attached to a rope, which runs over the scroll, acts by means of ropes running from one follower over a series of pulleys to the other follower, and to the conical windlass with continually increasing power, so that a substance placed between the two followers of the press is subjected to a long continuing and ever increasing pressure; and the scroll, together with the conical windlass, is arranged on a shaft which has its bearings on slides attached to the upper follower, so that the weight of these parts assists in doing the work.

The inventors say: We *claim*, first, the arrangement of the scroll D, and the conical windlasses E E<sup>1</sup>, to operate in combination with the windlass H, and with the two followers B B<sup>1</sup>, or their equivalents, substantially as and for the purpose specified.

Second. Arranging the scroll D and the windlasses E E<sup>1</sup>, or their equivalents, on slides C, which are rigidly attached to the upper follower B, so that the weight of those parts assists in increasing the pressure on the substance placed between the two followers, substantially as described.

Third. The arrangement of the two followers B B<sup>1</sup>, with pulleys k k<sup>1</sup> and l l<sup>1</sup>, to operate in combination with the scroll D, the cone windlasses E E<sup>1</sup>, and the ropes d and e e<sup>1</sup>, substantially as and for the purpose set forth.

No. 24,585.—WILLIAM SKENE and ROBERT SKENE, of Louisville, Ky.—*Improvement in Power Gear Presses.*—Patent dated June 28, 1859.—This invention consists in arranging a windlass and a scroll, or fusee, in combination with a series of gear wheels and pinions, and with a rack toothed on both sides in such a manner that by means of a weight suspended from a rope which extends from the windlass to the scroll, a progressive power is created on a follower attached to the lower end of the rack, so that the substance placed between the follower and the press bottom can be exposed to an ever increasing power during a certain period of time.

*Claim.*—The arrangement of the windlass J, the weight L, the scroll I, and the pinion H, to operate in combination with the cog wheel G, the pinions E and E<sup>1</sup>, the double rack D, and the follower B, substantially as and for the purposes specified.

No. 24,586.—M. D. SNYDER and S. A. SNYDER, of Clarendon, N. Y.—*Improved Carpet Fastener.*—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—An improved carpet hook, consisting of the barbed shank a, gauge notch d, throat c, and rectangular clinching hook b, all constructed and combined substantially in the manner and for the purposes shown and described.

No. 24,587.—JOHN L. STEWART, of East Boston, Mass.—*Improvement in Retorts for Distillation of Coal.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my improved revolving web retort, constructed not only with its induction and eduction openings arranged at or near one end of it, but with an endless or other proper carrier, made so as to operate to receive the coal or matter to be distilled from or near one end of the retort, and carry or force the same toward the opposite end thereof,



and from thence backward toward the front end, and there discharge such, the same causing the coal or matter to be distilled to pass twice through the retort or carbonizing chamber, in manner and for securing advantages specified.

And furthermore, I claim, in combination with the retort, or its discharging mouth, a water sealing trough and an endless carrier to operate in such trough, substantially as specified, to receive or carry away from the retort the discharged coke or products, the water of the trough, under such application of it to the discharging mouth, serving to furnish vapor or steam to the retort in manner and to effect an advantage in the distillation of the coal or matter therein, as specified.

No. 24,588.—J. C. STODDARD, of Worcester, Mass.—*Improvement in Machines for Making Hay*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Arranging the rakes in radial slots between the two drum heads K, and fixing them therein, so as to serve the purpose of a hay making and, by a simple change, a hay raking machine, substantially in the manner set forth.

No. 24,589.—JOSEPH SOUTER, of Chicago, Ill.—*Improvement in Apparatus for Drying Grain*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The drying of grain by means of heated air within a vertical cylindrical chamber, which is provided with a series of tapering rims *r* and a central shaft *y*, which is armed with a series of winged scattering wheels *w*, when a fan or some other equivalent means is employed for producing an upward current of heated air through the said chamber, in the manner set forth.

No. 24,590.—GEORGE S. G. SPENCE, of Boston, Mass.—*Improved Apparatus for Heating Buildings*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement of the elevated sides of the boiler in combination with the pipe H, or its equivalent, depressed within the same, for heating and distributing the air, in the manner and for the purpose set forth.

No. 24,591.—A. G. STIPHER, of Richmond, Ind.—*Improvement in Harvesting Machines*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of the tilting spring raker D in combination with the sliding raker frame *d*, constructed and arranged substantially as and for the purposes set forth.

Second. Operating the raker frame *d* and raker D by means of the reciprocating bar F F<sup>1</sup> through the medium of the rack F<sup>2</sup>, cog wheel *j*, pulley *g*, and cord *g*<sup>2</sup>, all being arranged substantially as and for the purposes set forth.

Third. In combination with the raker D, the sliding trap doors E, operated by means of the levers G, springs *k*, and cams *b*, substantially as and for the purposes set forth.

No. 24,592.—A. H. TAIT, of New York, N. Y., assignor to GEORGE B. HARTSON, of said New York.—*Improvement in Defecating Sugar Juices*.—Patent dated June 28, 1859.—The claim explains the nature of this invention.

*Claim*.—The employment of the sulphate of tin, applied in the manner substantially as described, for defecating cane juice and sirups, as set forth.

No. 24,593.—RICHARD P. THOMAS, of Syracuse, N. Y.—*Improvement in Frames for the Manufacture of Soap*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Lining soap frames in ordinary use with flexible metallic plates, substantially in the manner and for the purpose set forth.

No. 24,594.—CALVIN G. UDELL, of Morris, Ill.—*Improvement in Corn Planters*.—Patent dated June 28, 1859.—The measuring rods, marker, and guide are braced by cords, one of which is tied to a screw in one of the short tubes and passes to the top of the rod M, around which it is wound, thence to a screw in the other short tube.

Another cord P is tied around the front ends of the measuring rods and the rod M, and extends to the standard I I, to which it is tied near the top of the seed box.

The inventor says: I *claim*, first, the arrangement of the grain box A, tubes B B, connecting bars E E, and legs I I, the whole being constructed and operated substantially in the manner set forth.

Second. In combination with the above, I claim the measure L L, marking rod M, and guide K, the whole being constructed and operated substantially in the manner and for the purpose set forth.



No. 24,595.—THOMAS F. WAGONER, of Trenton, N. Y.—*Improvement in Machines for Hulling and Scouring Grain.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of two surfaces, one of which is elastic and the other hard, when the planes of said surfaces are placed on a plane with the horizon, and one of them having a circular motion for the purpose of hulling and scouring grain, substantially as set forth.

No. 24,596.—H. L. WATTS, of Chester, Mass.—*Improved Horse Shoe Machine.*—Patent dated June 28, 1859.—A is the bed plate, or horizontal frame, which carries the working parts of the machinery; B is a carriage to which the die C for forming the interior of the shoe is attached, said carriage resting and travelling on a planed surface provided for it on the bed plate A, and being confined thereto by tongs *a a* on its sides, fitting to grooved ways *b b* provided in the bed plate.

*Claim.*—The arrangement and combination of the slotted carriage B, the die C, and the rollers J, as and for the purpose shown and described.

No. 24,597.—JOHN YOUNG, of Joliet, Ill.—*Improvement in Rotary Cultivators.*—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and combination of a skeleton or open rotary ploughing cylinder, when the mould boards therefor are set tangential and extend from end to end of the cylinder in a straight or oblique direction, in combination with a rotary shaft or circular edged disk, the whole being operated substantially as and for the purposes set forth.

No. 24,598.—McCLINTOCK YOUNG, Jr., of Frederick, Md.—*Improvement in Harvesting Machines.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* combining the handle S of the rake C with the shaft R by means of the supporter *c*, the shaft arms *g g*, the crank *e*, the pitman *h*, and the pitman *i*, and in such a manner that the rotation of said shaft will steadily and positively impart the desired movements to the rake, substantially as set forth.

I also claim the combination of the cams D D<sup>1</sup> and the guides *a b*, or either of them, with the above described mechanism for operating the rake, constructed and arranged in the manner and for the purposes substantially as described.

No. 24,599.—EDMUND B. CHEREVY, of New York, N. Y., assignor to Himself and THOMAS W. WEATHERED, of said New York.—*Improvement in Furnaces.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the hollow dome *k* over the fire, in combination with the dome *h*, in the manner and for the purpose specified, whereby the heat ascends into said dome *k* and then passes away between the domes *h* and *k*, heating the circulating water, as specified.

I also claim the thimbles *o o* passing through the flanges 2 and 3, and forming openings for the circulating water, substantially as specified.

No. 24,600.—SAMUEL CLARK, of New York, N. Y., assignor to WILLIAM OLAND BOURNE, of said New York.—*Improved Mode of Imparting Motion to a Sifting Apparatus.*—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the imparting a short, quick, or jarring motion to a sifting apparatus, or machinery of any kind, where such motion is desirable, by means of an oscillating, vibrating, or reciprocating weight, brought, at the end of its motion, into contact with the said apparatus or its attachments, the same being arranged and constructed in the manner described at *d e f h* and *i*, or its equivalent.

Second. Suspending the object to which the motion is applied by means of a suspending or supporting link or rod, with concave bearing parts uppermost at both ends, and convex bearing parts undermost, constructed as set forth at *l m n k* and *r*, or in an equivalent manner.

No. 24,601.—DANIEL FOREMAN, of Navarre, Ohio, assignor to Himself, G. W. SWERINGEN, and JONATHAN PENoyer, of said Navarre.—*Improvement in Seeding Machines.*—Patent dated June 28, 1859.—On the shaft D a crank *f* is formed, said crank being connected by a rod *g* with a slide E, the upper end of which is fitted in a case or guide box F attached to the back side of the seed box C. The slide E is formed of a semi-cylindrical bar, the upper part of which is hollow, and a recess *h* is made in its outer or convex side to form a cap. In the upper and hollow part of the slide a plate *i* is placed, the lower end of said plate projecting over the recess or cap *h*.

*Claim.*—The arrangement and combination with the interior of the peculiarly formed hollow slide E of the adjustable plate *i*, substantially as and for the purposes shown and described.

No. 24,602.—WILLIAM H. GRAY, of Dover, N. H., assignor to Himself and LUTHER ROBINSON, of Melrose, Mass.—*Improvement in Let Off Motion for Looms.*—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, combining the clutch *h h i i*, or its equivalent, by which motion is imparted to the let off mechanism, with the yarn beam by means of a worm gear *d* on the yarn beam and an endless screw *e* and spring *g*, applied, substantially as described, to the shaft E, which controls the rotation of the beam, and operating as set forth.

Second. In combination with the worm gear *d*, endless screw *e*, and spring *g*, applied as described, I claim the lever H applied between the said spring and the surface of the yarn on the beam, and operating substantially as specified.

No. 24,603.—LEVI C. JOHNSON, of Buffalo, N. Y., assignor to Himself and JOSIAH B. SMITH, of said Buffalo.—*Improved Portable Door Fastener*.—Patent dated June 28, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The sliding bar D, including the plate F, when so constructed as to form the slot H, and so connected and arranged with the plates A and A<sup>1</sup> and bolt B as that when placed in the door for use the bar D will stand at right angles with the bolt B, and when folded for carrying in the pocket the plate F will cover the teeth or spurs of the plate A, substantially as described.

No. 24,604.—EBENEZER G. POMEROY, of New York, N. Y., assignor to JULIUS R. POMEROY, of Brooklyn, N. Y.—*Improvement in the Method of Protecting Iron from Oxidation*.—Patent dated June 28, 1859.—The claim will explain the nature of this invention.

*Claim*.—The preparation of iron by corroding or oxidizing its surface for the express purpose of making the same rough and capable of being closely and firmly united with the covering of fire-proof paint by means of rolling, or other mechanical force, and the application of other processes, as described, to iron so prepared in combination therewith.

No. 24,605.—AUSTIN POTTER, of Williamson, N. Y., assignor to Himself and JOEL W. NORTON, of said Williamson.—*Improvement in Grain Separators*.—Patent dated June 28, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the application of the adjustable slide board D to the endless riddle E in such a manner that the grain and straw can be made to impinge upon the end, or more open meshes of the same, or upon the top, thereby varying and adapting the action to the quantity of grain and straw, and employing the force with which it leaves the cylinder as a means of separating the two, substantially as and for the purposes described.

I also claim the combination and arrangement of the parts consisting of the fan H, self vibrating riddle E, with pulleys *u x* driven directly from the cylinder B, elongated shaker and board R G, and intermediate adjustable slide board D, operating conjointly, substantially as described, to form a portable, cheap, and effective separating attachment of threshing machines, as set forth.

No. 24,606.—CHARLES A. STEBBINS, of Boston, Mass., assignor to Himself and REUBEN J. TODD, of said Boston.—*Improvement in Apparatus for Oiling the Cylinders and Pistons of Steam Engines*.—Patent dated June 28, 1859.—This invention consists of a hollow vessel or reservoir A, carrying within it a force pump, the barrel of which is exhibited at B and the piston thereof at C. The said pump is furnished with an induction valve *a*, and an eduction valve *b*. The latter valve opens downward, and under ordinary circumstances is pressed towards its seat *d*, by means of a spring *c*.

*Claim*.—The combination of the lifter *f* and tubular holder *h*, or their equivalent or equivalents, with the valve *b* and the piston C, the whole being constructed and applied together and to a reservoir A and its pump barrel B, substantially in the manner and to operate as specified.

No. 24,607.—DEMAS S. BARNES, of New York, N. Y.—*Improved Furniture Caster*.—Patent dated July 5, 1859.—This invention consists in constructing the ball of the caster to run on an axle supported by a framework covering, but not touching the top of the ball, and said framework is to rest against the bottom of the object to be supported at a single point, to facilitate the horizontal rotation of the framework and ball, the whole being enclosed in a conical or cylindrical case.

*Claim*.—The spherical roller B, with its axle running in the framework C C, in combination with the two convex surfaces E and F, or with the convex and concave surfaces E and F, so as to enable the same readily to revolve on a vertical axis, the whole being constructed, combined, and enclosed in the tube or case A, substantially as herein described, and for the purposes set forth.

No. 24,608.—BENJAMIN BILLINGS, of Macedon, N. Y.—*Improved Water Wheel*.—Patent dated July 5, 1859.—This improvement consists in making the crown A and wheel B conical, in such a manner that the sluices or guide curves *g g* of the one, and the channels *h h* of the other, shall have an inclination downward and outward, the channels being in continuation of the sluices, as represented in the engraving.



*Claim.*—The conical crown A and conical wheel B, constructed and combined substantially in the manner and for the purposes specified.

No. 24,609.—LEWIS BISHOP, of Talladega, Ala.—*Improvement in Cotton Harvesters.*—Patent dated July 5, 1859.—This invention consists in the employment of a series of endless picker chains, placed on a revolving cylinder and used in connection with a revolving stripping brush, the above parts being attached to a cart or to a box mounted on wheels, so that as the cart is drawn along the cotton will be picked from the bolls by the picker chains, and the cotton stripped therefrom by the revolving brush, and deposited in the box on the body of the cart.

*Claim.*—The endless picker chains F, placed on the cylinder E, in connection with the brush cylinder D, the above parts being attached to a cart or to a box or receptacle A, mounted on wheels, and the whole arranged to operate as and for the purpose set forth.

No. 24,610.—SNOWBALL BOTTERILL, of Westmoreland, N. Y.—*Improvement in Hooks for Whiffletrees.*—Patent dated July 5, 1859.—E is a spring button or bolt, with a head which plays back and forth within the chamber F of the barrel C, and is held against the ends of hooks D D, an helical spring G, which presses respectively against the button E and piece H.

*Claim.*—The combination and arrangement of hooks D D and spring button E, in the manner and for the purposes set forth.

No. 24,611.—HENRY W. BOWEN, of Providence, R. I.—*Improved Wind Engine.*—Patent dated July 5, 1859.—This invention consists in the employment of a series of horizontal pivoted sails, placed in a frame, having certain mechanism connected with them and arranged so that the wind acting upon the sails is made to give, in connection with the weights or springs, either or both, a reciprocating movement to the device, and an engine is obtained for transmitting power by the action of the wind.

*Claim.*—The frame D, provided with sails E, and attached to the shaft C, in connection with the bent lever G, connected with the sails by the rods F and arms b, the links H, spring rod I, and the weight J and spring K, or their equivalents; the whole being arranged substantially as and for the purpose set forth.

No. 24,612.—ROBERT BROWN, of Stroudsburg, Pa.—*Improved Washing Machine.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement in the trough E of the chambers S S, and transverse strips h h with the bars a a, when the chambers stand behind the strips, and the strips are placed in such a relation to the bars a a that they will pass between them, and thus at the same time press and rub the clothes, the several parts being constructed and operating substantially in the manner and for the purpose set forth.

No. 24,613.—THOMAS B. BUTLER, of Norwalk, Conn.—*Improvement in Harvesting Machines.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The employment of the cams and guides S, for the purpose of giving a forward and backward motion to the cutter bar and cutters, substantially as set forth.

No. 24,614.—W. I. CANTELO, of Burlington, New Jersey.—*Improved Method of Reducing Wood, &c, to Sawdust or Finer Grains.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Reducing glutinous fibrous, and other tough materials, to powder, by placing the ends of blocks of the same opposite to and in contact with each other, and presenting them simultaneously, and at the point of junction, to the edge of a circular or reciprocating saw, with the aid of the appliances described, or any equivalent to the same.

No. 24,615.—MICHEL CELERIER, of Philadelphia, Pa.—*Improvement in Machinery for Webbing Single Strands of Thread.*—Patent dated July 5, 1859.—B is the bobbin containing the single thread; C, the bobbin containing the thread when tripled; D D D, the car; E, a bell shaped pulley connected by a compound lever G G G with a handle F, and H a fork connected by a lever with a handle J.

*Claim.*—The combination of the pulley E, the sliding car D D D, the fork H H, and the eyepiece L, arranged and operating substantially as described, for preparing silk for making twist.

No. 24,616.—CHARLES CLARENI, of New York, N. Y.—*Improved Wrought Nail Machine.* Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the top and side hammers and vibratory anvil, substantially as described, so as to form two or more nails at a time without turning the rod, as specified.



I also claim the apparatus for connecting the driving shaft with the top hammer, by which it receives its motion in a proper manner, as specified.

I also claim the connection of the side hammers with the driving shaft to produce the requisite motions thereof, and allow said hammers to be raised and lowered, as and for the purposes set forth.

I also claim the arrangement and operation of the cutter, as described, for severing the nail from the rod.

No. 24,617.—ISAAC COOK and JOHN T. BEVER, of Haynesville, Mo.—*Improvement in Ploughs*—Patent dated July 5, 1859.—This invention consists in the combination of a double pointed reversible mould board A B C, made without landside bars, and of a revolving landside wheel D, which has a circular cutting plate E attached to its landside face.

*Claim.*—The combination and arrangement of the sharp edged landside wheel D E with a reversible, double pointed mould board A B C, which has no landside bars, substantially as and for the purposes set forth.

No. 24,618.—GEORGE H. CORLISS, of Providence, R. I.—*Improvement in Steam Engines.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* imparting to the liberated slide valve of steam engines their closing movements by springs, so connected with the valve gear that whilst these springs impart the same initial force to the valves, at every operation, the expansive force, which these springs exert, varies with every change in the range of movement given to the valves.

I also claim imparting to the liberated slide valves of steam engines their closing movements, by springs combined with a curved moving support, in such manner that the spring applies itself tangentially to the said support, and that the effective length of the spring varies with the tensive force which it exerts.

No. 24,619.—B. M. DORR, of Kewanee, Ill.—*Improved Method of Opening and Closing Farm Gates.*—Patent dated July 5, 1859.—This invention consists in arranging under the gate a pinion which engages with two racks on opposite sides, said racks to be connected by means of suitable levers and rods with the two panels of a sliding gate, so that by giving the pinion an oscillating motion, the two panels slide to or from each other in opposite directions. By this invention gates are opened or closed as the wheels of vehicles pass over the pinion.

*Claim.*—The arrangement of the pinion  $i$ , the toothed racks  $n n^1$ , and the levers  $d d^1$ , to operate in combination with the slotted rods K K<sup>1</sup> and the crank levers E E<sup>1</sup>, for the purpose of opening and closing the gate A A<sup>1</sup>, substantially as described.

No. 24,620.—EPES E. ELLERY and JOHN F. ELLERY, of New York, N. Y.—*Improvement in Water Proof Paints.*—Patent dated July 5, 1859.—The inventors say: We take 12 pounds of India rubber and dissolve it by heat in 6 gallons of linseed oil. We then take 12 pounds of gutta percha and dissolve it by heat in 12 gallons of linseed oil. These articles are then mixed together, and into the mixture thus obtained we put 3 gallons of shellac varnish—made by dissolving 6 pounds of gum shellac in 3 gallons of alcohol—and the mixture is then thoroughly incorporated by stirring. From 2½ to 3½ gallons of this mixture is then mixed with 100 pounds of coloring matter, such as is needed, by passing the whole through a paint mill.

*Claim.*—The composition prepared and composed of the materials as described, in the proportion set forth, for the purpose of making water proof paint.

No. 24,621.—H. C. EMERY, of Lincoln, Ohio.—*Improvement in Mills for Crushing Cane.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The adjustable shafts of the rollers in slide bearings, at top and bottom, operating them in a rectilinear frame, in a direct manner for giving a wedge pressure, providing them near their top with flanges and a groove and a bevel on their bottoms, from the periphery toward the shafts, substantially as described, the several parts standing in the relation to each other as specified, for the purpose set forth.

No. 24,622.—A. L. FLEURY, of Baltimore, Md.—*Improvement in Lamps.*—Patent dated July 5, 1859.—This invention relates to certain improvements in devices for burning coal and other oils, by means of which intense heat may be produced, without the generation of smoke.

The inventor says: I *claim*, first, the quick lime cones  $c c^1$ , or their equivalents, arranged substantially as described, for the purposes set forth.

Second. In combination with the above, I claim the flanged cap  $n n^1 n^2$ , substantially as described.

No. 24,623.—REUBEN FRETZ, of Montville, Ohio.—*Improved Machine for Finishing the Exterior of Rims of Carriage Wheels.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.



The inventor says: I *claim* combining, in the arm that gauges the plane, devices for varying the height of the radial arm, with the devices for varying its length, so as to enable the operator to dress a wheel straight or square across the edge, substantially as described.

I claim making the arm or bar K, which guides the plane in the arc of a circle, to vibrate in the stock, so as to adjust and fasten it in the position desired.

No. 24,624.—P. W. GATES, D. R. FRASER, and THOMAS CHALMERS, of Chicago, Ill.—*Improvement in Cut Off Gear for Steam Engines*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* the combination of the two levers D D<sup>1</sup>, and their dogs E E<sup>1</sup>, the lever or levers C, and its or their teeth b b<sup>1</sup>, and the eccentric curved plate or plates H, the whole applied to the stem or stems of the valve or valves, to operate substantially as set forth.

And we also claim, in combination with the said levers, teeth and dogs, and the eccentric curved plate or plates of the arm j on the valve stem, and the spring or stationary curved surface K, applied and operating together substantially as and for the purposes specified.

No. 24,625.—IRA GLYNN and MIKEL BOROWSKY, of Placerville, Cal.—*Improved Machine for Cutting the Ends of Billiard Cues True*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The application of the reversed A knife or cutter E, and the spring jaws c c, for holding the cue so as it can be cut off square for the leather; these jaws will open or close to suit the size of the cues, the whole as set forth in our specification.

No. 24,626.—GEORGE P. GORDON, of New York, N. Y.—*Improved Printing Press*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, taking the sheet from the feed board by grippers or their equivalents, and presenting it directly to or upon the form of types, thence conveying it to the place of impression, so that it may be printed.

Second. The combination of a reciprocating bed with a set of sheet receiving grippers, so that the movements of the bed may control the action of the grippers, in order that the sheet may be taken from the place of feeding to the place of printing by such grippers.

Third. The combination of a vibrating platen, having a stationary or fixed axis upon which to vibrate, with a reciprocating bed.

Fourth. The combination of a set of sheet piling grippers, which will peel or take the printed sheet from the face of the type and pile it on its place of deposit, with a reciprocating bed operating substantially as described.

Fifth. By use of automatic grippers, piling the sheets directly before or in front of, and under the eye of the operator, so that he may at once detect any imperfection in the impression.

Sixth. The combination in one and the same machine of a set of grippers to take the sheet and carry it to the place of printing, with another set of grippers to take the sheet from the form and pile it, substantially as described.

Seventh. The arrangement and construction of a chase, as described, in combination with the piling grippers, substantially as set forth.

Eighth. The giving a reciprocating vibratory motion to a bed, or carriage, allowing the necessary intervals of time for the purpose of receiving the sheet, or the impression, either or both of them, by means of the cam forming part of the bed, the cranked shaft, the vibrating arm, and the connecting rod, or their equivalents, all of which is fully described and set forth.

No. 24,627.—WILLIAM GORMAN, of New York, N. Y.—*Improved Paddle Wheel*.—Patent dated July 5, 1859.—This invention consists in having the paddles placed in or attached to sliding frames which are fitted between suitable guides and arranged in such a manner that the desired object is attained without any appreciable loss of power by friction.

*Claim*.—The sliding paddles or floats D, placed between the traverse bars a of the arms C C of the wheel, and arranged with the catches F, and stationary cam G, or their equivalents, to operate as and for the purpose set forth.

No. 24,628.—S. N. GRAGG, of Shelburne Falls, Mass.—*Improvement in Corn Huskers*.—Patent dated July 5, 1859.—The person using this device sits on the seat B, with the ears of corn to be husked placed in a convenient position alongside of him; placing his foot on the treadle he grasps the ear of corn, with one hand on the stock or stem m and the other on the point of the ear. He thus holds the ear against the curved edge of the rest E, with part of the stem next to the but of the ear opposite to the point of the knife k, and, by pressing his foot on the treadle d, he drives the bolt D in the direction of its arrow, and forces the knife through the husks and stem, separating the ear from its stem; when, by bending the ear around the curved rest E, the but of the ear is projected out of its husk, and the ear may be then thrown aside separated from its husk.



*Claim.*—The curved or convex rest *E*, in combination with the reciprocating knife *k*, arranged and operating as described, for the purpose set forth.

No. 24,629.—WILLIAM GROUT, of Worcester, Mass.—*Improvement in Sewing Machines.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the feeding bar, needle, and looper, in the manner described, so that the movement of the cloth shall aid in extending the looper thread and in tightening the needle thread, and this when the needle is out of the cloth.

Second. The arrangement of the looper and forceps, as described, so that the forceps shall draw the loop of the needle thread across the path of the looper and in line with the movement of the cloth.

Third. The combination of the needle and looper, when arranged as described, so that both shall reciprocate in straight lines, and also so that, by merely changing the length of the looper, a single or double stitch may be formed, in the manner described.

No. 24,630.—BENJAMIN A. GROVER, of Momence, Ill.—*Improvement in Abdominal Supporters.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, constructing an adjustable spring steel frame of the form described, by combining, arranging, and securing together a series of spring bars, substantially in the manner and for the purpose described.

Second. I claim covering the concave portion of said frame with a canvas or other cloth *Z*, whose edge or border is gathered and drawn together over the outside edges of the said spring frame, by an India rubber or other elastic cord *C*, so as to give the covering portion of said canvas or other cloth the character of an elastic cushion, no matter what may be the extent of the contraction or expansion of the spring frame, as described.

Third. I also claim attaching the upper and lower straps *P P<sup>1</sup>*, which respectively branch upward and downward from the band *v* of the main strap *S O*, at the points of the spring frame, and in the relation to each other and the centre or main straps *S O*, described and represented, so as to give an upward pressure to the spring frame, and for other purposes set forth.

No. 24,631.—ELIJAH HARRIS, of Princeton, Ill.—*Improvement in Horse Rakes.*—Patent dated July 5, 1859.—This invention consists in providing a grain or hay rake with a discharge lever *D*, which, commencing at a point even with the front bar of the lever truck *C*, runs back on the under side of the same about two thirds of its length, when it is bent and passed through one or both sides of the truck pivoted at *e*, which pivot forms the fulcrum of the lever; after passing through the truck it is again bent at a line nearly parallel with its arm, at the end of which is a side projection or finger *c*, which, coming in contact with a similar projection *a*, on the tooth passing nearest to it, holds the rake in place while in operation, until the pressure of the accumulated matter beneath lifts the lever and allows the rake to discharge itself.

*Claim.*—The lever *D*, with the arms *d d* and the projection or finger *c*, in combination with the stop *a*, substantially as set forth and specified.

No. 24,632.—W. HARTSFIELD, of Thomaston, Ga.—*Improved Door Fastening.*—Patent dated July 5, 1859.—This invention consists in arranging, on the inside of a door, a bar, fitting into a socket attached to one side of the frame, and under a bolt, which is secured to the other side of the frame, and which, when drawn up, is retained by a pin, projecting from a spring placed under the bolt; and when the door is closed the bar, by striking against the lower end of this spring, releases the bolt, so that it drops down and secures the bar.

*Claim.*—The arrangement of the bar *C*, which is attached to the inside of a door, to operate in combination with the staple *D* and with the bolt *E* and spring *d*, substantially as and for the purpose described.

No. 24,633.—HENRY HAYS, of New York, N. Y.—*Improved Machine for Boring.*—Patent dated July 5, 1859.—In making heads for barrels and casks, it is usual to bore holes on opposite sides of the meeting edges and insert a wooden dowel.

This invention relates to an arrangement of machinery for performing this operation, which has heretofore been done by other means.

*Claim.*—The arrangement of the adjustable head block *c*, carrying the spindles *d* of the boring tools, when combined with the spring tightening pulley *o*, in the manner and for the purposes specified.

No. 24,634.—JOHN HENDERSON, of Horseheads, N. Y.—*Improvement in Stoves.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction and arrangement of the ventilating passages *i i* and concealed flues *m m*, the former having their origin in the heating chamber *K* and terminating at or near the top of the oven, and the latter starting from the lower part thereof and terminating



in the flue G, whereby external air is admitted, and currents thereof passed through the oven, substantially as and for the purposes specified.

No. 24,635.—ISAAC C. SHULER, of Amsterdam, N. Y.—*Improvement in the Construction of Sheet Metal Coffins.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of stiffening the lower part of a sheet metal coffin by locking together the scrolled edges of the sides and bottom, forming a firm rim, when they are soldered together, substantially as described.

Second. I claim the sheet metal rim *c* on the outside of the walls as a means of stiffening the base, either with or without a filling of molten metal, according to the size of the coffin.

Third. I claim the rim *d* of sheet metal, single or scrolled, forming an inside chamber, which may be filled with molten metal or left hollow, according to the size of the coffin.

Fourth. I claim a cast metal rim *f*, with a deep groove on the under side, which receives, straightens, and stiffens the walls, and which serves to support the lids.

Fifth. I claim setting the pillows or braces *x* at the corners and around the body of the coffin, between the inward projections of the rims *d* and *f*, which give them an extended purchase, for the purpose of stiffening the walls, substantially as described. I also claim the peculiar braces *K* to prevent the lateral racking of the bottom.

Sixth. I claim the arrangement of pressing inverted beads or recesses, in any required number, in the sheet metal of the lid, walls, and bottom of a metal coffin, on the inside and on the outside of the same, which may be filled with molten metal in the large size and left empty in the small size coffins, for the purpose of securing, by a peculiar mode of manufacture, of a level surface between the indented parts described.

Seventh. The arrangement of fastening firmly on the under side, near the outer edge of the air tight lid of a sheet metal coffin, a cast metal rim, or its equivalent, for the purpose of strengthening this lid, and also for fitting into the groove in the rim *F*, on the upper edge of the walls of the coffin, substantially as described.

Eighth. The arrangement of fastening around the face window, on the under side of the air tight lid of a sheet metal coffin, a cast metal sash or rim *m*, which receives and supports the face glass when it is cemented in its proper place.

Ninth. I claim the arrangement of fastening permanently, on the under side near the outer edge of the sheet metal blind *m*, which covers the glass in the face window of a sheet metal coffin, a cast metal brim *O*, or its equivalent, for the purpose of strengthening and furnishing a means of securing the same to the outer lid which covers the air tight joint, substantially as described.

Tenth. I claim the arrangement described of two entire, distinct, separate sheet metal lids.

No. 24,636.—G. W. SMITH, of Hartford, Conn.—*Improved Butter Cooler.*—Patent dated July 5, 1859.—This invention consists in arranging the cover of a butter plate with an additional ice chamber, which is hermetically closed, whereby the ice is preserved in a solid state, and so that the butter on the plate may be surrounded with ice on all sides, and thus kept cool.

*Claim.*—The arrangement of the air tight ice chamber *D* in combination with the butter plate *A* and with the cup *B*, substantially as and for the purpose set forth.

No. 24,637.—DANIEL HESS, of West Union, Iowa.—*Improved Device for Heating Steam Boilers.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination with a steam boiler of the tight external casing *A* and fan *H* for the purpose of producing currents of air around the boiler, substantially as set forth.

Second. In combination with the subject of the first claim, the stove *D*, provided with a smoke pipe *E* through which the products of combustion pass, while the heat passes into the casing, substantially as set forth.

No. 24,638.—HENRY HOFFMAN, of New York, N. Y.—*Improved Automatic Fan.*—Patent dated July 5, 1859.—This invention consists in arranging the wings of the fan on a fan carrier, suspended from a rock shaft by means of two cords or belts, which are secured to the extreme ends of two arms, and which wind in opposite directions on rollers, so that by tipping the rock shaft alternately to one side and to the other, the gravity of the fan carrier, assisted by the weight of the fan itself, causes the latter to assume a swinging motion, no more power being required than just enough to tip the rock shaft from one side to the other.

*Claim.*—The arrangement of the rock shaft *D*, arms *F F*<sup>1</sup>, belts *f f*<sup>1</sup>, and rollers *G*, or the equivalents, to operate in combination with the fan carrier *H*, substantially as and for the purpose specified.



No. 24,639.—ISAAC B. HOWE, of Northfield, Vt.—*Improvement in Railroad Chairs*.—Patent dated July 5, 1859.—This invention consists in a peculiar one lip chair, in connection with a fishing piece secured permanently to the sleepers, and a method of securing both chair and rail in place by a bolt; the whole so arranged that on withdrawing this bolt the rails and chair may be removed without the necessity of disturbing the fishing.

*Claim*.—The one-lip chair, secured by the single bolt, in combination with the permanent fishing piece, arranged and operating in the manner set forth for the purpose specified.

No. 24,640.—JULIUS C. HURD and MOSES A. JOHNSON, of Dorchester, Mass.—*Improvement in Manufacturing Wadding*.—Patent dated July 5, 1859.—This invention consists in slightly felting the two surfaces of the bat, a thin layer of wool or other suitable felting material being deposited upon each side of it when the material of which it is composed will not of itself consolidate by felting.

*Claim*.—As a new article of manufacture, the described wadding, having its two surfaces felted, as set forth, for the purpose specified.

No. 24,641.—OBED HUSSEY, of Baltimore, Md.—*Improvement in Mowing Machines*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—In combination with the ordinary apparatus fixed to the extreme end of the finger beam, and called a track clearer, a similar apparatus at the opposite or frame end of said beam, when so arranged as to sweep the cut grass towards the centre of the swath, and leave it in a windrow behind the machine, substantially as described.

No. 24,642.—JOSHUA IRVING, of New York, N. Y.—*Improved Machine for Turning Ovals*.—Patent dated July 5, 1859.—This improvement consists of light central mandrel *a*, having a grooved guide piece *a*<sup>1</sup> in its front end, in which a sliding bar *b* is guided.

*Claim*.—The sliding disk and driving rim combined with the centre mandrel and slides, substantially as and for the purposes set forth.

No. 24,643.—JOSEPH JOREY, of Rocky Hill, Conn.—*Improved Horse Shoe*.—Patent dated July 5, 1859.—This improvement consists in providing a detachable plate, made so as to cover the under surface of the shoe, over the head of the nails after they are driven and clinched, in connection with detachable screw corks, by means of which the said plate is readily secured to or removed from the shoe when desired.

*Claim*.—The combination of the plate *B*, corks *C*, shoe *A*, substantially in the manner as and for the purpose described.

No. 24,644.—PHILIP KRIBS, of Jefferson Furnace, Pa.—*Improvement in Cultivators*.—Patent dated July 5, 1859.—In the drawings *A* is the centre and *B B* the side bars, which are framed into the front bar *C*, with their ends fastened together by the bolt *D*, the whole making a strong frame, to which the other parts of the cultivator are fastened.

*Claim*.—The arrangement of the bars *A B C*, metal frame *G*, handles *H*, shanks *E*<sup>1</sup>, teeth *E*, bar *I*, and shafts *F*, as described, for the purposes set forth.

No. 24,645.—PHILIP LEBZELTER, of Lancaster, Pa.—*Improvement in Horse Rakes*.—Patent dated July 5, 1859.—The axle of the rake is made of two counter shouldered pieces *A B*, sliding in and embraced by the bands *C*, each piece having a band bolted to it, while the opposite side of the band is free for its adjoining piece to slide in; one or both of these bands have a binding screw *D* for securing the adjustment.

*Claim*.—The double axle *A B*, brace and sliding bands *c*, hinged braces *E*, slot hook and staple *F x*, binding screw *D*, hinged rod and beam *G* and *H*, when these parts are combined, substantially in the manner and for the purpose specified.

No. 24,646.—LEWIS LILLIE, of Troy, N. Y.—*Improvement in Vault Doors and Cast Iron Safes*.—Patent dated July 5, 1859.—This invention consists in the arrangement and combination of hollow pipes or tubes, and the filling of the same with refined cast-iron, with round and hardened bars of cast-steel, or any other material, so as to prevent any hole or holes being drilled into and through the same.

*Claim*.—The arrangement and combination of a series of pipes or tubes *a b* and *c*, and the filling of the same with cast-steel, hardened, or with refined cast-iron, as and for the purposes described.

No. 24,647.—LEWIS LILLIE, of Troy, N. Y.—*Improved Door Knob Bolt*.—Patent dated July 5, 1859.—*A* is the knob which is securely fastened to the larger end of the knob bolt or spindle *B*. This knob bolt or spindle is made of wrought-iron, so as not to be easily broken, with an even taper from the outside end, where the knob *A* is fastened, to the inside end, to which the nut *c* and switch *D* are attached.

The inventor says: I *claim* the knob bolt or spindle *B*, constructed in the manner as and for the purposes substantially described.



I further claim the switch D and the nut *c*, arranged and fastened to and upon the knob bolt or spindle B, in the manner as set forth.

No. 24,648.—MATTHIAS LUDLUM, of Fair Haven, Vt.—*Improvement in Trunks*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination, with a water tight shell or body part A to a trunk or box, having ordinary or any other suitable inner and outer lids C and D, of a valvular spring borne lid B, of water tight construction, and arranged to occupy an intermediate position in relation to the inner and outer or ordinary lids C and D, essentially as and for the purpose or purposes set forth.

No. 24,649.—THOMAS P. MARSHALL, of Trenton, N. J.—*Improvement in Buckles*.—Patent dated July 5, 1859.—This invention consists in arranging one part of the buckle in such a manner that it slides easily on the strap, which is kept in the same by the action of a spring so that it can adjust itself to any length, and the two parts are united by means of a slot in the movable part.

*Claim*.—A buckle constructed of a sliding case A, with the platform *d* and slot B, in combination with the nose *i*, and otherwise arranged as set forth.

No. 24,650.—JARRETT MEGAW, of Wilmington, Del.—*Improvement in Rotary Pumps*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Combining the water packing chambers formed around the axis or shaft, between the suction pipe and stuffing boxes, with the descending main or discharge pipe of the pumps, substantially as and for the purpose set forth.

No. 24,651.—RICHARD L. MILLS and PAUL CARPENTER, of Lancaster, Ohio.—*Improvement in Railroad Car Couplings*.—Patent dated July 5, 1859.—This invention consists in the arrangement of a sliding frame in connection with a vibrating frame and locking key.

*Claim*.—The arrangement of the sliding frame K and vibrating frame J, in combination with the flat locking key L, the whole being constructed and arranged for joint operation, substantially as set forth.

No. 24,652.—Z. N. MORIEL, of Cameron, Texas.—*Improvement in Machines for Planting Cotton Seed*.—Patent dated July 5, 1859.—This invention consists in the peculiar means employed for distributing the seed, whereby it is intended to avoid the difficulties hitherto attending the planting of cotton seed by mechanical means.

The inventor says: I *claim*, first, the combination and arrangement of the one side wheel D, cylinder F *e*, stirrer E *c*, gear wheels *a b*, mortised beam A *d f*, share H *h*, and boot I, substantially as and for the purpose described.

Second. The arrangement of the V shaped fender, with the harrow teeth and with the devices included in the first claim, substantially as and for the purpose set forth.

No. 24,653.—A. A. MOSS, of Philadelphia, Pa.—*Improved Elastic Friction Roller*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The elastic friction apparatus described, the same consisting of the ball or sphere A, spring B, and case or hole C, constructed, arranged, and combined together in relation to each other in the manner set forth and described, irrespectively of the plate *e*, or the conical form of the spiral spring B.

No. 24,654.—J. W. NARAMORE, of Derby, Conn.—*Improved Pin Sticking Machine*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, operating the driver or drivers and the crimping and feeding apparatus, or any portion of the same, by means of a clutch or clutches, carried by a constantly rotating shaft, and thrown into gear therewith, to effect such operation, by the action of the sliding bed or pin carriage, as the latter, after having received the pins, completes its movement to the necessary position for the sticking operation substantially as described.

Second. The combination, with a single reciprocating sliding bed or pin carriage and a single conductor, of two drivers, and two sets of crimping and paper feeding apparatus, arranged on opposite sides of the mouth of the conductor in such a manner that the said bed or carriage, in every movement in either direction, is caused to be filled with pins from the conductor, and to convey them to a proper position relatively to one or the other of the drivers, to be thereby driven into the paper supplied, and crimped by its respective feeding and crimping apparatus, substantially as described, whereby I effect a saving of the time heretofore lost in running the bed twice under the conductor to be once filled.

Third. Effecting the combination between the sliding bed or carriage and a clutch, carried by a constantly revolving shaft, to operate a driver, a crimper, and a feeding apparatus, or either of them, by means of a toothed lever R or R<sup>1</sup>, a spring T, or notched slide P or P<sup>1</sup>, plate U or U<sup>1</sup>, with an inclined edge and a sliding tooth *i*, the whole applied and operating



substantially as described, to permit one and only one revolution of the loose portion of the clutch, and hence but a single operation of the part or parts driven by it.

No. 24,655.—A. NEWBURY and B. NEWBURY, of Windham Centre, N. Y.—*Improvement in Hand Printing Presses*.—Patent dated July 5, 1859.—In using this press the table L is supplied with a requisite quantity of ink, the form D locked on the bed C; if the frame E is in an elevated position the platen F will be raised, and the ink rollers in the frame K will be at the inner side of the form D, having passed over the form as the frame E was elevated. As the frame is depressed by the operator a blank card is inserted between the guide bars *a a* and the platen F is forced down by the downward movement of the frame in consequence of the rollers *j j* fitting in the slots *k* of the bars *c c*.

*Claim*.—The arrangement and combination of the slotted frame E, adjustable bar G, platen F, roller frame K, and rotating ink table L, substantially as and for the purposes shown and described.

No. 24,656.—ELLIS NORDYKE and A. H. NORDYKE, of Richmond, Ind.—*Improvement in Flour Bolts*.—Patent dated July 5, 1859.—The principal features of this machine are the manner of governing the wrapping arms, that one set may be in motion while the other is stopped, all as the case may require; it may be operated while the bolt is in motion.

The inventors say: We *claim* the band *c* encircling the shaft M, in combination with the spring catches S S S, for the purpose described.

Second. We also claim making the movable slide H F in two parts, jointed, substantially as and for the purpose set forth.

No. 24,657.—ANTHONY OVEROCKER, of McHenry, Ill.—*Improvement in Clover Hullers*.—Patent dated July 5, 1859.—A A represent a square frame; within this frame is secured a metallic concave box C; said concave being provided with burrs. D D represent a series of ribs, which are secured in the concave C at a suitable distance apart. The tops of these ribs are concave, and their sides are provided with burrs or rasps similar to those on the concave C.

*Claim*.—The combination of the concave C and cylinder E, with the adjustable sliding door F, the several parts being arranged and constructed substantially in the manner and for the purpose described.

No. 24,658.—ANDREW PATTERSON, of Birmingham, Pa.—*Improvement in the Manufacture of Hoes*.—Patent dated July 5, 1859.—This invention consists in casting the head or eye of the hoe on or around the blade, which has been previously prepared and placed in a mould so as to receive the molten metal of which the head or eye is to be cast.

*Claim*.—The combination of the two jaws *d d* which clasp the blade with the head *b*, and the blade arranged and constructed substantially as set forth.

No. 24,659.—JOHN PERCIVAL, of Auburn, N. Y.—*Improvement in Piano Hammers*.—Patent dated July 5, 1859.—This invention consists in giving to the wooden head of the hammer a broad, flat face, and forming the cushion on the top of the hammer, by a series of layers of some elastic material, arranged one above the other, without extending down upon the sides of the hammer head, and then covering the whole by a single thickness of soft, flexible, and elastic material, extending over the top of the cushion and down the sides of the hammer.

*Claim*.—Constructing and arranging the cushion forming the elastic covering to the hammer head, substantially as described for the purpose as set forth.

No. 24,660.—ALBERT POTTS, of Philadelphia, Pa.—*Improvement in Setting Gas Meters in the Walls of Buildings*.—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The manner described of adjusting a gas meter to an auxiliary case of the character substantially as specified, so that the meter is applied to a building in a neat and secure manner, and, at the same time, the examination of the same, to ascertain its condition or the amount of gas consumed, from the outside of the building, is rendered practicable and convenient, all as and for the purposes set forth.

No. 24,661.—THOMAS B. QUIGLEY, of Galion, Ohio.—*Improvement in the Mode of Regulating the Exhaust in Locomotive Engines*.—Patent dated July 5, 1859.—This improvement relates to apparatus for increasing and diminishing the draft in locomotives, by regulating the area of the orifices through which the exhaust steam passes into the smoke stack.

The inventor says: I *claim*, first, the sliding throttle valves *g* and *f*, when combined with the exhaust pipes of a locomotive engine, substantially in the manner and for the purpose specified.

Second. The sliding box *o*, with apertures *r*, in combination with the chest *b*, as set forth.

No. 24,662.—D. B. RAY, of Galena, Ill.—*Improved Apparatus for Punching Stereotype*



*Plates.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of stamping bars D upon A B, when provided with the characters to be printed or stereotyped, so that they will all work to a common centre and imprint the characters upon the face of the type metal, substantially in the manner and for the purposes set forth.

I also claim arranging upon the end of bar F knives *a b*, for the purposes specified.

No. 24,663.—JOHN A. REED, of Jersey City, N. J.—*Improvement in Trunnion Box Lining for Oscillating Engines.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, in combination with the conical trunnions, of slit cap like linings D D, applied to the boxes with screws and nuts, or other equivalent means of forcing them up towards the sides of the cylinder, substantially as described.

No. 24,664.—GEORGE P. SANBORN and WILLIS MANSFIELD, of New Haven, Conn.—*Improvement in Elastic Railroad Frogs.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* an elastic frog, constructed of layers of plate metal and wood, substantially in the manner specified, and either with or without layers of vulcanized rubber.

Also, we claim constructing an elastic frog with end slots, suitable to receive the lower flange and neck of a rail, as specified, whereby the frog may be kept in alignment as described.

No. 24,665.—THADDEUS SELLECK, of Greenwich, Conn.—*Improvement in Protecting Surfaces of Articles of Iron.*—Patent dated July 5, 1859.—The claim explains the nature of this invention.

*Claim.*—As a new article of manufacture, a horse shoe, or other article, as indicated, made by uniting Franklinitic pig metal with the surface of iron, as set forth.

No. 24,666.—HORACE SMITH and D. B. WESSON, of Springfield, Mass.—*Improvement in Revolving Fire-Arms.*—Patent dated July 5, 1859.—It is the object of this invention to furnish a stop that will be simple, durable, and entirely separated from the lock of the pistol, thereby simplifying the lock and placing the stop in such a position that it can be detached for repairs, or other purposes, without interfering with the lock.

*Claim.*—The wedge *n*, on the top of the nose of the hammer, the spring *m*, and stop bolt *k*, when combined for the purpose and operating in the manner as described.

No. 24,667.—JAMES SPEAR, of Philadelphia, Pa.—*Improved Ironing Pan for Ranges and Stoves.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—An ironing pan, constructed with a perforated bottom, in the manner and for the purpose described.

No. 24,668.—WILLIAM STEARNS, of Manchester, N. H.—*Improvement in Picker Motion for Power Looms.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* extending the picker staff down through and below the rocker, and through the rail, as described.

I claim the rocker D, made to receive the staff, in the way and manner described.

And, in combination with the rocker D, I claim the hook G or G<sup>1</sup>, whether made separate or cast on the rocker, for the purposes set forth.

I claim making the picker staff adjustable in the rocker, in the manner described, or in some equivalent manner.

I claim making the stud surrounded by the coiled spring P, smaller in the middle than at the ends, to allow the spring to contract in diameter in the middle as it is drawn in working.

I also claim, making that portion of the stud surrounded by the stationary end of the coiled spring permanent or stationary, and that portion surrounded by the moving end of the spring to revolve, to facilitate the working of the spring.

No. 24,669.—JOSEPH W. STRANGE, of Bangor, Me.—*Improvement in Scales for Weighing.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, arranging the beam in such a manner that the several indications or scales marked on the same, can be brought before the eye of the operator by turning the beam, substantially as described.

Second. The arrangement of the socket C, so that its end forms the common index pointer *c*, for the several indications marked on the sides of the beam, substantially as and for the purpose specified.



No. 24,670.—WILLIAM STRATTON, of Philadelphia, Pa.—*Improvement in Gas Retorts*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of an upright partition B dividing the D retort into chambers, in the manner and for the purposes substantially set forth in the specification.

No. 24,671.—JOHN STOCK, of New York, N. Y.—*Improvement in Photographic Cameras*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the front plate of a camera, to which the lens tube is attached, in such a manner that the centre of the tube may be removed in any desired position, for the purpose as described and in the manner substantially as specified.

Second. I claim the arrangement of the plates 5 and 8, for the purpose described.

Third. I claim attaching the ground glass holder to the end of the camera, and the manner of supporting the weight of the same, substantially as specified.

No. 24,672.—ELAM STOCKBRIDGE, of Houston, Texas.—*Improvement in Cotton and Hay Presses*.—Patent dated July 5, 1859.—This invention consists in the arrangement, in combination with the ordinary ropes, chains, and windlass used in the toggle presses, of auxiliary ropes or chains for drawing a horizontal follower out of a horizontal pressing box, and the horizontal toggle and main cords or chains into operative position, or bringing the same in position for operation, after the first pressing operation has been performed by them.

*Claim*.—The arrangement, in combination with the horizontal ropes or chains  $a^1 a^1$ , vertical windlass G, horizontal toggles E E, and horizontal follower C, of the auxiliary horizontal ropes or chains  $a^1 a^1$  and  $h$ , in the manner and for the purposes set forth.

No. 24,673.—JOSIAH STUBBS, of Dublin, Ind.—*Improved Churn*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Operating the butterfly wings  $d$  and  $d$ , with the single crank  $k$  confined to one side of the cylinder  $g^1$ , being made to cross the body of the cylinder obliquely to effect this movement, in the manner and for the purpose set forth.

No. 24,674.—GIUSEPPE TAGLIABUE, of New York, N. Y.—*Improvement in Mercurial Barometers*.—Patent dated July 5, 1859.—This invention consists in an improved mode of applying a gauge, attached to an adjustable scale, in combination with the cistern or lower limb of a mercurial barometer, for the purpose of enabling the scale to be adjusted to the level of the mercury in the cistern.

*Claim*.—The external slotted sleeve gauge D, applied in combination with the cistern or lower limb of the barometer, and with the adjustable scale, substantially as and for the purposes described.

No. 24,675.—LOUIS TREGRE, of the parish of St. John the Baptist, La.—*Improvement in Bagasse Furnaces*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the employment of a double feeder, arranged substantially as described, with springs through the blades of the lower feeder to allow the hot air from the furnace to pass from the lower feeder to the upper feeder, for the purpose set forth.

And I also claim arranging between the two feeders an intermediate chamber to receive and retain the bagasse as it passes from the upper to the lower feeder; and I claim constructing the upper feeder of larger size than the lower feeder, with or without an increased number of blades, or in an equivalent manner, for the purpose set forth.

And I further claim introducing an independent current of hot, dry air into the chamber between the two feeders, substantially as described for the purpose set forth.

No. 24,676.—JACOB W. TRUOX, of Richford, Vt.—*Improved Handblock for Saw Mills*.—Patent dated July 5, 1859.—This invention consists in operating a slide to which the log to be sawed is spiked, by means of a lever and pawl, in such a manner that a lateral movement can be imparted to the log corresponding to the desired thickness of the boards to be sawed, and gauging the same by a gauge wheel.

The inventor says: I *claim*, first, the combination and arrangement of the ratchet wheel F, setting lever P, cam wheel R, gauge wheel M, and spur wheel I, with the spring latch H, in the manner and for the purposes specified.

Second. I claim the clamps V, the lever W, and eccentric lever  $y$ , arranged and operating as specified.

No. 24,677.—MARIANUS X. TSCHUS, of Bloomington, Ill.—*Improved Spring Snap for Bridle Reins*.—Patent dated July 5, 1859.—The inventor says: I construct my buckle snap by casting, or otherwise forming it, so that it will all be one piece of metal, except the tongue of the buckle, for the purpose of giving strength and beauty to the whole.



*Claim.*—The combination of the two in one, in the manner described and for the purpose described.

NO. 24,678.—LEVI B. TYNG, of Lowell, Mass.—*Improvement in Cast-iron Tires for Railroad Wheels.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the wedge shaped braces  $d d^1$ , arranged in the chamber C, between the rims A and B of a hollow cast-iron tire, so that the chamber is continuous throughout, substantially as and for the purpose set forth.

Second. In combination with the continuous chamber, I claim the groove  $b$  in the inner rim, arranged substantially as and for the purpose described.

Third. Arranging the ribs  $c$  alternately on the inner and outer rim, for the purpose of strengthening them without tying them together, substantially as described.

NO. 24,679.—WILLIAM W. VIRDIN, of Baltimore, Md.—*Improvement in the Mode of Propelling Locomotive Engines on Railroads.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The placing of the friction wheels under the driving wheels of locomotives, or other vehicles, in the manner substantially the same as described in this specification.

NO. 24,680.—WILLIAM W. VIRDIN, of Baltimore, Md.—*Improvement in the Mode of Braking Locomotive Engines on Railroads.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The introduction of air into the cylinders of locomotives, in the manner as set forth and for the purpose of offering a yielding resistance to the movement of the piston, and by this resistance overcome the momentum of the train.

NO. 24,681.—JOSEPH W. WATTLES, of Canton, Mass.—*Improvement in Ring and Traveller Spinning Mechanism.*—Patent dated July 5, 1859.—The nature of this invention consists in the application and arrangement of a bearing annulus outside of and concentric with the circular ring or rail on which the traveller runs and is supported.

*Claim.*—The combination and arrangement of the bearing annulus  $b$ , with the ring or its traveller carrier  $a$ , substantially in the manner and to operate with the traveller, as described.

NO. 24,682.—JOHN S. WERTZ, of Middletown, Iowa.—*Improvement in Machines for Boring Post Holes in the Earth.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement and combination of the screw shaft D, cross head C, grooves  $k$ , pinion  $m$ , and toothed cylinders B, as and for the purpose shown and described.

Second. The arrangement and combination with the cylinders B of the shaft F and rotary scrapers G, as and for the purpose shown and described.

Third. The arrangement and combination with the frame A of the jointed bars  $c c$ , sectors  $e$ , and adjusting rods  $h$ , as and for the purpose shown and described.

NO. 24,683.—J. W. WEST, of Hillsboro', Ohio.—*Improvement in Corn Planters.*—Patent dated July 5, 1859.—The nature of this invention relates to the arrangement and operation of a plunger, by means of which corn may be forced from the planter into the earth, and the certainty of seeding secured.

*Claim.*—The arrangement of cords  $o$  and  $n$ , with the pulleys  $i$  and  $j$ , working in arms  $h h$ , for operating the slotted plunger  $l$  and seeding bar  $g$ , the whole operated together and in the manner and for the purpose substantially as set forth.

NO. 24,684.—WILLIAM WHEELER, of West Poultney, Vt.—*Improvement in Manufacturing Machine and Animal Cards.*—Patent dated July 5, 1859.—By this invention for hand cards, the plate A is secured to a wooden back B by screws or nails  $d d$ ; the handle C is secured to the wooden back by screws or nails  $g g$ . For machine or revolving cards, the plates A A are formed in long, narrow, continuous strips of metal, grooved lengthwise; and, after soldering the teeth therein, they are wound or coiled around a wooden cylinder, and secured thereto by nails, or otherwise.

*Claim.*—The construction and arrangement of the sheet metal backs and wire teeth, in combination, substantially as described, when united by solder applied thereto by immersion, or otherwise.

NO. 24,685.—E. B. WHITE, of Nashua, N. H.—*Improved Alarm Attachment for Tills.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of the invention.

The inventor says: I *claim*, first, the bolt plate  $b$ , provided with bolts C, connected by a joint  $c$  to the box B, and connected to a bell striking apparatus, substantially as shown, in



connection with the keys *k* and a stop *D*, the whole being applied to the till, substantially as and for the purpose set forth.

Second. In combination with the bolt plate *b*, bolt *C*, and keys *k*, the bars *j* and screws *e*<sup>1</sup>, in the parts *k*<sup>1</sup> of the keys, when the bolt plate and bar *j* are both connected with the lever *h* on the bell striking apparatus in any proper way.

Third. The employment or use of the sliding plate *G*, combined and arranged with the bolt plate *b* and stop *D*, to operate automatically as and for the purpose set forth.

Fourth. The employment or use, for the purpose specified, of a supplemental spring *u*, fitted in a socket *t*, or otherwise arranged to resist the movement of the bar *j*, when said bar *j* is used in connection with spring bolts *C*, substantially as described.

No. 24,686.—LORAN J. WICKS, of Racine, Wis.—*Improved Churn*.—Patent dated July 5, 1859.—This machine is operated as follows: Milk being placed in the box *A*, the crank *P* is turned with considerable rapidity; the milk entering the pipe at the bottom of the box *A* seeks to rise to its level; the pulley *H*, revolving on pipe *B*, forces the milk up, and around, into box *c* with a great deal of force, against the gauze wire partitions *E E*; the globules being thus broken, the milk passes out through screen *D* into box *A*; thus a continued stream is ejected until the butter is all separated from the milk.

The inventor says: I *claim* the combination of the box *A*, the pipe *B*, and the box *C*, when the same are used in the manner and for the purpose set forth.

Second. Placing the box *C* over the box *A*, and providing said box *C* with a screen *D* and depending wire gauze partitions *E E*, substantially in the manner and for the purpose specified.

No. 24,687.—HENRY WILEY, of Frankfort, Ohio.—*Improvement in Corn Planters*.—Patent dated July 5, 1859.—This invention consists in an improved construction and arrangement of a seed planter for operating the feed valves or slides, and dropping the seed when planting in cross furrows.

*Claim*.—The arrangement of the gate *H*, wheel *K*, bars *B*, hopper *g*, rods *d*, slides *N*, and seed tubes *y*, being all constructed, arranged, and operated substantially as set forth.

No. 24,688.—LEONARD WORCESTER, of Lebanon, N. H.—*Improved Machine for Boring or Mortising Blind Stiles*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* combining the transversely reciprocating carriages *A A* with the cam cylinders *L L*, by means of the pairs of vibrating levers *E E* and *ff*, substantially in the manner and for the purposes set forth.

I also claim the notched plates *N N* for sustaining the stiles during the operation of mortising or boring the same, when the said plates are combined with reciprocating bearings and other suitable mechanism, in such a manner that the necessary laterally reciprocating and longitudinally feeding movements will be imparted to said plates, substantially as set forth.

I claim combining the bearings of the bit shaft *G* with the reciprocating carriage *C*, when the said shaft is so arranged with relation to the notched plates *N N* that the bits which project from the ends of said shaft will act upon the stiles as they are automatically presented to them, substantially as set forth.

I also claim the combination and joint operation with each other of the reciprocating carriages *A A*, the notched plates *N N*, the pairs of levers *E E* and *ff*, the cam cylinders *L L*, the reciprocating spring pawls *k k*, and the bit-carrying cylinder *G*, substantially as set forth.

No. 24,689.—W. E. WORTHEN and H. B. RENWICK, of New York, N. Y.—*Improvement in Corrugating Sheet Metal*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The method of corrugating or moulding sheet metal by several dies acting in succession, substantially in the manner specified, upon a sheet resting upon a bed, die, or dies, so as to cause the metal to conform to shape, substantially in the manner described.

No. 24,690.—JOHN WRIGHT, of Worcester, Mass.—*Improvement in Self-Acting Spinning Mules*.—Patent dated July 5, 1859.—This invention consists in the means of effecting the drawing in and running out of the carriage of a self-operating mule, and the driving of the drawn rollers and of the quadrant form, from which motion is communicated to the spindles.

*Claim*.—The shaft *F*, with its screw thread *d e f*, arranged and applied substantially as described, in combination with the carriage, the quadrant, and the shaft which drives the drawing rollers, for the purpose set forth.

No. 24,691.—FREDERICK BAARE and JULIUS G. GARELLY, of New York, N. Y., assignors to HORACE H. DAY, of same place.—*Improvement in Manufacturing Corrugated Fabrics*.—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.



The inventors say: We *claim* the combination of two or more parallel series of corrugations in the same fabric in such manner that the ridges of the adjacent series alternate.

We also claim combining rubber strands (one or more) with a textile material, in such manner that when the rubber contracts the compound fabric gathers up into two or more parallel series of corrugations whose numbers alternate.

We also claim combining rubber strands with a textile material, in such manner that the strands are alternately secured to the fabric and left free therefrom at alternating parts of their length, so that the secured parts of one rubber strand corresponds with the free part of an adjacent one.

We also claim forming the fabric sleazy at the division lines between the corrugations of adjacent series, so as to insure uniformity in the form of the adjacent extremities of the corrugations.

No. 24,692.—FRANCIS W. BACON, of West Newton, Mass., assignor to EDWARD H. ASHCROFT, of Boston, Mass.—*Improvement in Gauge Cocks for Steam Boilers.*—Patent dated July 5, 1859.—This invention consists in the application of a throat clearer to the screw plug of a gauge cock, so as to extend into the throat of the cock and be rotated therein with and by the screw plug; the object of the clearer being to prevent the throat from becoming clogged by foreign matter or mineral deposits.

*Claim.*—The combination of the throat clearer C with the throat and the screw plug gauge cock, and so as to operate therewith, substantially as specified.

No. 24,693.—HENRY W. BEINS, of New York, N. Y., assignor to the NEW ENGLAND CAR SPRING COMPANY, of the same place.—*Improvement in Vulcanized Rubber Car Springs.*—Patent dated July 5, 1859.—A is the middle part or section of a spring; *b b* two projections, one on each side, serve to receive the two end sections B B in their perpendicular direction, and keep them together until they are put in their place in the car.

*Claim.*—The sectional gum car spring, of two or more pieces, vulcanized in the manner set forth.

No. 24,694.—E. CULVER, of Shelburne Falls, Mass., assignor to Himself and R. N. FIFE, of the same place.—*Improved Table and Clothes Dryer.*—Patent dated July 5, 1859.—This invention consists of a table with a hinged top, having a clothes dryer so connected therewith that it may be unfolded, and when not in use may be folded up and stowed within the table.

*Claim.*—The described combination of ironing table and clothes dryer, the table furnishing a support to the dryer, and a receptacle in which it may be stowed away, as set forth.

No. 24,695.—A. K. EATON, of New York, N. Y., assignor, through J. S. L. CUMMINS, J. EDWARDS, J. J. FIELDS, and HENRY W. JOSLIN, to the JOSLIN INDIA RUBBER COMPANY.—*Improvement in Vulcanizing Rubber.*—Patent dated July 5, 1859.—This invention consists in the combination of the sulphide of manganese with India rubber. When the combination is effected, the matter is submitted to the action of a gradually increasing heat for several hours, the thermometer ranging during the time from 250° to 310° Fahrenheit. By this treatment the rubber is rendered more elastic and no longer affected by changes of the weather.

*Claim.*—The use of the sulphide of manganese in the curing of India rubber, in the manner specified.

No. 24,696.—O. F. FULLER, of Lamonte, Mich., assignor to Himself and W. M. FERRY, of Ferrysburgh, Mich.—*Improvement in Railroad Brakes.*—Patent dated July 5, 1859.—This invention consists in the relative arrangement, for united operation, of the toggle, or radius compensating levers, pulleys, sections of chains or cord, and connecting rods, sliding bumpers or draw heads, steam cylinder and brakes. By this arrangement, the train is so completely under the management of the engineer as to do away with the necessity of employing brakemen.

*Claim.*—The brake blocks C, pins *a a*, and levers D D, constructed and operating together, substantially as and for the purpose described.

No. 24,697.—JOSEPH R. GATES, of Indianapolis, Ind., assignor to Himself and J. J. DUMONT and E. F. SINKER, of the same place.—*Improvement in Sugar Mills.*—Patent dated July 5, 1859.—In operating this mill, the cane is fed into the rollers, between the strippers G, which are rapidly revolved outward upon the same by the gearing E, and by which the leaves are stripped.

*Claim.*—The grooved friction rollers G G G G, when used for stripping the blade from the stalk, substantially as set forth.

No. 24,698.—JOSEPH JONES, of Philadelphia, Pa., assignor to Himself and JAMES G. BRYCE, of the same place.—*Improved Butter Worker.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.



*Claim.*—The use of the yielding beater G, whether solid or constructed with an open or with a perforated bottom, inclosing an absorbing material, as set forth, in combination with a travelling tray; the whole operated as described.

No. 24,699.—LANSING MARBLE, of Vassar, Mich, assignor to Himself and TOWNSEND NORTH, of the same place.—*Improved Method of Manufacturing Baskets.*—Patent dated July 5, 1856.—The claim and engraving explain the nature of this invention.

*Claim.*—The described method of forming baskets by passing a series of staves or splints through proper guides over a mould, and pressing the same in the proper shape by a suitable piston and form, as set forth.

No. 24,700.—LEWIS MILLER and JACOB MILLER, of Canton, Ohio, assignor to C. AULTMAN & Co., of the same place.—*Improvement in Harvesters.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Extending the finger or platform bar, one or both, far enough under the yielding bars, by which they are hung to the main frame, as that the two may be united by suspension rods, which allows them a yielding motion in one direction and makes them rigid in another direction, and prevents the motions of the main frame from being communicated to the finger bar, substantially as described.

No. 24,701.—CHARLES NEALE, of Philadelphia, Pa., assignor to FREDERICK LIBRANDT and W. L. McDOWELL, of Philadelphia, aforesaid.—*Improvement in Moulding Beads on Hollow Wax.*—Patent dated July 5, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Moulding for the production of beads, flanges, or other projections, and ornaments on the outer sides of cast metal pots, kettles, and other vessels, so as to form the said vessels in two part flasks; the pattern bead flange, or other projecting ornament, being so constructed, arranged, and operated, as to admit of its being drawn in and pushed out of the vessel pattern, substantially in the manner described.

No. 24,702.—ALFRED S. PHILLIPS, of Boston, Mass., assignor to Himself and ISAAC ADAMS, of South Boston, Mass.—*Improved Hawse Pipes for Ships.*—Patent dated July 5, 1859.—This improvement consists in an improved manufacture of cable guide, as made with its body or pipe curved in longitudinal sections, the external surface of the flange being made in continuation of the curve of the body, and so that the chain, while either running out or being drawn in, shall pass over and on a curved surface, such as will prevent the links from being stopped thereon.

*Claim.*—A tubular cable guide curved substantially as described.

No. 24,703.—PETER PLATTER, of Moore's Hill, Ind., assignor to Himself and JAMES S. FLEMING, of Moore's Hill, aforesaid.—*Improvement in Corn Planters.*—Patent dated July 5, 1859.—This invention consists in certain improvements in corn planters, by which corn may be planted at desired intervals by the use of the shield T.

*Claim.*—The arrangement of the shield T, hammer G, sliding feed bar I, lever O, crank shaft K, and spring H, the whole being constructed for operation conjointly, as and for the purpose set forth.

No. 24,704.—JOHN I. ROLLOW, of Fredericksburg, Va., assignor to CHARLES C. WELLFORD, of Fredericksburg, aforesaid.—*Improvement in Threshing Machines.*—Patent dated July 5, 1859.—This invention has reference to that class of machines in which the thresher and cleaner are combined, all of which heretofore constructed are cumbersome, complicated, laborious to operate, and liable soon to get out of order. To obviate these difficulties is the object of this invention.

*Claim.*—The combination of the inclined carrier H with the shoot I and curved screen J, the whole being constructed, arranged, and operated, in the manner and for the purposes set forth.

No. 24,705.—WILLIAM SPINK, of Providence, R. I., assignor to OLIVER A. WASHBURN, jr., of Providence, R. I.—*Improved Machine for Pointing Nails and Spikes.*—Patent dated July 5, 1859.—This invention consists in providing the Reed nail machine, or any other invention to which this machine may be applied, with an apparatus for the purpose of pointing nails and spikes.

*Claim.*—The combination of the bunter G, the pointer F, and the spring I with each other and with the back piece and other parts of the Reed machine, or with the corresponding parts of any other nail machines, constructed and operated substantially in the manner as set forth.

No. 24,706.—GEORGE C. WHEELER, of Graysville, Ga., assignor to Himself and GEORGE CALVERT, of Upperville, Va.—*Improved Machine for Washing and Amalgamating Gold.*—Patent



dated July 5, 1859.—This invention consists in the combination of a series of horizontally revolving vertical hollow tubes with a series of horizontally revolving rakes and vessel or receiver.

It also consists in arranging the body of the vessel to receive, so as to be adjusted or elevated independently of its dish shaped bottom.

The inventor says: I *claim*, first, the relative arrangement for united operation of the hopper I, horizontally revolving vertical tubes H H H, horizontally revolving rakes G G<sup>1</sup> G<sup>2</sup>, and stationary washing vessel B C, substantially as and for the purpose described.

Second. Making the receiver or washing vessel into two parts B C, and combining with the part C an adjustable device D a a, substantially as and for the purpose described.

No. 24,707.—WILLIAM W. W. WOOD and HENRY HOWSON, of Philadelphia, Pa., assignors to JOHN RICE, of Philadelphia aforesaid.—*Improved Device for Operating the Cut Off Valve of Steam Engines.*—Patent dated July 5, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We limit our claim to causing the positive power of the engine to operate the throttle valve by the employment of two vibrating, reciprocating, or rotating strikers, actuated by any positive movement of the engine, in combination with two inclined planes intervening between the said strikers, and the valve or appliances connected therewith, any governor being so connected to the strikers or to the inclined planes that the movement of the governor, caused by any increase or diminution in the speed of the engine, shall change the position of the inclined planes in respect to the striking or that of the strikers in respect to the inclined planes, and that the latter may thereby be the intermediate means of regulating the extent of the opening of the valve to suit the speed of the engine while the actual movement of the valve is effected through one or the other of the strikers by the power of the engine itself, as set forth.

No. 24,708.—E. H. ANGAMAR, of New Orleans, La.—*Improvement in the Mode of Staying Piles for Wharves, Piers, &c.*—Patent dated July 12, 1859.—The sleeves *a* make the hinges for braces *b* that support the piles. After the frames S S have been settled to the base, the sleeves *a*, having the braces attached, are passed over the head of the piles and rest on the frames S S, which support the braces *b*; after this they are framed into piles, the links *o* allowing the frames to assume their position on the bottom to meet the inequality of the surface at the foot of each pile.

*Claim.*—In combination with the piles, the frames *s s* and sleeves *a* and the braces *b*, when made and arranged as, or substantially as and for the purpose set forth.

No. 24,709.—STEBEN T. BACON, of Boston, Mass.—*Improvement in Locks.*—Patent dated July 12, 1859.—This invention consists of improvements upon a lock patented by Linus Yale, June 13, 1844, in which the bolt B is thrown out and in by a pin C, on the face of what is termed a rotating tumbler D, which works in a groove in the face of the bolt; the rotating tumbler being operated by a key which is inserted, forces out to the required distance a series of radial stops or pistons *i i i* and *k k k k* that move in the holes *o o o o*, in a cylindrical or rotating tumbler D, and corresponding holes in a surrounding cylinder E.

*Claim.*—The construction of one or more pistons or drivers, or both; also one or more holes in the rotating tumbler or surrounding cylinder, or both, substantially as and for the purpose specified.

No. 24,710.—STEBEN T. BACON, of Boston, Mass.—*Improvement in Bank and Safe Locks.*—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, arresting and holding the tumbler in an exact locked position.

Second. Preventing the displacement of the tumbler, in the direction of unlocking, by means of pins *l l l l*, in combination with the sliding bottom key hole guard and the tenons.

Third. Preventing the displacement of the tumbler at and beyond the locked position, by means of the slotted collar, in combination with the cylinder, the tumbler, and the tumbler pin.

Fourth. Preventing the displacement of the tumbler inwardly, by means of the collar, in combination with the cylinder and the bolt of the lock.

Fifth. Enlarging the piston holes throughout the lock, for the purpose specified.

Sixth. Enlarging the holes in both tumbler and cylinder, in each direction from the dividing line between them, for the purpose specified.

Seventh. Constructing the key hole guard of two or more pieces of metal hardened, for the purpose specified.

Eighth. Making one or more chambers between the several parts of the key hole guard, for the purpose specified.

Ninth. Dividing the air chamber or chambers with one or more narrow ridges, for the purpose specified.



No. 24,711.—JOSEPH M. BATCHELOR, of Foxcroft, Me.—*Improvement in Lamps*.—Patent dated July 12, 1859.—This invention consists in arranging, upon the stem of the button spindle, in connection with the small spur wheel commonly employed for adjusting the wick, a large spur wheel, meshing into a rack projecting from the side of the wick tube, so that the wick and tube can be both raised or depressed, by turning the button spindle in exact relative distances, to produce the proper amount of light required.

*Claim*.—The arrangement and combination of adjustable tube B with the wick L, button spindle F, spur wheels D J, and friction spring H, or the equivalents thereof, as set forth.

No. 24,712.—JOHN T. BEVER, of Haynesville, Mo.—*Improvement in Devices for Trimming Pea Vines*.—Patent dated July 12, 1859.—This improvement consists in so constructing the posts between which the rope or twine is strained, that, being hollow, they shall form a box for the purpose of containing, when not in use, the cords and pins, each pair of posts forming a couple box.

*Claim*.—The posts B B, when forming a box as described, and combined with cords g g, rope f, and pegs h h, the whole constructed and arranged in the manner and for the purposes set forth.

No. 24,713.—DANIEL EDWARD BISHOP, of New York, N. Y.—*Improvement in Railroad Chairs*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The formation of a bridle A in the centre of the continuous lift D of a railroad chair, constituting a new article of manufacture, as described.

No. 24,714.—J. L. BOOTH, of Cuyahoga Falls, Ohio.—*Improvement in Grain Separators*.—Patent dated July 12, 1859.—The object of this invention is to receive the grain, both the sound and the light portions, as it is projected from the machine, and to more fully separate and collect the same into distinct parts and to graduate the separation as may be required.

*Claim*.—The box A, provided with an inclined bottom or flooring and adjustable strips or valves, arranged to operate substantially as and for the purpose set forth.

No. 24,715.—J. BORTON, of Middlebourne, Ohio.—*Improvement in Rat Traps*.—Patent dated July 12, 1859.—This invention consists in the employment of a combination of devices for closing the spring doors of a trap, constructed for the purpose of catching rats, or other similar animals.

*Claim*.—The combination of the spring doors D D, rods O O, dog d, and rod r, when arranged substantially in the manner and for the purpose set forth.

No. 24,716.—CHARLES B. BRISTOL, of Naugatuck, Conn.—*Improved Combination of Flesh Fork and Skimmer*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, the combination of the fork and skimmer, when constructed, attached, and fitted for use, substantially as described.

No. 24,717.—J. H. BUTLER and P. G. VAN HOUTEN, of Cohocton, N. Y.—*Improved Mode of Operating Farm Gates*.—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* actuating the traps L L, by means of the weight M and cord o, arranged in combination with the lever F, or its equivalent, for operating automatic gates, substantially in the manner and for the purposes shown and described.

We also claim the construction and operation of the double acting latch, in combination with an automatic gate for carriages substantially in the manner and for the purpose set forth.

No. 24,718.—ANSEL CAIN, of Holyoke, Mass.—*Improvement in Walking Canes*.—Patent dated July 12, 1859.—This invention consists in constructing a walking stick containing within itself a lamp, the flame of which shall be surrounded by glass, and ventilation properly provided for, in such manner that the staff can be used for walking, and at the same time made to furnish sufficient light to light the way to the person using it in a dark night.

*Claim*.—The combination of the lamp, constructed and arranged in the manner described with the walking cane, for the purpose set forth.

No. 24,719.—JAMES H. CASE, of Lyons, N. Y.—*Improvement in Hanging the Bodies of Vehicles*.—Patent dated July 12, 1859.—This invention consists in combining metallic leaf springs with thorough braces in such a manner as to combine the effect of flexible and tensile elasticity, and in the method of applying the same to sulkies, gigs, and other light carriages.

The inventor says: I *claim* the combination of the metallic springs with thorough braces, substantially in the manner and for the purpose set forth.

I also claim, the combination and arrangement of the combined thorough braces a b, with



the circular body E, and supplementary spring G, substantially as and for the purpose described.

No. 24,720.—MATTHEW CHAMBERS, of New York, N. Y.—*Improvement in Skirt Supporters*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Combining with and securing to a corset band extending in the rear, or in the rear and front downwards from the waist, to clasp the body around the hips of the wearer, the frame work of a skirt or bustle, when said frame work is composed of hoops disconnected and fastened in front, or thereabouts, substantially as described and for the purposes set forth.

No. 24,721.—DENISON CHESEBRO, of Syracuse, N. Y.—*Improved Method of Telegraphing from Railroad Cars while Moving*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of a sufficient number of pendants, arranged as described, and each having a movable vertical tongue, as described, and so constructed as to admit of a telegraph wire being attached to each of them in the particular manner specified with the metallic plates, wood scantling, or equivalent, and conducting internal wires attached to the roof of a railroad car, the whole being constructed, operated, and operating in the manner described and for the purposes set forth.

No. 24,722.—WILLIAM A. CLARK, of Bethany, Conn.—*Improved Device for Fastening the Cutters of Hollow Augurs*.—Patent dated July 12, 1859.—This invention consists of a device for securing the cutters in position, it being made of an angle wedge resting against a shoulder upon the stock and secured in place by the pressure of the cutter upon the portion of the wedge which passes between the cutter and the stock.

*Claim*.—The angle wedge *e*, in combination with the cutters, face plate, screws *c*, and ledges *H*, substantially as described and for the purposes set forth.

No. 24,723.—DAVID COOK, of New Haven, Conn.—*Improved Fruit Basket*.—Patent dated July 12, 1859.—This invention consists in making a fruit basket of thin slats of wood, curved, or bent laterally or transversely to fit the shape of the bottom, as shall be found most convenient to give the desired shape to the article.

Also, in binding the top and bottom with a suitable band of sheet metal to strengthen the article and make the shape permanent.

*Claim*.—Making a metal bound wooden fruit basket, either plain or ornamental, when constructed and fitted for use, substantially as described.

No. 24,724.—JOHN DAVIS, of New Bedford, Mass.—*Improved Mode of Connecting the Ends of Railway Bars*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, connecting the rails of railroads in continuous chains with hinge joints in any practical mode.

Second. I claim securing the rails in the couplings, by inserting wedges longitudinally under the rails, and clinching their margins.

Third. I claim wedge *D*<sup>2</sup>, in Fig 2, to secure wedge *D*<sup>3</sup>, in Fig. 3, and *vice versa*, by means of the hinge joint or bolt *C*, in Fig. 1.

No. 24,725.—PERRY DAVIS, of Providence, R. I.—*Improvement in the Wheels of Buggy Boats*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Arranging paddles upon the spokes of the wheels of a buggy boat, so that the wheels perform the twofold purpose of paddle wheels and carriage wheels, substantially in the manner and for the purposes set forth.

No. 24,726.—WILLARD C. ELLIS and JOHN N. WHITE, of Springfield, Mass.—*Improvement in Revolving Fire-Arms*.—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim* the projection *C* at the bottom of the chambers of the cylinders on which the fulminate of the cartridge rests and is struck by the hammer in the discharge.

We also claim the flange *B* of the cartridge parallel with the barrel, the two in combination, for the purpose specified.

No. 24,727.—LEWIS C. ENGLAND, of Owego, N. Y.—*Improvement in Apparatus for Tanning*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, in combination with the leach vat and the conveyer trough,



the pair of rollers to crack the wet bark before it is delivered into the leach vat, substantially as set forth.

No. 24,728.—DANIEL FITZGERALD, of New York, N. Y.—*Improved Fireman's Ladder*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, suspending a ladder upon the standard E, so that it may be elevated and turned in any direction, constructed and arranged substantially as described.

Second. The arrangement of the branch pipes C with the stop cocks K, for use at various heights, as described.

Third. I also claim making the main pipe B serve as a hand rail to the ladder, and to give it stiffness, by setting it up a little above and parallel to it, as described.

No. 24,729.—W. A. FOSTER, of Chester, Conn.—*Improved Method of Hanging Pictures, Looking-Glasses, &c.*—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Adjusting picture frames or mirrors to different positions and at different angles, by means of a central hinge and levers, substantially as described and for the purposes set forth.

No. 24,730.—M. I. GALLAGER and WILLIAM H. GLADDING, of Savannah, Ga.—*Improvement in Breech Loading Fire-Arms*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Forming the chamber in the barrel and breech of the gun of the shape of two frustrums of cones, or of a frustrum of a cone, and a section of a parabolic spindle, whose bases meet at or near the line of the joint between said barrel and breech, for the purpose of containing a cartridge case of the form substantially as represented.

No. 24,731.—JOSEPH GASSER, of Toledo, Ohio.—*Improved Clothes Frame*.—Patent dated July 12, 1859.—When this invention is in use, the frame rests entirely on the legs C, the feet of which are spread far apart, so as to give the frame a broad base, rendering it very difficult to overthrow the frame when laden with clothes. The standard A is about as long as the legs C, and does not rest upon the ground. The arm E, legs C, and braces D will fold together somewhat like the arms and braces of an umbrella.

*Claim*.—The arrangement of the braces D and arms E in connection with the standard A and legs C, substantially as set forth.

No. 24,732.—DAVID GLOVER, of Cass township, Pa.—*Improvement in Dumping Cars*.—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The construction of a revolving tip placed upon a movable frame or truck, the side pieces of which form, at a certain stage of the operation, a continuation of the main track or foundation, by means of which the wagon or car can be taken without handling from the main track or foundation, with the load, moved to the place required, and there dumped in any direction, substantially as and for the purposes set forth.

No. 24,733.—FREEMAN GODFREY, of Grand Rapids, Mich.—*Improved Shingle Machine*.—Patent dated July 12, 1859.—This invention relates to that class of shingle machines in which a reciprocating knife is used for riving shingles from the bolt. It consists in the means employed for feeding the bolt to the knife, whereby an automatic and positive feed movement is obtained.

*Claim*.—The cams G G, gearing into rack bars F F, attached one to each end of the carriage E, said cams being fitted in a yielding or adjustable centre-poised frame I, and operated from the power lever D, through the medium of the pawl O, ratchet M, and gearing *l m*, substantially as and for the purpose set forth.

No. 24,734.—WILLIAM GOODALE, of Clinton, Mass.—*Improved Machine for Making Paper Bags*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, making the cutter which cuts the paper from the roll or piece of the form herein described, that, in cutting off the paper, it also cuts it to the required form to fold into a bag without further cutting out.

Second. The attachment of the former F directly to the cutter to operate in combination therewith, and with a folding table C, substantially as described.

Third. The described mode of applying and arranging the paster *f* to operate in combination with the folding table C and the former F.

Fourth. The construction of the side lappers with angular ends *e e*, substantially as described, for the purpose of partly folding the side of the bag.

Fifth. The knock off I, operating in combination with the former, substantially as and for the purpose described.



Sixth. The vibrating frame J with its rollers *i i*, operating in combination with the former and the knock off, substantially as and for the purpose described.

Seventh. The arrangement of the table, the cutter, the former, the side lappers, the bottom paster, the knock off, and the vibrating frame J, to operate in relation to and in combination with each other, substantially as described.

No. 24,735.—DARWIN A. GREENE, of New York, N. Y., administrator of ELIAS DAVIS, deceased, late of New York, aforesaid.—*Improved Machine for Splitting Fire Wood.*—Patent dated July 12, 1859.—This invention consists of a set of duplicate horizontal acting knives, operating upon the wood while resting against two vertical stationary plates, which are connected together by four bolts, also forming guides for the reciprocating cross heads having the knives secured to them; the wood, before and after the operation of splitting, is brought forward by two endless belts, which are advanced by ratchets, rods, and levers, operated by cross heads while in motion.

*Claim.*—The slabbing knife *a* and splitting knives *b c d e f*, as secured to one cross head O, acting simultaneously at the forward movement of the latter, substantially as described and for the purpose set forth.

No. 24,736.—TOBIAS GRODJINSKI, of New York, N. Y.—*Improvement in Dry Gas Meters.*—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Attaching each pair of the plates B B<sup>1</sup>, or their substantial equivalents, to the flexible part C of the diaphragms of dry gas meters, by overlapping parts of the one upon the other, substantially in the manner and for the purpose set forth and described.

No. 24,737.—GEORGE HENSEL, of New York, N. Y.—*Improvement in Sewing Machines.*—Patent dated July 12, 1859.—This invention consists in an improved contrivance for working and regulating the feed.

*Claim.*—The construction of the disk W with an elastic plate R, attached and operated by means of a cam, in the manner and for the purpose substantially as set forth.

No. 24,738.—S. EMILIUS HEWES, of Albany, N. Y.—*Improvement in Stoves.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—A revolving fire pot, arranged to traverse perpendicularly or to be raised and lowered, substantially as described, for the purpose of supplying air to and shutting it from the openings in the sides of the fire pot, so as to effect a ready and perfect combustion and consumption of the fuel.

No. 24,739.—H. J. HOLMES, of Warren, Mass.—*Improved Clothes Frame.*—Patent dated July 12, 1859.—This invention consists in combining together a series of clothes frames for drying clothes, so that each frame will have independent bearings in two segmental pieces, which form the foot and cap pieces, and so that when the frames are closed and shut together there will be a great economy of space.

*Claim.*—A series of vertical frames, one of which has permanently affixed to it a foot piece A and cap B, when said cap and foot pieces form suitable bearings for other frames, arranged and operating as and for the purpose set forth.

No. 24,740.—JOHN P. HUGHES, of Spout Spring, Va.—*Improvement in Water Wheels.*—Patent dated July 12, 1859.—The inventor says: By making the arms in sections the capacity of the wheel may be readily varied to adapt it to different circumstances, by simply adding or extracting a section as the case may require, while at the same time the whole apparatus may be more readily made, transported, and put together and taken apart.

*Claim.*—Making the water arms in sections, essentially as described, for the purpose set forth.

No. 24,741.—ANTHONY ISKE, of Lancaster, Pa.—*Improvement in Dumping Wagons.*—Patent dated July 12, 1859.—The side pieces F are grooved from the front to the centre, in which groove the rollers I on the box A move and are kept in place; on the rear end are the rollers H which move in the grooves in the bottom of the box A; L is a cogged spindle operated by a handle or windlass K, by means of which the box is moved back and forward; G is a bent upright for retaining the box in place when run forward; M is a stay peg or pivot against which the catch plate N with its notch to receive the peg comes when the box is run back and stays it, while it becomes the pivot of the dumping box.

*Claim.*—The drop door D with its lever E, the partitioned box A with its rack bar *c* on the bottom, the handled spindle E K for moving the same, as specified, when the several parts are combined as and for the purpose set forth.

No. 24,742.—JOHN W. KENNEDY and JOHN T. PLUMMER, of Plainfield, Conn.—*Improvement in Machines for Dressing Mill Stones.*—Patent dated July 12, 1859.—The pick may be adjusted to any part of the face of the stone, the plate *o* being movable on the case G and



radial or tangential furrows cut therein. The operator moves the plate *o* by hand and the strength of the spring *T*, and consequently the force of the blow of the pick is regulated by turning the shaft *U*, which causes the spring *T* to have greater or less strength. The shaft *U* is prevented from casually turning by means of the ratchet *V* and pawl *W*.

*Claim.*—The arrangement and combination of the arbor *Q*, forked arm *S*, spring *T*, shaft *U*, ratchet and pawl *V W*, wiper *N*, bar *A*, movable case *G*, shaft *K*, and adjustable plate *O*, as and for the purpose shown and described.

No. 24,743.—*J. KURTZEMAN*, of Lancaster, Ohio.—*Improved Head Block for Saw Mills.*—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The sliding rack bar placed longitudinally in the carriage *A* and adjusted therein by the wedges *e e*, in connection with the gearing *H I F*, whereby the two sides *C C* may, by a suitable adjustment of the wedges, be actuated both simultaneously and separately as may be desired.

No. 24,744.—*WILLIAM LANCE*, of Olney, Ill.—*Improved Method of Constructing Mallets.*—Patent dated July 12, 1859.—This invention consists of circular convex cast iron, wrought iron, or steel heads, which, by being contracted in sections and secured, prevent the blocks or sections of wood from working from the centre when fastened by the bolts *D*.

*Claim.*—The manner of their construction and arrangement, as shown and described, for the uses and purposes set forth.

No. 24,745.—*JOHN K. LEEDY*, of Woodstock, Vt.—*Improvement in Bee-Hives.*—Patent dated July 12, 1859.—The pipes *E E* are designed to protrude on the outside of the wall to furnish the bees a free passage and the same advantages that they would possess from the ordinary mode of treating them. The pipes *a b c* are designed for the purpose of conveying the bees from one compartment to the other when they swarm, and the faucets serve to confine them to either of the compartments desired.

The inventor says: I *claim*, first, the boxes *e*, constructed and arranged in the manner and for the purpose specified.

Second. I claim, in combination with the boxes *e*, the pipes *E E* and *a b c*, and their faucets, all arranged in the manner and for the purpose set forth.

No. 24,746.—*ROBERT H. LONG*, of Philadelphia, Pa.—*Improved Salinometer.*—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The means of drawing into a vessel water from a steam boiler, as a means to facilitate testing the density of the water in the same, constructed and arranged for the purpose substantially as set forth.

No. 24,747.—*A. G. MACK*, of Rochester, N. Y.—*Improved Life Preserving Raft.*—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Surrounding a cask or chamber *A* with conical floats *B*, arranged radially with said chamber and hinged thereto, and covering the cone with canvas or other suitable material, and bracing the whole together by a rope suitably arranged, all substantially in the manner and for the purposes specified.

No. 24,748.—*JOHN W. MASURY*, of Brooklyn, N. Y.—*Improvement in Paint Cans, &c.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The construction of a metallic can for hermetically sealing paints and other substances, having attached thereto a rim or ring of thin brass or other soft metal, in such a manner that the top or cover may be removed by severing the said rim or ring of brass or other soft metal with a penknife or other sharp instrument, in the manner and for the purposes described and represented, or its equivalent.

No. 24,749.—*A. A. McMAHEN*, of Oxford, Me.—*Improvement in Earth Boring Augers.*—Patent dated July 12, 1859.—This invention consists in the method of bracing together the two ends of the spiral portion of the auger by means of a rod, which constitutes the elongation of the auger shaft, for the purpose of stiffening said spiral portion and preventing it from being twisted or compressed during the operation.

The inventor says: I *claim* bracing the two ends of the spiral portion of the auger by means of the central rod *E*, substantially in the manner and for the purposes described.

I also claim the manner of securing the boring tools *F G*, rod *H*, to the spiral *D*, by which they may be removed and replaced without making any changes on the spiral *D*, substantially in the manner and for the purposes described.

No. 24,750.—*ANTON MENGE*, of Pointe à la Hache, La.—*Improvement in Dredging Machines.*—Patent dated July 12, 1859.—The principal feature in this invention consists in arranging the bucket or cutter frame in an inclined position in front of the boat, and constructing it so that it can be readily slewed from right to left of the boat by proper machinery



adapted to this purpose; also, in an improved bucket, which acts as a cutter, and is provided with a hinged bottom, in order to open and to cause, by the pressure of the air upon the hinged bottom, the earth or mud to fall at the proper place of discharge.

The inventor says: I *claim*, first, the bucket frame B, when resting upon adjustable casters or friction rollers, and operated so as to be swung from right to left of the boat upon a circular track *b*, in combination with the oscillating shaft C, all arranged and operating substantially in the manner and for the purposes set forth.

Second. I claim the buckets F, having a hinged back T, arranged and operating for the purposes specified.

No. 24,751.—F. O. MORE, of Bellefontaine, Ohio.—*Improvement in Preserve Cans*.—Patent dated July 12, 1859.—This invention consists of a peculiarly formed cap, provided with a lip fitting into a corresponding groove in the top of the can, in combination with a lip of peculiar form upon the top of the can itself.

*Claim*.—The peculiarly formed cap B, in combination with the curved spring lip E.

No. 24,752.—Z. N. MORREL, of Cameron, Texas.—*Improved Portable Oven*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Forming the pin on the handle on the cover of a Dutch oven or skillet, in combination with the tube under the centre of the frying pan or gridiron, substantially as and for the purposes set forth.

No. 24,753.—CHARLES NEER, of Albany, N. Y.—*Improved Dynamometer*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the rigid arm or arms *c* and yielding incline or inclines *d*, with the loose pulley *a*, or its equivalent, whereby the power exerted to rotate the shaft *a* is denoted by the motion resulting from the pressure against said yielding incline or inclines, for the purpose of forming a rotary dynamometer, substantially as specified.

I also claim the revolving and sliding cone *h*, adjusted in its position according to the power applied from the pulley *a* to the shaft *b*, when combined with a registering apparatus, substantially as set forth, to record the amount of power made use of, as described.

No. 24,754.—CHARITY PENDLETON, of Galena, Ill.—*Improved Washing Machine*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the two horizontal bars or rails J and M, having a circular reciprocating motion, with the fixed corrugated cylindrical surface forming the bottom of the machine and having its axis coincident with the axis of motion of the said bars J and M, the parts being constructed and arranged as hereinbefore described, and operating so as to produce the effect previously stated.

Second. The combination of the slot or mouth K, in the arm D and the tenon I I<sup>1</sup>, at the ends of the corrugated rubbing bar M with the perforated bar J, by which the portion of the said corrugated rubbing bar M may be altered with respect to the bottom of the machine, so as to increase or diminish its distance therefrom, substantially as set forth, and without altering the position of the bar J.

Third. The combination of the corrugations on the lower surface of the rubbing bar M with similar corrugations on the bottom or concave of the machine, but so arranged that the direction of the two sets of corrugations will be at right angles to each other, as fully described, and for the purpose set forth.

No. 24,755.—PETER PHILIP, of Ghent, N. Y.—*Improved Method of Operating Windlasses When Applied to Hay Presses, &c.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, attaching the wheel or table C to the capstan A, so as to be operated upon by the loose or boom sweep B, as a brake, for the purpose of stopping the press at any point of descent while being filled, and of regulating and controlling the motion of the capstan in the uncoil.

Second. Providing the capstan A with the arms *e e*<sup>1</sup> and the loose or broom sweep B, in combination with the check lever D, substantially in the manner and for the purpose set forth.

No. 24,756.—DANIEL QUIMBY, of Littleton, N. H.—*Improved Machine for Boring Hubs*.—Patent dated July 12, 1859.—This invention consists in the use of an adjustable rotating clamp, stationary cutter, and feed screw, combined and arranged whereby hubs may be bored in taper form to receive their boxes, and the machine rendered capable of being adjusted to bore hubs of varying sizes, and with holes of greater or less taper form, as may be desired.

The inventor says: I *claim* the shaft A, the boss B, placed on said shaft, and provided with a conical bore *d*, and having the collar *p* and arms *q* attached, the screw rod C connected with the collar *p* by the gearing *n o*, and provided with the divided nut D, attached to



the upright *f*, the whole being arranged to operate substantially as and for the purpose set forth.

I further claim, in combination with the parts above named, the convex projection *m*, placed on the shaft *A*, to operate as and for the purpose specified.

No. 24,757.—P. D. RICHARDS and F. N. THAYER, of New Orleans, La.—*Improved Pocket Register of Count*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction and arrangement of a hand operating tally, specifically as described, consisting of three indexes and corresponding wheels to indicate count, as specified, the whole being operated by a projecting stud *G* and spring brake *I*, with its gauge *S*, for the purpose set forth.

No. 24,758.—JOHN RICHARDSON, of New York, N. Y.—*Improvement in Pen and Pencil Cases*.—Patent dated July 12, 1859.—This invention consists in the employment of two sleeves with spiral grooves turning in the same direction, and arranged around the same tube connected with the penholder and the pencil, and also with a sectional outer case, or shell, in such manner that by turning the outer case either the penholder or pencil may be moved independently of each other, so that on drawing one within the case, by continuing the same movement of the outer shell the other is thrown out.

*Claim*.—The arrangement of the spiral grooved sleeves and their connection with the penholder and pencil, and also with the outer shell of the case, substantially as described, for the purposes set forth.

No. 24,759.—JOHN ROBERTSON, of Brooklyn, N. Y.—*Improvement in Hydrostatic Lifting Jacks*.—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The employment of the exterior movable hydraulic cylinder *E* with toe piece upon its surface, in combination with the standard *B*, which serves also as piston and eduction pipe, as and for the purpose shown and described.

No. 24,760.—WILLIAM G. RUSSELL, of Winchester, Va.—*Improvement in Self Detaching Whiffletrees*.—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A swingle or whiffletree, provided with a lever turn bar *e e e f f g h h*, as shown in Fig. 3, together with the spring clasp *o o*, Figs. 1, 4, 5, and the hinged or jointed hooking ferrules *K K L L n n*, when constructed and arranged substantially as set forth and described.

No. 24,761.—SILAS T. SAVAGE, of Albany, N. Y.—*Improvement in Coal Sieves*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of the two half globes *A* and *B*, in which there are interstices *c c c*, as a coal sifter, when said half globes are provided with grooves *b b*, tongues *a a*, and shoulders *x x*, the same being used in connection with a box or cylinder, by means of which the two portions of the globe are prevented from moving endwise of the trunnions and are prevented from separating, substantially as set forth.

No. 24,762.—I. W. SCHMIDT, of Philadelphia, Pa.—*Improved Sawing Machine*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combined arrangement of the stationary frame *A*, fitted with the adjustable holders *d e* and *n*, as described, and the saw carriage *B*, operated by the crank *o*, shaft *f*<sup>1</sup>, spur wheels *l*, shaft *m*, and rope or chain, as set forth and described, whilst the saw *k* is at the same time rotated through the media of the gear wheel *f* and *g*, pulley *h* and *i*, and band *7*, arranged and combined as set forth and described, the said stationary frame *A* and the said moving saw carriage *B*, operating together as and for the purpose set forth and described.

No. 24,763.—CORNELIUS R. SHAEFFER, of Gettysburg, Pa.—*Improved Machine for Making Hand Rails for Stairs*.—Patent dated July 12, 1859.—This invention consists in constructing and arranging a machine so that the length, the twist joint, and curve of any piece of a stair rail may be obtained by a mechanical process.

*Claim*.—The combination of the perpendicular square post erected upon the base *A* with the draft board *B*, pitch boards *B* and *G*, rod *C*, and arm *D*, the several parts being arranged substantially as and for the purpose set forth.

No. 24,764.—REUBEN SHALER, of Madison, Conn.—*Improved Confectionary Safe*.—Patent dated July 12, 1859.—This invention consists in so constructing the sides of the safe that they will fit into a groove, the said groove being filled with India rubber, or any other suitable elastic substance, in combination with a number of hooks or catches attached to the bottom of the safe, which can be hooked to a flange projecting from the side of the safe; also, in constructing the sides and top of the safe in one piece.



*Claim.*—The confectionary safe above described, constructed substantially as specified, as a new and useful article of manufacture.

No. 24,765.—GEORGE F. SHAW, of Woburn, Mass.—*Improvement in Corn Huskers.*—Patent dated July 12, 1859.—This invention consists in the use of a cylinder and a concave roller, arranged in such a manner that the axis of the one shall be slightly inclined to that of the other, so that as the ear is driven forward parallel with the cylinder, the husks shall be stripped backwards from the tip of the ear towards the but, and carried in a different direction between the cylinder and concave roller.

*Claim.*—The combination and arrangement of the cylinder A and concave roller C, substantially as set forth and for the purposes described

No. 24,766.—CHRISTIAN SHUNK, of Canton, Ohio.—*Improvement in Refining Iron.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The use of the external crucible or hearth, having the tuyere pipe C, the projecting stone D, and the escape pipe E, constructed as described, operating in such a manner that the blast shall deflect from the side of the upright stone and produce a rotary movement in the melted metal for the purpose of refining the same, as specified.

No. 24,767.—JOSEPH H. SIDDALL, of Philadelphia, Pa.—*Improvement in Threshing Machines.* Patent dated July 12, 1859.—In operating this machine when the crank revolves, the slides move rapidly up and down, and the straps, acting alternately on the lower and upper part of the circumference of the roller, will give it a reciprocal motion, and the flails, descending with a quick elastic blow and instantly rising to a vertical position, will allow the straw to pass under them without obstruction.

*Claim.*—The combination of flails F, rollers E, slides C, and straps  $g^1$ , when said flails are constructed with the flexible joints J, the arrangement and operation being substantially as and for the purpose set forth.

No. 24,768.—MICHAEL TROMLY, of Mount Vernon, Ill.—*Improvement in Locks for Fire-Arms.* Patent dated July 12, 1859.—The inventor says: This improved lock contains many of the features embraced in the lock patented by me on the 13th day of October, 1857, and its construction is such as to make it impossible for the hammer to descend when placed at half cock without being previously raised to a full cock, thereby guarding against accidental discharge when in this position, and to enable the trigger to discharge the hammer with more ease than heretofore.

The inventor says: I *claim*, first, the combination of the hooks  $G^2$  I, or their equivalents, respectively formed on the claw  $G^1$ , of the link G, and the trigger K, substantially as described.

Second. I also claim widening the upper end of the trigger K, so as to form a projection  $K^1$  in front, whose lower curved edge shall operate on the curved surface of the claw  $G^1$ , in the manner and for the purpose set forth.

No. 24,769.—I. L. G. WARD, of Adrian, Mich.—*Improvement in Artificial Stone.*—Patent dated July 12, 1859.—The claim explains the nature of this invention.

*Claim.*—A cement composed of pumice stone, silicate of soda, fluor spar, and Roman cement, as set forth.

No. 24,770.—OLIVER N. WEAVER, of Dover, Ky.—*Improvement in Preserving Cans.*—Patent dated July 12, 1859.—This invention consists in the application of a finely punctured plug of gum (catouchouc) to a screw threaded, tapering mouth or nozzle of a can or jar, the exhaust being effected through a tube adapted to readily penetrate the plug through the puncture without tearing its substance, and to be as readily withdrawn at the proper moment.

*Claim.*—The perforated elastic plug D d, secured in the top of a provision can, in the described combination, with a nozzle E and tube F communicating with an exhausting chamber, substantially as set forth.

No. 24,771.—LOREN WETMORE, of Tioga county, Pa.—*Improved Trap for Animals.*—Patent dated July 12, 1859.—This invention consists of a simple trap with a peculiar arrangement for springing it.

The inventor says: I *claim* the peculiar construction and arrangement of the manifold trap, substantially as set forth.

Second. I claim the arrangement of the trip C, provided with a fulcrum or fulcra c, guide pin e, and arched wire D, for operating the trap, substantially as set forth.

No. 24,772.—JAMES WILSON, CHARLES GREEN, and WILLIAM WILSON, jr., of Wilmington, Del.—*Improvement in Attaching the Heads of Metallic Powder Kegs, &c.*—Patent dated July 12, 1859.—In one head a hole is struck by the die in such a manner that upon the



upper side an elevation is produced around the hole, as shown at E E. Upon the under side a small plate F F, having a corresponding opening, but smaller, is riveted to the head. A cap G G fits upon the opening in the plate F F. After the keg is filled with powder this cap is sealed upon the head.

*Claim.*—The double seaming of both heads of the keg and the opening in one head, in the manner substantially as described.

No. 24,773.—ARCALOUS WYCKOFF, of Elmira, N. Y.—*Improved Hollow Augur.*—Patent dated July 12, 1859.—This invention relates to the cutting portion of those tubular augurs which in boring remove only a portion of the wood, leaving a core or rod in the centre. In this invention, the cutter head is constructed with the cutting lips *a a*, which start at the periphery of the bit, and extend toward the centre in a concave line till they terminate in the interior portion of the tube at *b*, where their direction approaches a line longitudinally with the augur.

*Claim.*—Combining the transverse auxiliary cutters *d d*, with the prime cutters *a a*, and elliptic opening of the annular cutter head, as described, substantially as and for the purpose set forth.

No. 24,774.—PETER ALTMAIR, of Lewistown, Pa., assignor to Himself and MYRON M. FAXON, of Lewistown, aforesaid.—*Improvement in Breech Loading Fire-Arms.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—In combination with a fixed breech piece, a hinged barrel, so arranged as that the said barrel shall swing upward and expose the chamber of the breech piece, below the rear end of the barrel for inserting the charge, substantially as described and represented.

No. 24,775.—ROBERT M. CAMPBELL, of East Cambridge, Mass., assignor to Himself and BENJAMIN S. WRIGHT, of Boston, Mass.—*Improved Money Drawer Alarm.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination and arrangement of the two levers F G, and the spring latch E, with the clock alarm apparatus D, the striker *a*, and bell *b*, and the combination of the same and a series of perforated key slides and a set of T bars applied together and to such levers so as to actuate the same, substantially as specified.

I also claim the combination and arrangement of the T bars and the perforated key slides, to operate in manner as described.

I also claim, in combination with the key lock M, and the T bar I, a latching apparatus placed in the case K, and constructed so as to lock both the cover and the T bar, or either, substantially as specified.

I also claim the combination of the detector or indicator with the case cover and the T bar, and operated in manner as specified.

No. 24,776.—SAMUEL GREEN, of Lambertville, N. J., assignor to Himself and W. R. GREEN, of Philadelphia, Pa.—*Improved Safety Apparatus for City Railroad Cars.*—Patent dated July 12, 1859.—This invention consists in providing a swinging frame and bolt, in connection with brake blocks in front of the forward wheels of a city railroad passenger car, so arranged in relation to each other that should a person fall upon the track in getting in or out at the forward end of the car while it is in motion, the swinging frame coming in contact with the falling person will so operate upon the brakes as to stop the wheel.

*Claim.*—The swinging frame C, in connection with the bolt *l*, and cover *v*, the brake blocks D D, in connection with the chains *r r*, and rods *t t*, and the stationary supporting piece *n*, the same, or their equivalents, being arranged, applied, and operated substantially in the manner and for the purpose set forth and described.

No. 24,777.—SAMUEL B. GUERNSEY, of Waterbury, Conn., assignor to WILLOUGHBY H. REED and GEORGE W. ZEIGLER, of New York, N. Y.—*Improvement in Clasps for Skirt Hoops.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* connecting the hoops with the straps, or equivalents thereof, for connecting and suspending them by means of plates bent to embrace the hoops, and formed with two slots or apertures, through which the straps or equivalents pass, thus clasping the straps or equivalents to the hoops, substantially as described.

And I also claim the employment of the metal clasps, constructed as above described, in combination with and as a means of connecting the ends of the hoops, substantially as described.

No. 24,778.—MOSES HALL, jr., of Osborn, Ohio, assignor to Himself and SAMUEL H. JUDY, of Osborn, aforesaid.—*Improvement in Cattle Gates for Railroads.*—Patent dated July 12, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Constructing a cattle guard or gate, with its cross bar or shaft below the rail of the railroad track, and operated by springs, substantially as described.



No. 24,779.—ROBERT LAW, of Lockport, N. Y., assignor to Himself and P. P. DIX, of Olcott, N. Y.—*Improvement in Apparatus for Packing Fruit*.—Patent dated July 12, 1859.—The inventor says: For packing fruit in barrels, I employ two clamping levers A A, connected together by the fulcrum link B, and V shaped nut or yoke c. This yoke forms the nut of the hand screw D, which works in a socket in the follower E. The lower ends or long arms of the lever are provided with claws f f, having teeth which enter the staves of the barrel by pressure, while the upper ends are inclined to the centre or screw D, in the form of an arch, and are provided with hooked recesses g g, which enter slots in the end of the yoke and are secured there by the pins h h.

*Claim*.—The V shaped or wedge acting yoke C, provided with fulcrum pins h h, and the hooked recesses g g, in the upper ends of the bent clamping levers A A, arranged and acting in combination with the screw D, fulcrum link B, and claws f f, or their equivalents, substantially in the manner and for the purpose specified.

No. 24,780.—SIDNEY PARKER, of New York, N. Y., assignor to Himself and HUGH HERRINGSHAW, of Sing Sing, N. Y.—*Improvement in Sewing Machines*.—Patent dated July 12, 1859.—This invention mostly respects the feeding apparatus, and the principal piece of mechanism involved therein is the combination of a certain hook with a feeding arc piece.

The inventor says: I claim the combination of the hook I, and the feeding arc H, in the manner and for the purpose substantially as set forth.

I claim, also, the method of adjusting the feed, by means of the combination of the spring piece G, and the feeding arc H, in the manner described.

No. 24,781.—JOHN PAYNTER, of Shelbyville, Ind., assignor to Himself and JOHN McCORKLE, of Shelbyville, aforesaid.—*Improvement in Sugar Mills*.—Patent dated July 12, 1859.—A is a frame which is revolved by the lever B, and turns upon the upright journal C. The beveled wheel D gears with the pinion E which is upon the same shaft, and gives motion to the wheel F and crushing rollers I. The wheel F gears with the wheels G and H, which being upon the same shaft revolve the rollers J and K.

*Claim*.—The combination and arrangement of the journal C, wheel D, gearing E F G and H, and rollers I J and K, the whole being suspended in a frame A, and constructed and operated substantially as described.

No. 24,782.—ASA T. RING, of Newton, Mass., assignor to NATHANIEL T. SPEAR and A. J. ROBINSON, of Boston and Milton, Mass., respectively.—*Improved Device for Winding Skeins of Thread*.—Patent dated July 12, 1859.—Each of the bobbins b turns loosely upon a shank e, which is a little longer than the length of the bobbin, so as to allow it free play, as seen at o, and provided with a milled head d. The shank e screws on the screw threaded end l of rod t, the lower portion of the shank being hollow and screw threaded, as seen at i.

*Claim*.—The combination of the clamping spring c, screw and guide pin or rod t t l, with the tightening and supporting shank e, and bobbin b, when said parts are constructed and arranged in relation to each other substantially as and for the purpose specified and shown.

No. 24,783.—THEODORE ADAMS, of Harrisburg, Pa.—*Improvement in Machines for Breaking Stone for Turnpike Roads*.—Patent dated July 12, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Hanging the breaking rolls of stone breaking machines in boxes supported on rubber springs or their equivalent, so that said rollers will yield to any and all undue strains upon them, and thus prevent the breaking of the machinery, substantially as represented.

No. 24,784.—LEWIS ALLEN, of Sleepy Creek, Va.—*Improved Washing Machine*.—Patent dated July 19, 1859.—The operation of this machine is as follows: Sufficient water and soap being put into the washing box, the clothes are arranged upon the main cylinder r r s s, and the net work u u, adjusted over the clothes, and the ends of the net held together by being tied. The crank n o P is turned when the cylinders q q s s rotate inwardly toward each other, carrying the clothes between them. The upper cylinder q q bearing down on the clothes by the action of the springs g<sup>3</sup> g<sup>3</sup>, and thereby pressing and squeezing the clothes against the grating or open bars of the main cylinder r r s s, and in the revolution thereof the clothes are pressed, squeezed, and dipped, and the dirt removed therefrom, the netting preventing the clothes from falling off the cylinders.

The inventor says: I claim the construction of the open, hollow washing, rinsing, and dipping cylinder, composed of a series of bars r r s s placed at regular intervals from each other and provided with open net work u u as described.

I also claim, in combination therewith, the fluted or ridged pressure squeezing cylinder q q and detachable framing e e, 2, f f, g g, g<sup>2</sup> g<sup>2</sup>, h h, i i, k k, when arranged and operated in the manner substantially as set forth and described.

No. 24,785.—JACOB BARNEY, of Chicago, Ill.—*Improvement in Variable Exhaust Devices for*



*Steam Engines.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of two cylinders B B, so provided with gradually tapering grooves in each that when revolved together an expanding and contracting circular opening will be formed for the purpose of regulating the passage of the exhaust steam from locomotive and other engines, substantially as set forth.

Second. I claim the cylinder B B, as constructed, when used in combination with the tight metallic case C C, and packing *o o*, the same being arranged and operating in the manner and for the purpose fully set forth.

No. 24,786.—JAMES BAYLOR, of Canton, Ill.—*Improvement in Universal Joints.*—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Connecting shafts, when placed angularly with each other, by means of the universal joints, constructed as represented and described, by which a rotary motion may be transmitted from one shaft to the other.

No. 24,787.—W. H. BETTES and I. H. PARKER, of Kokomo, Ind.—*Improvement in Boot Trees.*—Patent dated July 19, 1859.—This invention consists in expanding the toe, instep, and sides, all simultaneously.

The inventors say: We *claim*, first, the employment of the sleeve *c*, in connection with the screw shaft *g*, the two being arranged and operating substantially as set forth.

Second. The arrangement of the cords *e h* and *i* with the levers *d<sup>1</sup> d<sup>1</sup>* and *m*, substantially in the manner and for the purpose set forth.

Third. The combination of the instep K, side pieces H H<sup>1</sup>, and toe piece 1, when the whole are so arranged and constructed that they will operate simultaneously, substantially as and for the purpose described.

No. 24,788.—JOHN T. BEVER, of Hainesville, Mo.—*Improved Bedstead Cord Pin.*—Patent dated July 19, 1859.—A in the engraving represents an ordinary bedstead frame; B B, the cords which support the sack or form the bottom for the bed to rest upon.

*Claim.*—A bedstead cord pin consisting of two parts *a b*, which are constructed and operated in the manner and for the purpose substantially as described.

No. 24,789.—WILLIAM BULL, of New California, Wis.—*Improvement in Sugar Cane Presses.* Patent dated July 19, 1859.—In operating this machine motion is given to the shaft B, either by hand or other power, and the cane is placed on the more elevated trough or spout L and passes between the rollers D J, which rotate in the direction indicated by the arrows. The juice is expressed from the cane by the pressure of the rollers D J, the crushed cane passing down the spout L<sup>1</sup> and the juice falling into the reservoir G, from which it is discharged through the spout H. The pressure of the rollers on the cane is graduated by adjusting the wedge F.

*Claim.*—The arrangement and combination of the hinged adjustable frame E, roller J, frame A, wedge F, inclined spouts L L<sup>1</sup>, and roller D, as and for the purpose shown and described.

No. 24,790.—A. H. BURDINE, of Chulahoma, Miss.—*Improved Cotton Gin Sharpener.*—Patent dated July 19, 1859.—This invention consists in the combination of two crossed reciprocating files, with a circular feeding disk, which is constructed with an angular recess, and an inclined hook at one point of its circumference. It also consists, in the combination with the above, of a jointed slotted frame and a driving cam, whereby the machine is rendered more convenient for use in filing saws attached to the gin.

The inventor says: I *claim*, first, the combination of two crossed reciprocating files F F, with a circular feeding disk *r*, which is constructed with an angular recess and an inclined hook *r<sup>1</sup>* at one point of its circumference, substantially as and for the purposes set forth.

Second. The combination of the above with a jointed slotted frame and a driving cam, substantially as and for the purposes set forth.

No. 24,791.—PETER N. BURKE, of Buffalo, N. Y.—*Improvement in Stoves.*—Patent dated July 19, 1859.—The regulation of the passage of air through this stove is effected by common registers, placed below and on each side of the hearth; and when it is desired to radiate the heated air into the room the damper S in the hot air pipe L is closed, when the air passes out through apertures in said pipe arranged below the damper, as shown in the engraving.

*Claim.*—The arrangement and combination of the perforated plates N R, the partitional plates B, the flue H, the fire guard I, hot air pipe L, and chamber K, as and for the purpose shown and described.

No. 24,792.—JEREMIAH CARHART, of New York, N. Y.—*Improvement on Machines for*



*Planing Metal.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the pressure plate or plates, in combination with the reciprocating bed and feeding strip, when said plates extend substantially the length of the blank to be planed, and the bed travels far enough to carry the feeding end of the strip entirely past the facing cutter at each operation, substantially as set forth.

Second. I also claim rebating the inner edges of the pressure plate or plates, as described, in such manner as to furnish at once edge guides and pressure for the blank while being fed to the cutters.

Third. I also claim, in combination with the pressure plates and cutters, the shields extending downwards from the pressure plates to protect the space between the plates from shavings and other foreign matter, as described.

Fourth. I also claim, in combination with the reciprocating bed and feeder, the scraper and brush, acting in combination for cleaning the bed and feeder or feeding strip, substantially as described.

No. 24,793.—HEMAN CARTER, of Greene, N. Y.—*Improvement in Harvesters.*—Patent dated July 19, 1859.—This invention consists in the arrangement and combination of a vibrating discharger with a horizontally revolving rake.

*Claim.*—The vibrating discharger *F*, in combination with the rake *e*, arranged and operated in the manner described, for the purposes specified.

No. 24,794.—ROBERT CARTWRIGHT, of Ithaca, N. Y.—*Improved Canal Boat Propeller.*—Patent dated July 19, 1859.—This invention consists in applying gearing to drive the propeller, said propeller being placed in the rudder, or at the back of the rudder, by which, in combination with the gearing, the vessel can be propelled and steered.

*Claim.*—The step or bearing block *I*, constructed and arranged relatively to the rudder and vessel, substantially as described, to receive the end thrust of the propeller shaft, and thus relieving the gearing and rudder from pressure, the whole end thrust of the propeller being upon the step block *I*, which is arranged to admit of any lateral motion to the vessel's centre line, thus forming a steering as well as propelling power, and being all placed externally, it entirely obviates the necessity of entering the vessel below the water line.

No. 24,795.—WILLIAM CHESTERMAN, of Centralia, Iowa.—*Improvement in Coffee Pots.*—Patent dated July 19, 1859.—The strainer *E* serves the double purpose of strainer and piston, being tightly packed. If, by the descent of the contents of tube *D*, the vacuum in *A* becomes so much impaired that the whole of the contents of *D* do not pass below the coffee grounds, it is only necessary, in order to increase the vacuum, to raise the strainer gently with the hand. The strainer being packed tight, the vacuum below it will be thus increased, and the contents above the coffee grounds will then descend and leave the grounds entirely dry.

*Claim.*—The arrangement and combination of the piston packed strainer *E*, cylinder *D*, receiving vessel *A*, socket *H*, and condenser *F*, as and for the purpose shown and described.

No. 24,796.—JOHN CLARY, of Dayton, Ohio.—*Improved Vegetable Cutter.*—Patent dated July 19, 1859.—The operation of this machine is as follows: The cutters *h* being first adjusted to the thickness of the slices required to be cut, the vegetables will be placed against the plate *b*, upon the side opposite the pinion *p*, and held down against the disk *f*; the crank will then be operated so as to rotate the disk *f* in the direction of the arrow, and, as said disk is made to rotate, the vegetables will be sliced by means of the cutter *h*, the slices so cut falling into the receiving pan *A*.

*Claim.*—The arrangement of the cutting disk suspended from the cross piece *b*, in connection with the convex cutting edge of the cutters *h*, substantially in the manner and for the purpose set forth.

No. 24,797.—WILLIAM H. DAVIS, of Austin, Ind.—*Improvement in Double Acting Pumps.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction and arrangement of the air chamber, side pipe, and cylinders, and flange at the top, all in one piece of casting, for the purpose of suspending the cylinders sufficiently deep in the well to prevent freezing, in combination with the bottom plate, substantially as set forth.

No. 24,798.—RUFUS DAWES and WARREN C. CHOATE, of Washington, D. C.—*Improvement in Stoves.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of a new fire room for a downward draft, having a lid to close the opening at the top containing a valve in the lid and an open grate in front, having a door to close this opening air tight, with a system of ovens heated and ventilated, as specified.



No. 24,799.—BENJAMIN F. FIELD, of Sheboygan Falls, Wis.—*Improvement in Rotary Cultivators*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of two or more wheels on one crank eccentric, or equivalent axle, when the said wheels are arranged in pairs on the axle, one wheel within the other, and so that the spades or forks attached to the inner wheels shall pass out and in through the apertures in the outer wheels, for the purpose of displacing and pulverizing the soil over which they pass, in the manner described.

No. 24,800.—JAMES D. FIELD, of Davenport, Iowa.—*Improvement in Stoves*.—Patent dated July 19, 1859.—The object of this invention is to obtain a cooking stove in which the full benefit of the heat generated by the combustion of the fuel will be obtained, and consequently a saving of the latter effected.

*Claim*.—The fire chambers D I, flue F, and water heater H, the latter being provided with inclined tubes *a*, to form the grate of the fire chamber D, the above parts being arranged relatively with each other, the oven B, and the smoke pipe C, to operate as and for the purpose set forth.

No. 24,801.—AMBROSE FOSTER and NOAH SUTTON, of New York, N. Y.—*Improvement in Variable Cut Off Gear for Steam Engines*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment, for operating either the main valve or valves of an engine or a separate cut off valve or valves, of a compound cam, composed of two parts C and D, constructed and combined with each other, and applied to the main or a counter shaft, substantially as described.

No. 24,802.—AUGUST FREUTEL, of New York, N. Y.—*Improved Locks for Safes, &c.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the slotted wheels *m*, on the tumbler *l*, and the plates *7*, in combination with the wheels *6*, of the knobs *k*, when said wheels *m* are so arranged that the act of unlocking, or attempting to unlock the bolt moves the wheels *m* away from the wheels *6*, in the manner and for the purpose specified.

Second. In combination with the tumbler *l*, carrying the wheels *m* and acting as aforesaid, I claim the cross piece *n* and tumbler *o*, substantially as and for the purposes set forth.

No. 24,803.—C. B. GARLINGHOUSE and G. B. GARLINGHOUSE, of Allensville, Ind.—*Improvement in Harvesters*.—Patent dated July 19, 1859.—In operating this machine the bar *b* being hung in the gear with the cam B<sup>1</sup>, and the wheel being made to rotate, the bar *b* will be made to reciprocate vertically, thereby operating the bent lever *j*, and imparting a corresponding reciprocating motion horizontally to the sickle attached to the end *j*<sup>2</sup> of the lever *j*, thereby operating the sickle in an efficient manner.

*Claim*.—The peculiar arrangement of the disk C, in relation to the mechanism for operating the cutters, the standard K, and sliding frame *m*, in the manner and for the purpose specified.

No. 24,804.—HALVOR HALVORSON, of Cambridge, Mass.—*Improved Trimmer for Lamp Wicks*.—Patent dated July 19, 1859.—This invention consists in the use of gauges in connection with a proper cutting device, the gauges being so arranged as to retain the wick, or hold it in proper position while acted on by the cutter or cutters, thereby effecting the desired end.

*Claim*.—In combination with a knife D and bed or anvil E, or other suitable wick cutting devices, gauges *e f*, constructed and arranged as shown, or in such a manner as to hold or retain the wick and prevent it expanding laterally, while under the action of the cutting device, for the purpose set forth.

No. 24,805.—JACOB HESS, of Niagara Falls, N. Y.—*Improvement in Lathes*.—Patent dated July 19, 1859.—The disks are provided with keys, playing into the slot *p* in the disk shaft *m*, while they are allowed to slide horizontally upon it so as to adapt the distance between the disks to the length of the piece to be turned. The disks are provided with necks *b*<sup>2</sup>, and can be fastened to the shaft *m* when set at the desired distance from each other, by means of set screws *a*<sup>2</sup> passing through the necks.

*Claim*.—The combination of the grooved central shaft *m* with its movable disks *e f*, adjusting gears *k i*, and index spring hook *n*, all of said parts being constructed and arranged in relation to each other, as and for the purpose set forth.

No. 24,806.—GROVE HOWARD, of Westfield, Ohio.—*Improvement in Machines for Raking and Loading Hay*.—Patent dated July 19, 1859.—In operating this machine, power being applied, the points of the teeth R are lowered by means of lever *m*, and secured in such a manner that they will pass under and catch the hay up from the ground as the ma-



chine runs over it. The endless belt F being set in motion, its teeth  $x x$  passing around, receive the hay from the curved teeth, and convey it to the top of the frame, and when the belt changes its direction to come down again, the hay falls from the teeth and drops into the body I.

*Claim.*—The arrangement of the endless belt F, pulleys D and E, curved teeth  $r$ , rods K, lever  $m$ , and catch  $d$ , in the frame A, and with the body I, the whole being constructed and operating substantially as and for the purpose specified.

No. 24,807.—LEWIS S. HOYT and BENJAMIN B. BEERS, of New Fairfield, Conn.—*Improved Bit Stock and Wrench.*—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim*, first, The above described wimble or bit stock wrench, with one permanent and one movable jaw, which may be readily adjusted to turn nuts or screws of different sizes, substantially as described.

Second. We also claim the block  $k$ , or its equivalent, with a socket adapted to receive and hold the shanks of common bits, and fitted to the permanent or movable jaw, or both, so as to hold the block and bits, substantially as described.

Third. We also claim the screw N, so arranged as to fasten the block to the jaw C and the bit in the socket L at the same time, substantially as described.

No. 24,808.—WILLIAM JOHNSON and MARTIN SILMSER, of Auburn, N. Y.—*Improved Steam Cock.*—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—A plug cock, with a sectional plug, whose sides are inclined to its axis, in combination with a single casing, through which, and directly opposite, are openings, whose sides are parallel to the axis of the plug, and constructed as described.

No. 24,809.—DAVID KNOWLTON, of Camden, Me.—*Improvement in Joints for Pump Pipes.* Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Making the joint hemispherical, in combination with the stiff or rigid flanges, by which the parts joined hemispherically may be held at the desired angle, substantially as described.

No. 24,810.—DAVID KNOWLTON, of Camden, Me.—*Improved Ship's Warping Chock.*—Patent dated July 19, 1859.—This improvement consists in making the stock or base and standards of cast-iron, and narrowing and hollowing out the stands behind the rollers so as to let the rope or warp run freely around the rollers without being chafed by the stand.

*Claim.*—The cast-iron warping chock described, as a new article of manufacture.

No. 24,811.—A. HENRY LOWELL, of Manchester N. H.—*Improved Hose Coupling.*—Patent dated July 19, 1859.—This invention consists in the arrangement of certain locking devices in combination with a screw and cap, arranged in connection with said locking devices.

*Claim.*—The locking devices described in combination with the screw tube K, arranged in connection with and on the outside of said locking devices, substantially as described.

No. 24,812.—FRANKLIN I. MAY, of Beverly, N. J.—*Improvement in Grain Separators.*—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the two side or supplementary inclined planes C and C<sup>1</sup>, in combination with the short inclined plane B, and the two adjustable guides  $r$  and  $r^1$ , the same being constructed and arranged together so as to operate substantially as and for the purposes described and set forth.

Second. I claim the employment of the sliding board E in the shaker E, when the said board is arranged to operate in combination with the screens therein, in the manner described, and for the purpose of better preparing the grain, &c., for the inclined planes B C and C<sup>1</sup>, and the rotary screen A, as described and set forth.

No. 24,813.—JAMES H. MAYDOLE, of Eaton, N. Y.—*Improvement in Foot Stoves.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—In combination with a foot stove, the several parts thereof being arranged in the order specified, the employment of a lamp constructed with an intermediate space P filled with plaster of Paris, or the equivalent thereof, whereby I am enabled to prevent the heating of fluid contained therein, for the uses and purposes set forth.

No. 24,814.—ISAAC C. MAYER, of Jersey City, N. J.—*Improved Machine for Turning Skins.* Patent dated July 19, 1859.—A is the body of the implement, made of rod iron and having a pointed screw cut on its lower end, which can be screwed into the side of a work bench or ceiling, or into the floor to secure it and hold it in position; B is the head of the implement made by welding another rod at each of its ends to the body, and then bending each of the



rods, forming the head into a bow shape; the top of the head is pointed so as to enter and pass through the skin with facility.

*Claim.*—The implement constructed and operated as herein described, for the purpose of turning the skins used by furriers, as herein set forth.

No. 24,815.—E. J. McCARTHY, of Saugerties, N. Y.—*Improvement in Furnace Grates.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A furnace with a series of stationary grate bars A B in combination with a series of movable blades, so arranged as to pass between and above the bars, and descend below so far as not to obstruct the draft and be beyond the influence of the intense heat of the furnace, as described, for the purpose set forth.

No. 24,816.—Z. N. MORREL, of Cameron, Texas.—*Improvement in Excavating and Grading Machines.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of a revolving cylinder of blades, arranged at the lower end of the inclined digger, in combination with said digger, and with a series of coulter ploughs arranged at the front end of the machine, substantially as and for the purposes set forth.

Second. The employment of a revolving cylinder of teeth or blades, arranged at the upper end of the inclined digger, in combination with said digger, substantially as and for the purposes set forth.

No. 24,817.—WILLIAM NEWELL, of Philadelphia, Pa.—*Improved Machine for Scouring and Polishing Coffee.*—Patent dated July 19, 1859.—This invention relates to the employment of two cylinders, one within the other, and having a steam space between them, said cylinders being armed with proper beaters or polishers, and running in opposite direction to a centre shaft, which is armed in a similar manner with beaters for the purpose of polishing coffee.

*Claim.*—The combination of the two cylinders B and E, having a space between them, with the scarified arms or beaters L M, moving in contrary directions, substantially in the manner and for the purpose described.

No. 24,818.—WILLIAM PERKINS, of Plympton, Mass.—*Improvement in Railroad Car Brakes.*—Patent dated July 19, 1859.—This invention consists in arranging the brakes in such a manner that they can be applied either by the momentum of the cars themselves or by hand, the brakes being connected by means of a lever with the buffers, said lever to be fulcrated in a bar secured to one of the brakeheads, and to connect with the other brakehead by means of hooked rods.

The inventor says: I *claim*, first, the arrangement of the sliding buffers J, brake levers N, rod *i*, hooked rods *b b*<sup>1</sup>, and staple *n*, to operate in combination with the brake, substantially as and for the purpose specified.

Second. Arranging the brake shoes L in combination with the staple *n* and hooks *m m*<sup>1</sup>, substantially as described.

Third. The arrangement and combination of the hooked rods *l l*<sup>1</sup>, and the rods *o o*<sup>1</sup>, and with the staple *n*, so that the hooks *m m* can be adjusted according to the direction in which the car is to run, substantially as set forth.

Fourth. The arrangement and combination of the sliding buffer J, lever P, and spring Q, substantially as specified.

No. 24,819.—A. P. PITKIN, of Hartford, Conn.—*Improvement in the Mode of Heating Drying Cylinders by Steam.*—Patent dated July 19, 1859.—The pump is kept in constant operation while the cylinders A are in use, and whenever any condensed steam or water is deposited in the discharge pipe or close vessel, the pump will immediately return the same into the boiler, and in case the steam should at any time be shut off from the drying cylinders, and the pump continue to work, the vacuum valve will open and thereby prevent the collapsing of the cylinders.

*Claim.*—In combination, the closed heating cylinders, force pump, vacuum valve and connecting tubes, substantially in the manner as and for the purpose set forth.

No. 24,820.—WILLIAM PORTER, of Mexico, N. Y.—*Improved Saw Gummer.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement and combination of the lever *p* with the sliding box *g*, by means of the bar *m*, so as to give a continued and downward action upon the cutter or burr *f*<sup>1</sup> by the use of the coiled springs *g*<sup>1</sup> *g*<sup>1</sup>, thereby feeding the said cutter or burr, as and for the purpose described.

Second. The arrangement and combination of the index pointers *h*<sup>1</sup> *h*<sup>1</sup> with the index B and the bars *t t*<sup>1</sup> connected to the frame A, so as to give any required direction to the cutter or burr *f*<sup>1</sup>, as and for the purpose set forth.

Third. I also claim the use of the set screw *b*<sup>1</sup>, by means of which the distance between



the blocks  $a^1 a^1$  is adjusted proportionally to saw plates of different thicknesses prior to being fastened thereto by the eccentric lever  $c c$ .

No. 24,821.—JOHN A. REED, of Jersey City, N. J.—*Improvement in Oscillating Steam Engines*.—Patent dated July 19, 1859.—This invention consists in a certain arrangement of a reversing valve and steam passages, in combination with stationary induction and eduction valves on the inner ends of the trunnion boxes, constituting a means of reversing an oscillating engine.

*Claim*.—The arrangement of the reversing valve E, in a steam chest, on the top of a bridge piece D, in combination with the separate passages in the bridge piece communicating with the chambers in the trunnion boxes, substantially as described.

No. 24,822.—BENJAMIN ROBBINS, of Machias, Me.—*Improved Apparatus for Working Pumps*.—Patent dated July 19, 1859.—This invention relates to an improved arrangement of means for operating two reciprocating pumps, and consists in having the piston rods attached to the ends of a walking beam, which is operated by segment gear from an oscillating arm put in motion by a crank or driving shaft.

*Claim*.—The combination and arrangement of the crank  $f$ , fly wheel J, lever H, walking beam E, and piston rods D D, as and for the purpose set forth.

No. 24,823.—EDWARD A. L. ROBERTS, of New York, N. Y.—*Improved Furnace for Dental Purposes*.—Patent dated July 19, 1859.—This invention consists in constructing a furnace, intended to be compact in form, not expensive, simple in operation, and which gives and secures an intense heat with little fuel, and in a much less time than can be obtained in ordinary furnaces.

The inventor says: I *claim* the arrangement and application of the double inclined grates  $c c$ , substantially as and for the purposes set forth.

I also claim, in combination with such inclined grates, the parts B, to contain the muffle C, retort, &c., the whole arranged substantially as and for the purposes set forth.

No. 24,824.—CHARLES RUNDLETT, of Alden, and JOHN W. DRUMMOND, of Winslow, Me.—*Improved Hay Press*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the arrangement of the driving drum or windlass K and the driving gear I, with reference to the press box B and the platen screws D E and their pinions disposed on the sides of the press box.

We also claim the combination and arrangement of the connecting rods F F and rings G G, with each platen elevating screw E, and the bars of the cover of the press box, the whole being arranged to operate as specified.

We also claim the mode of applying the draft rope guide M to the press frame and the driving pulley, that is, by means of a fulcrum  $r$  and the screw or projection made to enter the helical groove of the driving pulley.

No. 24,825.—HENRY SAUERBIER, of Newark, N. J.—*Improvement in Edge Planes*.—Patent dated July 19, 1859.—This invention consists in arranging and adapting means for edge trimming and finishing in the manufacture of shoes, and combining the same with facilities for shaping and trimming edges in harness making, such as the edges of traces, &c.

*Claim*.—The bevel wheel  $e$ , pinion  $b$ , worm  $a$ , wheel  $o$ , socket shaft  $p$ , pinion D, feed wheel C, cutter head B, gauges  $i$ , roller J, lever piece  $t$ , and corliss head Fig. 3, constructed, combined, and arranged substantially as hereinabove set forth, and for the purposes specified.

No. 24,826.—MORRILL A. SHEPARD, of Orio, Ill.—*Improved Hydraulic Motor*.—Patent dated July 19, 1859.—This invention consists in a method of giving motion to a water wheel, without the necessity for the formation of a dam as ordinarily employed for such purpose.

*Claim*.—The combination of the vacuum tube  $e$  and tube  $c$ , for giving motion to the water wheel by the action of an undammed stream, substantially as described.

No. 24,827.—T. BRIGGS SMITH, of Marietta, Ohio.—*Improved Metallic Bung*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A metallic screw bung, for casks or other wooden vessels for holding liquids, with a knifelike thread, and an elevation at any point between the threads, and a shoulder on the bung, let into the stave, substantially as and for the purposes specified.

No. 24,828.—LEWIS SOLOMON, of New York, N. Y.—*Improvement in Furnaces*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—So constructing a desulphurizing furnace for roasting the ores of precious metals as that the heat shall be applied first beneath the sole of the furnace and afterwards on the surface of the ore, when the same is combined with a chamber arranged in the base of the



chimney for the reception of such volatilized particles of ore, &c., as may be driven off by heat or carried over by the draft, substantially as described.

No. 24,829.—M. B. SPAFFORD, of Warsaw, N. Y.—*Improvement in Snow Ploughs*.—Patent dated July 19, 1859.—This invention consists of a vertical shaft placed in front of the locomotive and driven thereby, having spiral wings, which serve to cut and elevate the snow, a horizontal reciprocating cutter close to the rails acting in connection with the elevator and excavator.

*Claim*.—The vertical rotary shaft S, with its spiral wings W W<sup>1</sup>, for the removal of snow from the railroad track, as described.

No. 24,830.—OBED S. SQUIRE, of North Haven, Conn.—*Improvement in Lasts*.—Patent dated July 19, 1859.—This last for shoes, or boot trees for high boots, is cast in two halves or longitudinal sections A B; between these sections are placed strips of metal or other suitable material, which are made tapering so as to give symmetry or shape to the shoe. When it is necessary to extend the toe part of the shoe, only a stationary strip D, like a wedge, is used, and in the same manner with the heel or instep.

*Claim*.—The arrangement and combination of the longitudinal sections A B, strips C D, and bolt E, as and for the purposes shown and described.

No. 24,831.—GEORGE STORER, of New Britain, Conn.—*Improved Meat Masher*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The hollow or solid cylinders with pointed angular teeth, the base of which teeth has nearly in contact and in combination therewith the device for adjusting the cylinders, all constructed substantially as and for the purpose specified.

No. 24,832.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Stoves*.—Patent dated July 19, 1859.—The damper D and the door E are connected together by means of a rod *a* in such manner that when the damper is closed the door E is pushed back and the opening unclosed, and when the door is closed the flue *d* is unclosed by the damper; *e* represents a small flue, which is never closed.

*Claim*.—The combination of the division C with the damper D and doors E, when the same are arranged substantially in the manner and for the purpose specified.

No. 24,833.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Stoves*.—Patent dated July 19, 1859.—The inventor says: When the ordinary hearth plate is placed in proper position, air frequently passes down into the ash pit; this air passes to the fire and assists combustion, but when the plate J is raised it effectually cuts off the draft, and thus the fire may be kept in the stove a long time.

*Claim*.—The employment of the hinged plate J, in combination with the hearth plate above, the two being used and operated in the manner and for the purpose specified.

No. 24,834.—A. K. TUPPER, of Clarkston, Mich.—*Improved Elbow for Stove Pipes*.—Patent dated July 19, 1859.—This invention consists in having a flange around each piece of pipe at their joint, the one lapping over the other, so that by turning one piece of the pipe the flange moves in the lap of the other and the pipe can be turned at any desired angle.

*Claim*.—Constructing the joint of pipes P and P<sup>1</sup> with flange *f*<sup>1</sup> and the overlapping flange *f*<sup>1</sup>, so as to allow the pipe to be adjusted at any desired angle, substantially as described.

No. 24,835.—ALBERT WARREN, of Jefferson, Ohio.—*Improved Machine for Cutting Heels and Soles for Boots and Shoes*.—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I claim the bent knife Y, resting on the shoulders *x x x x x* of the movable slides, as herein described, and for the purposes herein specified.

I also claim the knife Y resting on shoulders *x x x x x*, as herein described, in combination with the knife Q, adjusted as set forth, and by which any size or shape of leather may be cut, ready to be sewed or pegged upon the boot or shoe.

No. 24,836.—W. A. WOOD and I. W. ROSEBROOK, of Hoosick Falls, N. Y.—*Improvement in Harvesters*.—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—In combination with a main frame, supported upon two driving wheels, and which frame carries the shaft D and main cog wheel E, a second frame, hinged to said shaft D, so that the crank shaft on said second frame shall always be in a radial line to the main cog wheel E, however much said second frame may vibrate on the main frame, as set forth.

No. 24,837.—GEORGE W. WATROUS, of Hartford, Conn.—*Improved Fastening for Bedstead Drapery*.—Patent dated July 19, 1859.—This invention consists in making a shield case



with a hook made secure to either the back of the case or to the case proper, without a back, so that a link sewed to the drapery may be inserted into the case from the underside on to the hook, thereby affording a ready means of attaching or detaching the drapery to or from the bedstead, and, at the same time, make it ornamental in its appearance when arranged on a bedstead.

*Claim.*—As a new manufacture, or a new and improved article of manufacture, a drapery fastening, constructed of a case A, hook C, link D, substantially as and for the purpose described.

No. 24,838.—HENRY R. WORTHINGTON, of Brooklyn, N. Y.—*Improvement in Pumping Engines.*—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination set forth and exhibited of two direct acting pumping engines, propelled by steam or other fluid, so arranged as that each engine shall actuate the inlet and outlet valves, governing the motive power of the other, thereby insuring the constant action of at least one pump piston upon the water, and relieving the action of the pump from shocks and concussions.

Second. I claim the arrangement shown of two distinct systems of levers adapted to the steam and exhaust valves of each engine, the one system to be operated upon for producing motion and for determining the duration of the repose of the piston at the termination of the stroke; the other for bringing the pistons to a state of rest, all substantially as explained and set forth.

No. 24,839.—JACOB BEACHLER, of Anderson, Ind., assignor to J. F. BRICKLEY, of Anderson, aforesaid.—*Improvement in Railroad Switches.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The obstruction or “scotch” E, applied to the turn out and connected with the switch so as to be operated automatically by the movement of the same, substantially as and for the purpose set forth.

No. 24,840.—NORMAN BEDELL, of Albion, N. Y., assignor to STEPHEN P. BEDELL, of Albion, aforesaid.—*Improvement in Elbows for Stove Pipes.*—Patent dated July 19, 1859.—This invention consists in the use and construction of the frame and clasp, by means of which the pipe is joined.

The inventor says: I *claim*, first, the employment of the metallic frame C, constructed and used substantially in the manner and for the purpose set forth.

Second. The combination of the clasp D, with the frame C, as constructed for the purpose of holding the mitre edges of the pipe together, substantially as set forth.

No. 24,841.—HENRY F. COX, of Jersey City, N. J., and ALEXANDER MILLAR, of New York, N. Y., assignors to HENRY F. COX, aforesaid.—*Improved Machine for Polishing Corks.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The cork polishing machine, consisting of a series of rollers roughened by a surface of pumice stone, or equivalent abrading material, and a brush or brushes acting in conjunction to polish the cylindrical portion of machine made corks, as described.

No. 24,842.—LEVI DODGE, of Waterford, N. Y., assignor to Himself and DODGE & BLAKE, of Waterford, aforesaid.—*Improvement in Dies for Shaping Articles in Metal.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The forming of articles of iron or other metal, when such articles are to be shaped by a simultaneous action or pressure of dies on several or all sides, the employment of the movable dies *e* operating substantially upon the principles set forth.

No. 24,843.—MOSES H. GRAGG, of South Boston, Mass., assignor to Himself and THOS N. PAGE, of South Boston, aforesaid.—*Improvement in Corn Huskers.*—Patent dated July 19, 1859.—While the two external rollers A B are alike in size, the middle roller C is much less in diameter or size. They are placed together so that the external curved surfaces of the middle shall touch, or nearly touch, those of the others. The shaft of one of the rollers carries a fly wheel E and a crank F.

*Claim.*—The arrangement and combination of the small intermediate conical roller C, larger conical rollers A B, guard G, and hopper D, as and for the purpose shown and described.

No. 24,844.—JOSEPH C. HENDERSON, of Albany, N. Y., assignor to RATHBONE & Co., of Albany, aforesaid.—*Improvement in Stoves.*—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the air space *m*, between the oven and the fire, when so constructed and arranged that a descending draft the whole width of the stove passes through



said space, and thence to the fire, for promoting combustion, and at the same time rendering the temperature of the oven more uniform, as set forth.

Second. I claim the damper *n*, at the front end of the oven, in connection with the descending flue between the front plate and fire box, whereby the oven can be entirely closed when the stove is in use for roasting, as specified.

No. 24,845.—LORENZO LAKE, of Middleburg, Pa., assignor to Himself and WILLIAM PATTON, of Middleburg, aforesaid.—*Improved Churn*.—Patent dated July 19, 1859.—This invention consists in arranging the several parts together. *L L* represent the dashers which consist of two or more pieces of boards, of a proper length secured together; these dashers have *V* shaped slots cut in their ends, and are so placed upon the staff that the sharpened ends of the boards will cover the spaces left between the boards in the dasher immediately above or below, so that when operated in the churn the cream will be more thoroughly cut, and the globules more speedily broken.

*Claim*.—The dasher, made in the manner as described in my specification and shown in drawings at *L*, when the same shall be operated by the devices as described for the purpose set forth.

No. 24,846.—ROBERT McWILLIAMS, of Philadelphia, Pa., assignor to SAMUEL H. HOFFMAN, of Philadelphia, aforesaid.—*Improvement in Journal Boxes of Railroad Cars*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* first, the upper half *A* of the box, with its socket, formed by the flanges *h*, in combination with the lower half *B* of the box, when the two halves are arranged substantially as set forth, so that on adjusting the lower half to its place it may assume the position shown in Fig. 1, and so that when adjusted the end *w* of the oil chamber shall be close to the axle, as and for the purpose specified.

Second. The self adjusting leather packing *E*, and the metal plate *F*, when both are dependent upon the lower half of the box for their proper position within the other half, and when they are otherwise arranged in respect to both upper and lower half of the box, as and for the purpose set forth.

No. 24,847.—LOUIS PLANER, of New York, N. Y., assignor to Himself and JOSEPH AUGER, of New York, aforesaid.—*Improvement in Sewing Machines*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the peculiarly constructed notch *a b c*, which is confined to the upper half of the shuttle and leaves the lower half intact, with a driver having a single horn or finger, which entering the said notch constitutes a guard to prevent the flying up of the heel of the shuttle, substantially as described.

No. 24,848.—GEORGE W. RICHARDSON, of Grayville, Ill., assignor to Himself and GEORGE M. WEED, of Grayville, aforesaid.—*Improvement in Harvesting Machines*.—Patent dated July 19, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the application of the rack *d*, upon the reciprocating bar *D D*, and pinion *i*, upon the vertical shaft *H*, connected and arranged for operating the two sickles at the same time by the cam wheel *c*, in manner described.

No. 24,849.—LYMAN L. THOMAS, of Dighton, Mass., assignor to the DIGHTON FURNACE COMPANY.—*Improved Damper for Cooking Stoves*.—Patent dated July 19, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The damper *D*, substantially as set forth, or in other words, I claim a damper placed in the outlet of the return flue of a cooking stove, near the termination of said flue, and of such a form that when secured or hinged at its lower end to the side of the flue opposite the oven, and when partially or fully closed it shall stand in a position more or less diagonal across the flue, and of such a length that it can never be moved more than twenty-five degrees from a perpendicular.

No. 24,850.—ASA BROOKS, of Tolland, Conn.—*Improved Mode of Setting Logs in Saw Mills*. Patent dated July 26, 1859.—This invention consists of a self acting apparatus to shift the tail block of a saw mill frame to saw any given thickness required.

*Claim*.—The application and combination of the gear *A* and screw shaft *L*, the travelling ratchet *E*, and chock *c*, the stops *F* and *K*, the spring pawl *B D*, for the purpose described substantially as set forth.

No. 24,851.—HENRY F. BOND, of Hudson, Wis.—*Improved Bread Slicer*.—Patent dated July 26, 1859.—This invention consists in the employment of a movable tray on which the loaf is secured and which is fed forward the required distance at each stroke of the knife.

*Claim*.—The movable tray *G*, operated automatically by the motion of the knife *C*, in the manner substantially as set forth.

Second. I claim the bar *T*, arranged substantially as described for the purpose specified.



No. 25,852.—S. L. BOND, of Greenwood, S. C.—*Improved Tuyere*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination of the two pipes C C, having their orifices opposite to each other, with the air chamber B, so that the two currents of air on entering the chamber will oppose each other and thus uniformly diffuse the air, as shown and described.

No. 24,853.—JOHN BIBERTHALER, of New York, N. Y.—*Improved Iron Folding Bedstead*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of the bed bottom in two parts, one of which A being about two thirds of the whole length of the bed, and to which the legs are attached, capable of being turned under said part when required, and attaching the other part D (and which forms the upper or head part of the bed) to the legs nearest the head in such manner that the said part D may be turned over the top of the bottom part A while the legs to which the same is attached are turned under the said part A, in the manner and for the purpose substantially as described.

I further claim fixing the head part of the bed D when unfolded, either to the legs B or to the bottom part A, by means of bolts or pins *n*, in such a manner that by said bolts the inclination of said part D may at the same time be regulated to any desired position, substantially as described and set forth.

No. 24,854.—HENRY BESSLING, of New York, N. Y.—*Improvement in Reefing Sails*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the slides *d d*<sup>1</sup>, applied to work along the jack stay or other suitable portion of the yard, in combination with reef points extended from the back of the sail up through the jack stay or yard and with the reef pendants, substantially as described.

And, without confining myself to the peculiar construction of the pawls I I, I claim securing the reef by means of pawls, applied to the yard to operate in combination with portions of the reef pendants, made of chain, substantially as described.

No. 24,855.—ALEXANDER BECKERS, of New York, N. Y.—*Improvement in Stereoscopic Instruments*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, placing the eye glasses B in a movable cylinder A in such a manner that opaque pictures O<sup>1</sup> and O<sup>2</sup>, placed back to back, may be viewed by the same pair of glasses, the direction of the said eye glasses being varied by the partial rotation of the cylinder to suit the opposite position of the pictures, substantially as described.

Second. The construction of the picture holders with double hook N, substantially as described.

No. 24,856.—EDWIN C. CUSTER, of Evansburg Pa.—*Improved Machine for Stoning Cherries*.—Patent dated July 26, 1859.—In operating this machine when the stripping plate E has been set close to the face of the cylinder A to prevent any downward passage of the stones of the size contained in the cherries, the hopper D is filled with cherries and the cylinder A revolved by means of crank B in the direction of the arrow. The cherries which are by this means successively carried into the suddenly narrowing space between A and E will burst and, following the motion of the cylinder, pass the bottom point of E, whereupon they are free to fall into any convenient receptacle, while the stones follow the motion imparted to them by the spiral grooves *i i* until they are ejected through the aperture G.

*Claim*.—The described machine for stoning cherries, constructed in a manner substantially as specified, with its spirally grooved cylinder A and adjustable stripper E, arranged and operating as set forth.

No. 24,857.—JAMES M. CLARK, of Philadelphia, Pa.—*Improvement in Flour Bolts*.—Patent dated July 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Slide valve *d*, or a series of slide valves *d*, without holes in them, so arranged and operating with the apertures *e* and *e*<sup>1</sup> in the sides of the bolting chest that either of these apertures can be opened or closed when required, for the purpose of turning the material as desired in either of three directions, as set forth.

No. 24,858.—B. WELLS DUNKLEE and W. B. MOORE, of Boston, Mass.—*Improved Steam Heating Apparatus*.—Patent dated July 26, 1859.—The inventor says: By the use of water and steam as extracting and transmitting agents we are enabled to take away the heat from the radiating surface of the furnace much faster than by the use of air alone, without increasing the combustion of the fuel.

*Claim*.—The combination of the tubes E, casing P, inner and outer reservoirs C and D, and vaporizing pipe *b*, and the use of the iron known as the Polenx patent metal alloy coating, substantially as and for the purposes set forth in the specifications and drawings.



No. 24,859.—CHARLES FROST, of Waterbury, Conn.—*Improved Door Fastening*.—Patent dated July 26, 1859.—This invention consists in the employment or use of a drop plate, applied to the door or gate in such a manner as to insure a proper fastening, and at the same time dispense with the use of auxiliary fastenings or bolts hitherto required on one of a pair of folding doors.

*Claim*.—The employment or use of the drop plate D, constructed of the form and applied to the door or doors, substantially as and for the purpose set forth.

No. 24,860.—HENRY FISHER, of Alliance, Ohio.—*Improvement in Harvesters*.—Patent dated July 26, 1859.—The frame of the machine consists of the pieces I I<sup>1</sup>, J J<sup>1</sup>, K K<sup>1</sup>. The upright parts I J K are rigidly attached to the axletree B in any convenient manner. The two outside ones, I and K, extend nearly a foot above the axletree, as seen at L L<sup>1</sup>, and serve as points of attachment for the draw bars M M<sup>1</sup>, to which the neap N is attached.

The inventor says: I *claim* attaching the draft or draw bars M M<sup>1</sup> to the arms L L<sup>1</sup>, in the manner and for the purposes substantially as set forth.

I also claim the peculiar arrangement and combination of frames I K and M, tongue N, spur e, and arm g, in relation to each other and to the main shaft B, to operate in the manner and for the purpose specified.

No. 24,861.—GEORGE H. FERGUSON and SYLVESTER FERGUSON, of Malden Bridge, N. Y.—*Improved Machine for Feeding Paper to Printing Presses*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Feeding sheets of paper singly to a printing press, paper ruling, or other machine requiring the feed of a single sheet at a time, by means of the feed roller G, feed roller I, and adjustable friction stop J, or the equivalents thereof, when arranged essentially as specified.

No. 24,862.—BENJAMIN L. GRIFFITH, of Hazleton, Pa.—*Improvement in Locomotive Boilers*.—Patent dated July 26, 1859.—This invention consists of certain deflectors arranged in a space between the fire box and tube plate of a locomotive boiler, in combination with openings in the side of the fire box for the admission of jets of atmospheric air, so that the latter may be thoroughly mixed with the gaseous products of combustion as they pass from the fire box and impinge against the deflectors, thereby igniting the gases, which would otherwise pass off unconsumed to the chimney.

*Claim*.—The deflectors G G<sup>1</sup> and H arranged within the space C, between the fire place and the tube sheet of a locomotive boiler, substantially as described, in combination with the openings in the fire box for the admission of atmospheric air, for the purpose specified.

No. 24,863.—E. A. GOODES and E. L. MILLER, of Philadelphia, Pa.—*Improvement in Sewing Machines*.—Patent dated July 26, 1859.—This invention relates to the formation of a stitch of a novel character, suitable for working button holes and eyelet holes, over seaming, and for other kinds of work in which it is necessary or desirable for the stitches to pass over an edge. It consists in a certain combination of mechanical devices for making such stitch.

*Claim*.—The combination of the needles n and b, the hook h, and the tongue L; the whole applied, arranged, and operated substantially as described.

No. 24,864.—CHARLES M. GOULD, of Worcester, Mass.—*Improved Submarine Helmet Window*.—Patent dated July 26, 1859.—The nature of this invention consists in confining two separate plates of glass a a in one common bezel B, with a space e between them.

*Claim*.—The application to submarine helmets of the described window, substantially in the manner and for the purpose described.

No. 24,865.—CHARLES GLASSBOROW, of Philadelphia, Pa.—*Improvement in Piano Fortes*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* constructing the string frame of an upright piano with two pin blocks and other appliances for receiving two sets of strings and two distinct sounding boards, the strings being arranged one set on one side and the other set on the opposite side of the frame, the two sounding boards being connected together, and the whole being otherwise constructed substantially in the manner and for the purpose set forth.

No. 24,866.—JAMES GILFILLAN, of Hartford, Conn.—*Improvement in Valves for Water Closets*.—Patent dated July 26, 1859.—In operating this invention, by pressing down the stem H by a connection with the ordinary mechanism used in water closet arrangements, the valve C will open and the water will flow through said openings until it is gradually shut off by the action of the elastic tubular spring K and piston D. The amount of the flow of the water may be regulated by a screw thimble upon the upper end of the spindle H.

*Claim*.—The combination of the elastic tubular spring K, piston D, and chamber E, operating in the manner and for the purpose described.



NO. 24,867.—RICHARD GILL and GEORGE W. GRIER, of Altoona, Pa.—*Improvement in the Furnaces of Locomotive Engines.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—In combination with the fire box of a coal burning locomotive boiler, a water deflector, having a series of small openings through it, and extending up over the fire, as represented, and an air passage behind or over it, which communicates with the external air, for the purpose of introducing atmospheric air in small jets over the fire, substantially in the manner and for the purpose set forth.

NO. 24,868.—ENOS HARTZLER, of Orville, Ohio.—*Improved Pump.*—Patent dated July 26, 1859.—This invention consists in arranging the several parts together in the manner described.

*Claim.*—The arrangement of pipes E F G H, valves *c c c c*, springs *x x x x*, and spring *a*, with the rod I, box C, and stock A; the several parts being combined and operating substantially as and for the purpose specified.

NO. 24,869.—E. H. HANCOCK, of Augusta, Ga.—*Improved Sawing Machine.*—Patent dated July 26, 1859.—This invention is more particularly adapted to that class of machines in which a series of circular saws are mounted on a common shaft, in order to effect the cutting of the entire log at one operation.

The inventor says: I *claim*, first, the combination of the yielding guard levers, or their equivalent, with the rotary saws, substantially as and for the purpose described.

Second. The head blocks D, swinging guide E, circular saws A, and guard levers C, when arranged and operating substantially as and for the purpose set forth.

NO. 24,870.—WILLIAM HALL, of North Adams, Mass.—*Improvement in Sewing Machines.* Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the needle carrier B, pivoted bar M, connecting rod J, slide I, pitman H, and crank G, when arranged and operating in the manner and for the purpose substantially as set forth.

Second. The combination of the slide I and rod J, or its equivalent, with a vibrating needle carrier, in such manner as to produce two vertical motions on the needle during each single horizontal motion of the slide I, substantially in the manner fully set forth in my description.

NO. 24,871.—GEORGE HALL and ALONZO SCUDDER, of Morris, N. Y.—*Improved Washing Machine.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment of a corrugated flexible metallic concave B, stretching across the lower part of the machine, substantially as and for the purpose shown and described.

NO. 24,872.—CHARLES H. HERSEY, of Boston, Mass.—*Improvement in Rotary Pumps.*—Patent dated July 26, 1859.—In this invention the cone moves around with the flange shaft and the sides of the cone roll upon the flange. There is but little friction produced by the passage of the hinge valve through the cone, as the power is not transmitted through the cone, its only office being to revolve within the shaft and form the steam and exhaust chambers.

*Claim.*—The combination of the flanged shaft with the hinged valve and cone, substantially as described, for the purpose specified.

NO. 24,873.—BENJAMIN HINKLY, of Troy, N. Y.—*Improved Bedstead.*—Patent dated July 26, 1859.—This invention consists in uniting the end rails to the posts of bedsteads by means of dovetailed tenons *m* or *m*<sup>1</sup> on the end rails, and corresponding dovetailed mortises *n* or *n*<sup>1</sup> in the posts.

*Claim.*—The arrangement of the dovetailed tenons *m* or *m*<sup>1</sup> on the end rails B, and corresponding dovetailed mortises *n* or *n*<sup>1</sup> in the full posts K, with the side rails J and longitudinal tension rods *a*, as and for the purpose set forth.

NO. 24,874.—FRANCIS A. HOYT, of Boston, Mass.—*Improved Water and Alarm Gauge for Steam Boilers.*—Patent dated July 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement of the balanced valve chamber and valve, the leading pipe thereof, and the whistle, with reference to the dry steam chamber C, the indicator chamber B, and the valve lever and the indicator hand connected together and arranged in the two chambers B and C, as specified.

NO. 24,875.—RICHARD M. HOE, of New York, N. Y.—*Improvement in Printing Machines.* Patent dated July 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Stopping the sheet of paper as it issues after its first side is printed, and imparting



to it a retrograde motion, thus returning it backwards, or in reverse order, to the impression cylinder for the purpose of printing the second side, by the means substantially as described.

No. 24,876.—FREDERIC KETTLER, of Milwaukie, Wis.—*Improvement in Force Pumps*.—Patent dated July 26, 1859.—This engine has one horizontal pump, which is intended to throw out every minute seven hundred gallons of water, when the engine is of common size. Through the operation and construction of the machinery, the water will be forced more regularly and in a greater quantity through the discharge pipes of the engine.

*Claim*.—The combination and arrangement of a force pump as described, for the purpose set forth.

No. 24,877.—FREDERIC KETTLER, of Milwaukie, Wis.—*Improved Force Pump*.—Patent dated July 26, 1859.—A A are two cylinders, which are fastened on the right and left below the back part of the vessel *a*. The pipes S are fastened to the cylinders, and are intended to draw the water out of the well, and to force it, by means of the pipes *t*, into the vessel *a*, as indicated by the arrow heads.

*Claim*.—The combination and arrangement of a force pump as described, for the purpose set forth.

No. 24,878.—GEORGE T. KEARSING and WILLIAM F. KEARSING, of Butte City, Cal.—*Improvement in Mills for Crushing Quartz*.—Patent dated July 26, 1859.—The runner is suspended from arms B, which extend in a horizontal direction from the driving shaft C by means of rods A, and additional rods E serve to impart motion to the runner. The upper ends of the rods A are furnished with screws and nuts, which latter are turned by means of arms A<sup>1</sup>, so that the runner can be raised and lowered without much labor.

*Claim*.—The arrangement and combination of the driving shaft C, arms B, rods A, and runner *h*, substantially as and for the purpose described.

No. 24,879.—ROBERT MARCHER, of New York, N. Y.—*Improvement in Machines for Enamelling Mouldings*.—Patent dated July 26, 1859.—This invention consists in an improvement in the hopper, which contains the necessary composition for enamelling, whereby the hopper is rendered capable of contracting and expanding to compensate for the inequalities of the moulding; also, in the adaptation of feeding devices, which permit the employment of any power as a motor.

The inventor says: I *claim*, first, the elastic or yielding sides *a a* of the hopper B, arranged to operate substantially and for the purpose set forth.

Second. In combination with the hopper B the reciprocating dog S, attached to the bed E, and operated as shown, and also in combination with said hopper the feed rollers L L<sup>1</sup>, P P<sup>1</sup>, either or both feeding devices being employed for the purpose specified.

No. 24,880.—CHARLES MESSENGER, of Warren, Ohio.—*Improved Bedstead*.—Patent dated July 26, 1859.—The nature of this invention relates to the method of connecting the rails to the posts, by which the bedstead may be folded up, from the position in Fig. 1 to that in Fig. 2, and *vice versa*, without detaching the rails from the posts.

*Claim*.—The angular and oblique slot F and pin G, in combination with the plate or key D, when arranged in connection with the jointed rails, substantially as described and for the purpose set forth.

No. 24,881.—JOSEPH W. MORTON, of Plainfield, N. J.—*Improvement in Sewing Machines*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my improved loop check for the Wheeler and Wilson sewing machine, viz: a loop check or thread holder, which is composed of hair, bristles, or other suitable fibres, by compacting them into a firm mass of suitable size and then combining the same with a sewing machine in such a manner that the ends of the said fibres will bear against a portion of the rotating hook of said machine, substantially as set forth.

No. 24,882.—RICHARD MONTGOMERY, of New York, N. Y.—*Improvement in Machines for Manufacturing Waved and Corrugated Metal Plates*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the peculiarly constructed roll I, with the peculiarly constructed roll arranged and operating in relation to each other as shown, whereby the manufacture of the waved corrugated metallic plate, with margins of greater thickness than the middle, as patented to me on the 21st of June, 1859, is facilitated, while a portion of each corrugation is formed at the same time, as described.

No. 24,883.—RICHARD MONTGOMERY, of New York, N. Y.—*Improved Machine for Manufacturing Waved and Corrugated Metal Plates*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the peculiarly formed roll I<sup>1</sup>, with the



peculiarly formed roll J<sup>1</sup>, arranged and operating in relation to each other as shown and set forth, whereby the manufacture of the waved corrugated metallic plate, with margins of greater thickness than the middle, as patented by me on the 21st of June, 1859, is facilitated while only one corrugation is formed at the same time, as described.

No. 24,884.—DANIEL MORRIS, of Bangor, Me.—*Improvement in Shirt Studs*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I do not claim a shirt stud made entirely of metal, or entirely of a material which will not tarnish or crack, but I *claim* the improved manufacture of shirt studs as constructed with a metallic facing A, and an anti-soiling spool or guard B, arranged and combined together, substantially as specified.

No. 24,885.—JOSEPH NEWMAN, of Baltimore, Md.—*Improvement in Platforms between Railroad Cars*.—Patent dated July 26, 1859.—This invention consists in forming the bridge of net or lattice work of iron, or other suitable material, which net or lattice work is so put together that the same may be expanded or contracted in length as the car platforms are further or nearer to each other, and so attached as to allow for the swaying and surging of the cars or other objects, and for the stowage of the bridge when there is a disconnection.

*Claim*.—The expanding mesh or lattice work described, when attached by a single point at each end, substantially in the manner set forth, to be used as a bridge or gangway between railroad cars.

No. 24,886.—Suspended.

No. 24,887.—IRA ROBBINS, of Hughesville, Pa.—*Improvement in Gates for Railroads*.—Patent dated July 26, 1859.—This invention consists in the combination of devices by which a sliding gate G, connected by lever A, with a horizontal shaft s having an arm a, is moved back by the passing of the car wheel over the said arm a and held by a spring detent until the train having passed, it is closed by the action of the spring f on the shaft s.

*Claim*.—The shafts s s<sup>1</sup> having arms a b, as described, in combination with the shaft B, lever A, train of wheels c c c, spring detent g, spring f, and the several rods connecting the aforesaid parts, substantially as set forth for operating the sliding gate G.

No. 24,888.—DAVID B. ROGERS and JOEL A. WOOD, of Pittsburg, Pa.—*Improvement in Springs for Railroad Cars*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of a series of plate springs, constructed and arranged as described, with a box, in which they are inserted, and a follower; the spring box being either separated from or forming part of the truck, substantially in the manner and for the purpose set forth; also making and using the plates of the spring, constructed and arranged as described, of different thicknesses in the same, for the purpose of adapting the spring to the varying degrees of pressure to which it may be subjected from time to time.

No. 24,889.—HARRISON ROBERTS, of Mormon Island, Cal.—*Improvement in Gold Washers*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the sluice B in combination with the hopper A and with the supply channel C in such a manner that the water strikes the dirt from below, and that the hopper is made self supplying, substantially as specified.

No. 24,890.—ISAAC R. SHANK, of Buffalo, Va.—*Improved Biscuit Boards*.—Patent dated July 26, 1859.—This invention consists in arranging within a chest, and at a convenient height from the floor, a board which is provided with trap doors resting upon slats, having beveled eyes, and operated so as to be readily opened by levers and pins.

*Claim*.—The arrangement and combination of trap boards H H, beveled straps G G, levers I I, and vertical pins J, substantially in the manner and for the purpose set forth.

No. 24,891.—HENRY SIMON, of Providence, R. I.—*Improvement in Shirt Studs*.—Patent dated July 26, 1859.—This invention consists in a certain construction of, and mode of applying, a spring to the inner portion or fastening of the stud or button, whereby it may be easily inserted in and removed from the holes in the shirt or vest, and made secure when in place.

*Claim*.—The movable elbow piece d e, spring g, and lever h, applied in combination with each other, and with the fixed shank c, and in relation to a fixed elbow piece a b, substantially as described.

No. 24,892.—ISAAC M. SINGER, of New York, N. Y.—*Improvement in Sewing Machines*.—Patent dated July 26, 1859.—This invention consists in securing two or more needles in a mortise in the needle carrier, or stock, by means of interposed blocks grooved on their



parallel faces to receive the body of the needles, and all clamped by a clamp screw, or equivalent means, whereby any number of needles can be secured to each other, and the spaces between the several needles varied at pleasure to suit the required width of seams, by taking out one set of blocks and substituting blocks of a different thickness.

*Claim.*—Making the needle carrier with a mortise, substantially as described, in combination with the needles, a series of blocks having parallel sides grooved to receive the needles, and with a clamp screw or its equivalent, all substantially as described and for the purpose set forth.

No. 24,893.—JOHN TAGGART, of Roxbury, Mass.—*Improvement in Ninepin Balls.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The new or improved article of manufacture, or ninepin ball, as composed of a hollow metallic body A and covering B of India rubber, or other suitable elastic material, the same being constructed and arranged in manner as set forth.

No. 24,894.—GEORGE I. WASHBURN, of Worcester, Mass.—*Improvement in Boring Tools.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Giving the stock or shaft of a boring, screw driving, or other tool, a continuous rotary motion in one and the same direction, by means of a nut or sleeve which is moved in a rectilinear reciprocating direction on said shaft, when constructed and arranged substantially in the manner described.

No. 24,895.—AMOS WEBB, of Savannah, Ga.—*Improvement in the Construction of Railroads.*—Patent dated July 26, 1859.—A represents a series of railroad ties, or sleepers, of the usual quadrilateral form. These ties or sleepers are placed on the ground B at the usual or any suitable distance apart in an angular position, that is to say: one edge of the bottom of the sleepers is placed lower than the other, so that the lower as well as the upper surfaces will be inclined from a horizontal position, and the sides consequently inclined from vertical planes.

*Claim.*—The arrangement of the ties A in alternate reversed inclined positions, as and for the purpose shown and described.

No. 24,896.—CHARLES A. WILSON, of Cincinnati, Ohio.—*Improvement in Apparatus for Warming by Steam.*—Patent dated July 26, 1859.—This invention has for its object the more efficient and economical heating of apartments by steam, and consists in the construction and arrangement of self acting valves in the discharging ends of the branches, coils, or radiators.

*Claim.*—The valves F F, *f g*, adapted substantially as set forth in the lower or discharge ends of the branches, coils, or radiators of a system of steam heating pipes, and closable automatically by heat, in the manner and for the purpose explained.

No. 24,897.—CHARLES A. WILSON, of Cincinnati, Ohio.—*Improved Steam Radiator.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The described arrangement of a series of tubes or boxes 1 2 3, &c., provided with corresponding apertures A and nozzles B, to permit circulation of steam and receive bolts or rods D, which extend from top to bottom of the tier, the whole being adapted in the manner set forth to admit of varying the extent of radiating surface, while that of the floor room occupied remains unchanged.

No. 24,898.—PARKER WINEMAN, of Loydsville, Ohio.—*Improvement in Churn Dashers.*—Patent dated July 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—A cylindrical dasher for churns, formed with a perforated top, provided with a movable cap or cover and with hinged valves, arranged in such a manner that cream may be received within the dasher at each downward motion thereof, and all operating substantially as described for the purpose set forth.

No. 24,899.—EDWARD F. WOODWARD, of Brooklyn, N. Y.—*Improved Safety Guard for Ferry Wharves.*—Patent dated July 26, 1859.—This invention consists in the adaptation to floating bridges, docks, or wharves, of a pliable self extending apron of net work or canvas, or other material placed below the footway on the outer end, or side of the structure, and next to the vessel when receiving or delivering passengers; and so arranged that, as the boat recedes from the dock, the net will be drawn out to a distance of several feet beyond which it is impossible for a person to leap.

*Claim.*—The employment of the apron *g*, for the purpose set forth.

No. 24,900.—GEORGE H. WOODWORTH, of Brooklyn, N. Y.—*Improvement in Venetian Blinds.*—Patent dated July 26, 1859.—This invention consists in providing eyes or staples on the edges of the slats that secure the tapes to said slats, and pass cords by which the blind is drawn up or lowered down, thus dispensing with the cross tapes heretofore used.



*Claim.*—The eyes 2 2, or staples passing the cords *f f*, and attaching the tapes *d d* to the blind slats *e e*, in the manner and for the purpose substantially as specified.

No. 24,901.—JOHN N. WYCKOFF, of Brooklyn, N. Y., and THOMAS M. FELL, of Orange Mines, Va.—*Improved Ore Washer and Amalgamator.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A concentrator, constructed with a series of boxes, or partitions having curved bottoms communicating one with the other, and driven transversely for the purpose of separating poor from rich deposit, all as described.

No. 24,902.—JOHN N. WYCKOFF, of Brooklyn, N. Y., and THOMAS M. FELL, of Orange Mines, Va.—*Improvement in Gold Amalgamators.*—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The application of heat by steam, or otherwise to vessels, pans, or cylinders, keeping the contents well triturated or mixed at an elevated temperature, the whole operating in the manner described, so as to amalgamate the prepared ore by the use of mercury and alkali, as specified.

No. 24,903.—ELIZA BLAKE, of Albany, N. Y., executrix of ROBERT BLAKE, deceased, assignor to BLAKE & SON, of the same place.—*Improved Wood Saw.*—Patent dated July 26, 1859. The saw blade is strained by means of a screw and nut *a b*; the ends of the frame *c d* are of wood, and made in the usual manner; the middle brace *e* is of wood, but instead of being provided at its ends with a rocking tenon, the tenon is square shouldered, so as not to rock or allow the frame to rock when the whole is properly braced.

*Claim.*—The manufacture of wood saws in the manner set forth, meaning by this to claim only the sole right to manufacture according to the mode of construction set forth, the special kind and character of saws known as wood saws, and clearly defined and represented in the description and drawings.

No. 24,904.—JOHN BURR, of Baltimore, Md., assignor to GEORGE H. FAYMAN, of Washington, D. C.—*Improved Clothes Frame.*—Patent dated July 26, 1859.—This invention is designed to obviate many of the defects existing in articles of this character, by causing the radial arms to bear against a seat which is incapable of rotary motion in itself, while at the same time the expanded system is free to rotate about the axis of the upright shaft without any contact between the shaft and the lower connection of the radial arms.

*Claim.*—The seat S capable of movement on the shaft in one direction only, and provided with the weighted detent, as set forth, and the ring R movable thereon, without being against the shaft, in combination with the shaft A, arms D, braces B, and cords E, arranged and operating as and for the purposes described.

No. 24,905.—JOHN W. FISCHER, of New York, N. Y., assignor to Himself and CHARLES S. FISCHER, of the same place.—*Improvement in Pianofortes.*—Patent dated July 26, 1859.—This invention consists in providing a bar beneath the dampers and above the edge of the rest plank, acted on by the pedal in such a manner that said bar is lifted and raises the outer ends of the dampers, allowing the inner or fulcrum ends to remain in their jaws on the plate, which in this instance is stationary, thus the strain is removed from the fulcrums of the dampers, and the whole pedal attachment works much more easily and is more durable.

*Claim.*—The bar *l* beneath the dampers *i i* and above the piano strings, actuated by the levers *m n*, or their equivalents, in the manner and for the purposes specified.

No. 24,906.—SIMEON GOODFELLOW, of Troy, N. Y., assignor to Himself and JOHN FISH, of said Troy.—*Improvement in Screw Stocks.*—Patent dated July 26, 1859.—This invention consists in arranging in combination with a circular die or dies, a vibrating die or chasing tool, which is held by a vibrating plug in the movable die holder in such a manner as to accommodate itself to the inclination of the thread, when the die begins to cut on the surface, as described.

*Claim.*—The cutting die G in combination with the vibrating circular plug F, and the movable holder D, when the same are arranged and operated essentially as specified.

No. 24,907.—ALFRED GUTHRIE, of Chicago, Ill., assignor to WARDELL GUTHRIE, of said Chicago.—*Improved Churn.*—Patent dated July 26, 1859.—My invention consists in such an arrangement of machinery as will impart to the milk or cream a rotating and centrifugal motion inside of the churn, without the intervention of paddle blades or stirring arms, relying upon the concussion of the particles against the periphery of the revolving churn, either with or without roughened or corrugated surfaces inside.

*Claim.*—The combination and arrangement of the cranks *c c c c*, connected by the plate D or its equivalent, operating in the manner and for the purpose set forth and explained substantially as described.



No. 24,908.—ALBERT H. HOOK, of New York, N. Y., assignor to WILLIAM H. HORSTMANN, of Brooklyn, N. Y.—*Improvement in Glass Polishing Machines*.—Patent dated July 26, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of the apparatus for producing the reciprocating longitudinal motion and continuous lateral motion given to the polishing blocks, consisting of the screws *k*, worm wheel *l*, worm *m*, and its connections with the driving power, arranged and operated in the manner set forth.

No. 24,909.—HEZEKIAH JOHNSTON and WILLIAM I. MATTHEWS, of Collinsville, Ill., assignors to HEZEKIAH JOHNSTON, of said Collinsville.—*Improvement in Fire Escape Ladders*.—Patent dated July 26, 1859.—This invention consists in combining an endless apron, belt, or chain with a set of folding ladders, and also in combining with the said ladders a movable platform.

*Claim*.—The combination of the endless belt *F* with the folding ladders and platform *M*, in the manner described.

No. 24,910.—JAMES H. MURRILL, of Baltimore, Md., assignor to EGERTON, DOUGHERTY, WORDS & Co., of Baltimore aforesaid.—*Improvement in Machines for Cracking Sugar*.—Patent dated July 26, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the employment of a vibrating saw *H*, when constructed and operated in the manner described, in combination with a gauge plate *P* and hopper *O*, arranged substantially in the manner and for the purpose of sawing slabs of sugar and directing them between the crushing rollers.

I claim the employment of rollers *A A* moving in unison with each other, when constructed with cruciform cutters *a a*, as described, for the purpose of perfectly dividing slabs of sugar into regular cubic portions, substantially as set forth.

I claim the construction of a hopper *O*, when provided with parallel grooves, or their equivalent, when used in combination with a circular saw, constructed and operated in the manner and for the purposes as set forth.

No. 24,911.—W. H. NICHOLS, of East Hampton, Conn., assignor to A. H. MARKHAM, W. H. NICHOLS, and DAVID STRONG, of East Hampton, aforesaid.—*Improved Coffin Screw*.—Patent dated July 26, 1859.—The caps *B* are spun of sheet brass, all of the same size, and so that they fit nicely to the plates *A*, which latter are cast, and need no finish or additional labor, with the exception of those serving to retain the caps of the screws, in which case it is necessary to cut screw threads on their edges.

*Claim*.—The employment of plates *A*, or their equivalent, for the purpose of securing or retaining the caps, or covers *B*, of coffin screw tacks, substantially as set forth.

No. 24,912.—J. Y. PARCE, of Fairport, N. Y., assignor to Himself and D. B. DE LAND, of Fairport, aforesaid.—*Improvement in Hoisting Cranes*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The main arm *E* of a crane, arranged with the double diagonal braces *I*, and with the guide rollers *m*, to operate in combination with the arm *F*, jointed to the same by means of the oval pin *d*, substantially as and for the purpose set forth.

No. 24,913.—SAMUEL R. SMITH and PHILANDER P. LANE, of Cincinnati, Ohio, assignors to LANE and BODLEY, of Cincinnati, aforesaid.—*Improved Portable Sawing Machine*.—Patent dated July 26, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the idle friction pulley *Z*, operating substantially in the manner set forth, in combination with the arbor and feed drum of a circular saw.

Second. In the described connection with the transverse rack *h*, the gearing *q q*<sup>1</sup>, ratchet wheels *r*, pawls *t*, lever *s*, and stop *v*, which operate by their rigidity in one direction to transmit a forward movement of the rack *h* to the knee *f*, yet permitting the retraction of said rack *h*, as set forth.

Third. The described arrangement and adaptation of the weighted eccentric friction pawl for the exact retention of the knee to the place of setting, as set forth.

Fourth. The described arrangement and adaptation of the perforated rack *h*, pinions *q q*<sup>1</sup>, knee *f*, and screw *Y*, for the exclusion of dust, as explained.

No. 24,914.—PAUL FRANCIS AERTS, of London, England.—*Improvement in Axle Boxes for Lubricating Railway Rolling Stock, &c.*—Patent dated August 2, 1859; patented in England March 19, 1858.—This invention consists in a novel mode of lubricating the journals of railway rolling stock and the moving parts of machinery working in fixed bearings.

*Claim*.—The wheel *a*, fixed on the end of the journal in railway rolling stock, raising water by centrifugal force, and the divergent *c*, for conducting the water over the greased surface of the journal or moving parts of machinery working in fixed bearings, when constructed and arranged substantially as set forth.



No. 24,915.—FREEBORN ADAMS, of Somerville, Mass.—*Improvement in Casting Copper Cylinders*.—Patent dated August 2, 1859.—This invention consists in the production of a new article of manufacture, viz: a cast copper tube or cylinder without blow holes made by rotating the mould in which it is cast, and using a core.

*Claim*.—As a new article of manufacture, a tube or cylinder cast out of copper, and free from blow holes and other similar defects, when produced as stated.

No. 24,916.—JONAS BRADLEY AIKEN, of Manchester, N. H.—*Improvement in Knitting Machines*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the lever Q, grooved eccentrically to its fulcrum, applied in combination with the sliding loop regulator to adjust the same for different lengths of loop, substantially as specified.

Second. The stop motion, consisting of the lever Y, and its self-adjusting dog 11, the ring X, with its pins 13 13, or their equivalents, and the sliding bolt W, or its equivalents, carrying the slipper W<sup>1</sup>, the whole combined, applied, and operating substantially as described.

No. 24,917.—WILLIAM BAKER, of East Templeton, Mass.—*Improved Tool for Riving Hoops*.—Patent dated August 2, 1859.—The hoop riving tool shown in the engravings, and which is designed to cut hoops for barrels or kegs of various kinds or sizes, is formed in part of a stock A, the back of which may be arranged to lie uppermost when the tool is in use. The inner side of the stock is provided with a longitudinal and central, or intermediate projecting strip B, designed to form guiding surfaces  $a a^1$  on either side of it to direct and steady the tool in its run along or over the edge of a plank.

*Claim*.—A hoop riving tool, formed of a stock A, provided with suitable guiding surfaces  $a a^1$ , and differently arranged or set stock faces  $b b^1$ , and knives D D<sup>1</sup>, for operation, essentially as set forth.

No. 24,918.—THOMAS C. BALL, of Keene, N. H.—*Improvement in the Mode of Hanging Brake Rubbers*.—Patent dated August 2, 1859.—This invention consists in so suspending each brake head upon a spring that the tread of the brake head shall be adjustable to the periphery of the wheel, as its relative position to the car track shall vary with the weight of the car, the flexibility of the spring allowing all the movements of the brake head without a hinge joint; in so attaching the brake head to the spring suspender by bolts as to be readily exchanged when worn, and in so suspending the brake beam that its action shall bring the brake heads to the wheel without being attached to them by bolts.

The inventor says: I *claim* the combination of the brake head and spring, as above described, also the arrangement of the brake beam F, Fig. 1, so as to allow its independent action upon brake head and spring A and D, as described.

No. 24,919.—THOMAS LAWRENCE BALL, of New York, N. Y.—*Improved Show Case*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of a case or box divided into compartments, each box having a sliding cover, arranged as set forth, in combination with the spring covers G and compartments F, constituting a new article of manufacture.

No. 24,920.—WILLIAM T. BARNES, of Buffalo, N. Y.—*Improvement in Apparatus for Condensing Coal Oils*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of tube K, the lower extremity of which is provided with tubular arms L L, the same being made to revolve, and being used in connection with a tank partially filled with water, and a conducting pipe F, substantially in the manner and for the purpose set forth.

Second. The arrangement and employment of the tanks A B C, constructed and used substantially in the manner specified and for the purpose set forth.

No. 24,921.—WILLIAM T. BARNES, of Buffalo, N. Y.—*Improvement in Apparatus for Generating Coal Oils*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the levers L K and J, and rod I, whether operated by a cam or otherwise, for the purpose of forming an automatic dust clearer to coal oil retorts, as is substantially set forth.

Second. The employment of the spiral or screw flanges on the head of the retort for pushing the material away from the hole in the journal, as fully described.

No. 24,922.—DANIEL BASSETT, of White Water, Wisconsin.—*Improvement in Mills for Crushing Sugar Cane*.—Patent dated August 2, 1859.—A A are tongued rollers, mounted on a horizontal shaft Z. These tongued rollers run into corresponding circular channels in the



peripheries of the rollers B B, which are similarly mounted below on the shaft Z<sup>2</sup>, thus constituting pairs, of which one or more may be placed on shafts.

The bar V is bolted to the framework across the front and immediately opposite the points of contact of the pairs of rollers, and serves as a support for the stripper and packing, or wiper F.

The inventor says: I *claim*, first, the arrangement and combination of the tongue and groove rollers A B, wiper F, and "stripper," as and for the purpose shown and described.

Second. The "stripper," when composed of spring caps and a movable cam G, and when arranged and combined with rollers A B, substantially as and for the purpose shown and described.

No. 24,923.—ALBERT BETTELEY, of Boston, Mass.—*Improvement in Elevators for Warehouses, Factories, Mines, &c.*—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of an automatic safety shipper and brake apparatus with an elevator, substantially as described, arranged to operate only to prevent an elevation of the car beyond a fixed limit.

Second. The combination of the weight *q*, flexible rope or chain *e*, with the shipping and brake controlling mechanism, substantially in the manner and for the purpose set forth.

No. 24,924.—CYRUS C. BISBEE, of Rochester, N. Y.—*Improved Spring Bed Bottom.*—Patent dated August 2, 1859.—This invention consists in the application of the head and foot rollers J, from which are suspended the slats D, they being riveted to the straps Y which pass over the rollers and are hooked to the pins on the under side, and the springs P and P<sup>1</sup>, the cords R R<sup>1</sup>, and the cams B B<sup>1</sup>.

The inventor says: I *claim* the arrangement described of the slats D, belts Y, rollers J, cords R and R<sup>1</sup>, and springs P P<sup>1</sup>, in the construction of spring bed bottoms.

I also claim the unequal cams B and B<sup>1</sup>, for the more perfect automatic adjustment of spring beds.

No. 24,925.—ABRAHAM BOWER, of Pekin, Ill.—*Improvement in Machines for Raising Water, &c.*—Patent dated August 2, 1859.—This invention consists in a combination of levers, bucket, and slide trough, whereby an elevating machine is obtained.

*Claim.*—The combination of the lazy tongs G, the slide trough J, and valvular bucket H, arranged for joint operation, substantially as and for the purpose set forth.

No. 24,926.—SAMUEL BOYD, of Brooklyn, N. Y.—*Improvement in Manufacturing Hoes.*—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment of an anvil, having an inclined face *a*, groove or recess *c*, and socket D, in combination with a mandrel F, as shown and described, whereby the bevel or set of the blade and eye, and the form, thickness and bevel of the interior of the socket or eye will be uniformly and simultaneously produced as set forth.

No. 24,927.—JAMES R. BROWN, of Boston, Mass.—*Improved Pipe Tongs.*—Patent dated August 2, 1859.—This improvement has reference to the peculiar arrangement and application of devices for adjusting and fixing in position the fulcrum screw pin of the two jaw levers.

*Claim.*—The arrangement and application of the serrated surface or rack *h*, the spring F, and toothed stopper D, with respect to the two jaw levers A B, the clamp nut E, and the screw pin C, applied to the toothed jaw lever A, substantially as described.

No. 24,928.—MOSES BUCLIN, of Grafton, N. H.—*Improved Draining Machine.*—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the platform E, with the cutter blade F, and ploughshare G, for the purpose of cutting underground drains, substantially in the manner specified.

Second. Arranging the blade F with a sloping cutting edge *d*, so that the same may readily pass over obstructions which may come in its way, substantially as described.

Third. The arrangement and combination of the platform E, the cutter blade F, and the ploughshare G, with the adjustable bars D and wheels B, to operate substantially in the manner and for the purpose described.

No. 24,929.—JOHN F. GALLEY, of New York, N. Y.—*Improved Ironing Table.*—Patent dated August 2, 1859.—This invention consists in applying the power of a treadle in a direct way; in the use of a hollow collar around the upright shaft worked by the treadle to diminish friction in the motion of the arms; in giving greater range and variety of motion to the goose, or smoothing iron, and in a new mode of securing and holding the pressboard.

The inventor says: I *claim*, first, the treadle C, the fulcrum arm D, the upright shaft E, the side jaws 6 and 7, the spiral spring 8, and the thumb screw 9, when arranged and combined substantially as described and for the purposes set forth.



Second. The hollow screw collar F on the shaft E, constructed and applied substantially as described and for the purposes set forth.

No. 24,930.—THOMAS B. GARSIDE, of Danville, Iowa.—*Improved Portable Field Fence*.—Patent dated August 2, 1859.—This invention consists in the combination of the long main posts of the fence, which are held out of the ground by short auxiliary posts driven into the ground, and by a pivoted triangular brace, or its equivalent, when the main posts, auxiliary posts, and brace are arranged in relation to one another.

*Claim*.—The combination of the long main posts *d*, short auxiliary posts *e*, and triangular pivoted brace *a b*, or its equivalent, when arranged in relation to one another, and to operate substantially as and for the purpose set forth.

No. 24,931.—FREDERICK AUGUSTUS GENTH, of Philadelphia, Pa.—*Improvement in the Manufacture of Phosphoric Acid and Phosphates*.—Patent dated August 2, 1859.—The claim explains the nature of this invention.

*Claim*.—The process of manufacturing phosphoric acid or phosphates by treating the phosphates of iron, alumina, or lead, substantially as described, by means of sulphuric acid or its equivalent.

No. 24,932.—JAMES GILFILLAN, of Hartford, Conn.—*Improvement in Gas Burners*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The improvement in gas burners described, consisting of a central exit tube supplied with apertures, surrounded by the gas chamber, having its discharge regulated by the mercury cap, the upper end of said pipe being furnished with a nozzle, or jet burner, the whole constructed and operating substantially as set forth.

No. 24,933.—CHARLES F. GREELEY, of East Kingston, N. H.—*Improved Cloth Holder for Washing Crockery, &c.*—Patent dated August 2, 1859.—This invention consists in having the article so constructed as to receive and hold the cloth or substance necessary to be immersed in hot water, for the purpose of washing dishes, crockery, or other articles, while the handle portion of it allows its effectual use by hand, without having the hands immersed at all in hot water.

*Claim*.—The described washing vise, constructed as and for the purpose set forth.

No. 24,934.—W. S. HALL, of Quincy, Mass.—*Improved Churn*.—Patent dated August 2, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of the frame of stationary transverse bars with the rotary hollow shaft, and hollow arms thereto attached for the introduction of air and the solid arms attached to the shaft, as substantially described.

No. 24,935.—PIERRE JEAN HARDY, of Boston, Mass.—*Improved Recumbent Chair*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the peculiar construction and arrangement of mechanism described for actuating the back and leg rest, whereby they can not only be brought from a vertical into horizontal, or nearly horizontal position, so as to constitute a couch, but be maintained in such or any intermediate positions that may be desirable, such mechanism consisting of the levers *c c* and *d d*, connected with each other, the back and leg rest, or leg rest frame *f*, respectively, in manner as set forth.

And, in combination with the said construction and arrangement of mechanism for actuating the said back and leg rest, I claim the arrangement of the locking contrivance (constructed and applied as described,) whereby the back and leg rest, when placed in any desirable position, may be firmly secured in such position or be released therefrom as circumstances may require.

No. 24,936.—ALBERT V. HILL, of Hinsdale, N. Y.—*Improvement in Breech Loading Fire-Arms*.—Patent dated August 2, 1859.—This invention consists of the combination of a chamber wherein the charge is inserted, the bed piece, (wherein the chamber rests,) and the breech pin; the bed piece and breech pin being each composed of strips of iron, so as to admit the one to slide into the other, which, when brought together, grasp the chamber and hold it firmly until it is discharged.

*Claim*.—The combination of the bed piece, breech pin, and connecting rod, which in connection form the sliding process, and operating as described.

No. 24,937.—HIRAM W. HAYDEN, of Waterbury, Conn.—*Improvement in Sewing Machines*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the attachment of the looping hook I, to an arm I, or its equivalent, which has a revolving motion, and also a vibrating motion, in a direction trans-



verse to its revolution, and operates substantially as described, in combination with a bobbin K, arranged relatively to it, substantially in the manner set forth.

Second. The stationary cam J, applied in combination with the revolving arm I, which carries the looping hook, and with a spring R, and sleeve Q, or their equivalent, for holding the said arm in contact with the said cam, to produce the vibrating motion of the said hook, substantially as described.

Third. The combination of the stationary cam J and the fixed portion L of the bobbin holder, substantially as described.

Fourth. The looping hook, made and fitted to turn in the revolving and vibrating arm I, as described, and provided with a pin or projection *h*, operating in combination with a fixed stop *m*, substantially as and for the purpose set forth.

Fifth. The extension of the mandril E forward of the rotating hook, as described, for the purpose of carrying the spring R, and a sleeve Q, or its equivalent, by which the revolving and vibrating arm I<sup>1</sup>, which carries the hook, is kept in contact with the cam from which it derives its vibrating motion.

Sixth. The adjustable pin *r*, applied and operating substantially as described, in combination with the revolving and vibrating looping hook and the bobbin for the purpose set forth.

Seventh. Feeding the cloth or material to be sewed by means of one or more smoothed faced angular projections, 14 14, on the feed bar, or its equivalent, and one or more ratchet like wheels *y y*, attached to the presser, said wheels being arranged with the lowest portions of their peripheries, above the bottom of the presser foot, and the said projections pressing the material into one notch at a time of each wheel, and operating in combination therewith, substantially as described.

No. 24,938.—EDWARD L. KEELER, of Pittsburg, Pa.—*Improvement in Car Couplings*.—Patent dated August 2, 1859.—This improvement consists in the use of beveled head coupling bars, as shown in the engraving, in combination with a spring to each coupling bar, whereby they are caused to receive their position for repeated action and kept firmly in place when coupled.

*Claim*.—The combination of a beveled coupling head *c*, shaped substantially as described, with a spring *e*, as a coupling for railroad cars, constructed and arranged in the manner described.

No. 24,939.—DAVID KELSEY, of Harper's Ferry, Va.—*Improvement in Sewing Machines*.—Patent dated August 2, 1859.—This invention consists in a certain arrangement of, and mode of combining the pressure pad and feeding dog, whereby, when the dog is pressed upon the material, the pad is caused to be raised therefrom, and is prevented from interfering with the action of the dog in the feeding operation.

*Claim*.—The horned eccentric, or cam L, applied substantially as described, in combination with the vibrating pressure pad E, and the feeding dog, sliding on the stem of said pad, and operated for the purpose specified, by means of a stud *l*, or its equivalent, attached to the needle bar.

No. 24,940.—BENJAMIN F. KILLAM, of Braintree, Vt.—*Improvement in Tooth Keys*.—Patent dated August 2, 1859.—This invention consists in so applying the mechanical force to the tooth as to lift it out in a direction that is perpendicular to the jaw, instead of breaking or prying it over in the manner of the instruments heretofore in use.

*Claim*.—The hollow fulcrum, as described.

No. 24,941.—OBED H. KING, of Salem, Iowa.—*Improvement in Harvesters*.—Patent dated August 2, 1859.—This invention consists in the peculiar arrangement and combination of devices shown in the engravings, with a circular platform for operating the rake and holding it to the platform while it is carrying off the grain, and retaining it in an elevated position while it is returning to rake a new quantity of grain.

*Claim*.—The arrangement and combination of the circular platform A, rake B, rods C, guide way E E, endless chain or belt G, wheels F F, and pin H, all constructed, arranged, and operating together, substantially as and for the purposes set forth.

No. 24,942.—S. C. LEWIS and F. P. PFLEGAR, of Whitneyville, Conn.—*Improvement in Revolving Fire-Arms*.—Patent dated August 2, 1859.—The claim and engraving explain the nature of this invention.

The inventors say: We *claim*, first, the centre pin E F, made in two pieces, one of which is fitted to the rotating cylinder and to a rotating recoil shield with fins *b b*, and has applied to it within the cylinder a spring *a*, and the other of which is fitted to slide and turn in the front part of the frame, and is capable of being locked to the frame, substantially as described.

Second. The dog *n*, constructed and applied, as described, to constitute its own spring, and operating traasversely to the hammer, in combination with a peripheral ratchet *ll*, substantially as and for the purpose set forth.



Third. The stop  $p$ , constructed with a tooth  $p^1$  in its front and a projection  $u$  on its back, and applied and operating in combination with a spring  $v$ , a ring of notches  $m m$  on the rear of the recoil shield or cylinder, and a tooth  $u^1$  on the tumbler, substantially as described.

Fourth. The recoil shield, constructed with a peripheral ratchet  $l l$ , a ring of notches  $m m$ , a central bore  $j$ , and slots  $k k$ , substantially as and for the purpose specified.

No. 24,943.—HENRY A. LINCOLN and HEBRON T. DOUGLASS, of New Haven, Conn.—*Improvement in Brakes for Railroad Cars*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combined arrangement described of brake shoes, truck wheels, equalizing beams and springs, the former being outside of the wheels, and so supported as to rise and fall practically with the wheels, while the equalizing beams support the springs, and the springs are arranged between the wheels, and transfer the weight to be carried to the equalizing beams, the several parts acting in combination, substantially in the manner and for the purposes specified.

No. 24,944.—STEPHEN A. LINDSAY, of Unionville, Md.—*Improvement in Harvesters*.—Patent dated August 2, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the hinged guide piece  $S$ , with the hinged platform  $T$ , for the purpose of retaining the rake and the reels in their proper relative positions toward the platform, when the latter is raised or lowered, substantially in the manner described.

I also claim the combination of the bar  $3$ , shaft  $5$ , and the hinged bar  $7$ , with the movable frame of the machine and the finger bar  $U$ , for the purpose of raising and lowering the latter, without interfering with the free movements of the platform on its hinges, substantially in the manner described.

No. 24,945.—FREDERICK MEYER, of Naperville, Ill.—*Improvement in Machines for Cutting and Binding Grain*.—Patent dated August 2, 1859.—This invention consists of an ordinary reaping machine; attached to this machine is an apparatus for bundling the grain as it is cut, operated by being connected with the motive power of the reaping machine.

The inventor says: I *claim*, first, the combination of the movable gates, the sliding divider, and the movable platform, as described.

Second. The construction of the tongs, and the mode of operating them, as described.

Third. The tucker  $H$ , for the purpose of fastening the free end of the band, substantially as described.

No. 24,946.—WARREN P. MILLER, of Marysville, Cal.—*Improved Machine for Excavating and Grading*.—Patent dated August 2, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the use of the cylinders or wheels  $k k$ , for the purpose of depressing the chains  $h h$  so as to give to the excavators  $i i$  a proper inclination, and thereby facilitate the feeding and working of the same.

I claim the construction and arranging of the excavators attached to endless chains, worked in the manner described, to wit: to fill and discharge while traversing from one tumbler to the other on the lower plane, (from  $A$  to  $B$ ), for the use and purpose of excavating and grading rail and turnpike roads, substantially as set forth.

No. 24,947.—JOHN A. MONTGOMERY, of Williamsport, Pa.—*Improvement in Journal Boxes*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a journal box formed of a sphere or segment of a sphere fitting into a cup or concave, and prevented from revolving with the shaft or journal by a pin and slot, as described, or their equivalent.

No. 24,948.—JARVIS T. MUDGE, of Dayton, Ohio.—*Improved Washing Machine*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Arming the side of the tub and the plunger  $F$  with round headed knobs or pins, to act on the clothes, substantially as described, and allow the water to escape freely as it is pressed out of the clothes being washed.

No. 24,949.—EDMUND T. D. MYERS and CHARLES F. THOMAS, of Washington, D. C.—*Improved Apparatus for Tapping Water or Gas Mains*.—Patent dated August 2, 1859.—By

means of the tool  $e$  the workman pierces the pipe to the required depth for tapping, leaving a thin film of iron on the interior surface of the pipe to prevent the escape of water or gas while tapping; then by means of tool  $f$  the workman cuts a thread to the bottom of the hole drilled; the stop cock  $a$  is then screwed into the hole, the plug  $d$  being open to admit the drill  $g$  down the passageway of the stop cock.

*Claim*.—The method of drilling, tapping, and inserting stop or other cocks into cast-iron



water or gas mains or supply pipes, in the manner as set forth, or other manner substantially the same.

No. 24,950.—JOSEPH R. PALMENBERY, of New York, N. Y.—*Improved Branch Holder for Bonnet Stands*.—Patent dated August 2, 1859.—This branch holder is secured upon the rod B through the set screw *s* in any desired position. The branches C C are inserted into holes *v* in the top part of the holder drilled through the metal and into the wooden part.

*Claim*.—As a new article of manufacture, a branch holder, made and constructed in the manner substantially as described.

No. 24,951.—HENRY PEMBERTON, of East Tarentum, Pa.—*Improvement in the Manufacture of Common Salt*.—Patent dated August 2, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim* the combination of processes described for the purification of common salt, to wit: Washing common salt, procured by the evaporation of salt water containing chloride of calcium and other impurities, with a saturated solution of chloride of sodium or brine, rendered pure by the use of chemical reagents, substantially in the manner described, and the repeated use, for that purpose, of the same brine for an indefinite number of operations, by treating it, after each process of washing the salt, with suitable chemical agents, whereby it is restored to its original purity.

No. 24,952.—HENRY PEMBERTON, of East Tarentum, Pa.—*Improvement in Refining Coal Oils*.—Patent dated August 2, 1859.—The claim explains the nature of this invention.

*Claim*.—Recovering the sulphuric acid used from the residuum resulting from the process of the purification of coal oils with sulphuric acid, by treating the residuum with water heated or caused to boil by steam or otherwise, substantially in the manner described.

No. 24,953.—JOHN G. PERRY, of Kingston, R. I.—*Improved Meat Cutter*.—Patent dated August 2, 1859.—The improvement in this machine is mainly upon the knives and the parts immediately connected with them. These knives are made with holes in their centres, through which is put the rod E to hold them and allow them to turn round on or with it, as the meat is pressed against them by the studs, or by connecting the rod E with the cylinder shaft by gears, or otherwise, making a rolling and drawing cut that will divide the meat easily and thoroughly.

*Claim*.—Combining the revolving knives with a cylinder or block having studs on its surface, substantially as set forth.

No. 24,954.—PHINEAS POMEROY and I. G. ALLEN, of Middletown, Ohio.—*Improvement in Machinery for making Roofing Cement*.—Patent dated August 2, 1859.—This invention consists in the employment of hollow metallic cylinders, arranged in such manner that steam may be applied to their interior surfaces for heating purposes; also, in the construction and arrangement of a double walled tank, having an interior chamber capable of receiving steam for heating the contained composition for roofing, and preventing the same from adhering to the inner surface of the tank and facilitating its flow to the paper or other material upon which it is to be laid.

*Claim*.—The employment of the double walled tank *c* in combination with the hollow metallic cylinders B and valves *p*, all being constructed and arranged to operate substantially as and for the purpose set forth.

No. 24,955.—JESSE PRUETTE, of Aurora, Ill.—*Improvement in Carriage Hubs*.—Patent dated August 2, 1859.—This invention consists in casting upon the but end of the box an annular flange with a concave recess formed on its inner surface, and driving it into the hub and screwing upon the opposite end of the box a metallic nut, having a flange upon its inner surface which projects into a corresponding cavity in the hub.

*Claim*.—The enlargement C upon box B, having an annular flange *a*, for the purposes specified, in combination with the nut F and its flange *b*, when the same are both arranged substantially as and for the purposes set forth.

No. 24,956.—LUMAN P. ROOD, of Deposit, N. Y.—*Improved Machine for Turning Hollow Ware*.—Patent dated August 2, 1859.—This invention consists in the use of a rotating mandrel, in connection with a slide, provided with a tool rest and cutter; the above parts being attached to a suitable bed, and the whole arranged so that the bodies of wooden vessels may be cut out from the solid wood.

*Claim*.—The combination of the rotating mandrel B with the adjustable slide F, provided with the tool rest G and cutter H, arranged as and for the purpose set forth.

No. 24,957.—ANDREW SHOGREN, of Chicago, Ill.—*Improvement in Sickle Guards for Harvesters*.—Patent dated August 2, 1859.—This invention consists in improvements in the



guard or fingers of reaping machines. The claim and engraving will give some idea of their nature.

*Claim.*—The cutter guard C, constructed in the manner described, in combination with the guard socket B and wedge shaped bolt D, substantially as described.

No. 24,958.—DANIEL C. SMITH, of Tecumseh, Mich.—*Improvement in Corn Huskers.*—Patent dated August 2, 1859.—This invention consists in so constructing a husking machine that it frees the corn from the silk at the same time that it frees it from the husk, and removes the husks from the machine after it has husked an ear of corn, while opening it to husk another.

The inventor says: I *claim*, first, the combination of forceps A, lever B, stop C, spring E, and post G, in the manner and for the purposes specified.

Second. I claim the combination, with the forceps A, of the slotted post M, nut N, and fork O, in the manner and for the purposes specified.

No. 24,959.—JOHN S. SNIDER, of Lancaster, Ohio.—*Improvement in Seeding Ploughs.*—Patent dated August 2, 1859.—This invention consists of an ordinary plough having a seed hopper, with discharge openings and slide at the bottom of it; also, a rod from the landside of the plough to the mould board, on which is hung a swinging frame containing a longitudinal crank shaft, the crank of which is inserted into a slot of the arm of the discharge slide, and having arms *a a*<sup>1</sup>.

*Claim.*—The arrangement of the swinging frame F, wheel W, crank shaft A, with the hopper H and mould board M, together with the devices connecting said parts, so as to operate as set forth.

No. 24,960.—GEORGE A. STANLEY, of Cleveland, Ohio.—*Improvement in Machinery for Moulding Candles.*—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the moving of the moulds any distance lengthwise of the candles to detach the moulds from the candles formed in them, and to withdraw the moulds from the candles and place the jaws of the clutches around them.

Second. Moving the moulds by the weight of the moulds, and boxes containing the moulds, to adjust the jaws of the clutches to the candles, and attach the clutches firmly to the candles, so that they may be raised at the same time at which the moulds are returned empty to their first position

No. 24,961.—RICHARD A. STEWART, of St. Bernard Parish, La.—*Improvement in Apparatus for Defecating Sugar.*—Patent dated August 2, 1859.—A represents a horizontal cylindrical vessel or retort, nearly closed, within and along the bottom of which common limestone is burned, with a small supply of air, so that the product of combustion may be sulphurous gas instead of sulphuric acid, and the combustion may be slow and continuous.

*Claim.*—The combination of the retort, the vacuum cylinder, and the receiver, substantially in the manner and for the purpose set forth; and these I also claim, in combination with the steam boiler, substantially operating as described and for the purpose set forth.

No. 24,962.—H. W. STILLMAN, of Port Washington, Wis.—*Improvement in Brick Machines.*—Patent dated August 2, 1859.—This invention consists in the employment of a series of rotating moulds, provided with movable bottoms, operated by eccentrics, in connection with a feeder and resisting plate; the whole being arranged for joint operation.

*Claim.*—The combination of the revolving moulds D, feeder G, and plate I, when arranged and operated in the manner described and for the purpose specified.

No. 24,963.—SAMUEL TAGGART, of Indianapolis, Ind.—*Improvement in Flour Packers.*—Patent dated August 2, 1859.—This invention will be understood by an examination of the claim and engravings.

The inventor says: I *claim*, first, the oil pot H H, with cap G<sup>2</sup> G<sup>2</sup>, when operated in connection with the clutch wheel G and shaft D.

Second. The cam V, in combination with the barrel lifter T T, when constructed and operated as and for the purposes set forth.

Third. The combination and arrangement of the friction brake Q, rod K, walking beam C, packing shaft D, and barrel lifter T T, when the whole is combined and operated as and for the purposes set forth.

No. 24,964.—N. G. THOM, of Cincinnati, Ohio.—*Improved Machine for Pointing and Threading Wood Screws.*—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, as a part of my invention, the combination of a rotating head containing two or more spindles or blank holders, revolving round a central point with an intermittent motion, with an apparatus for pointing and threading screw blanks, so



arranged and operated that while one blank is being pointed and undergoing the other operations necessary thereto, another blank is being threaded by another part of the same machine.

Second. I claim, in combination with an apparatus for pointing and threading screw blanks, simultaneously, or nearly so, by the same machine, the apparatus so constructed and operated that while the spindles are rotated, or changing positions, the threading cam or other device for operating the threading tool and its connections remains stationary, and when the motion of the spindles around the central point is arrested, the other part, and all necessary parts of the machine, recommence motion.

Third. I claim the spring brake  $C^2$ , so constructed and operated that when the spring is being depressed to withdraw it from the notch in the plate  $S$ , it acts as a brake upon the periphery of the plate  $T$ , to arrest its motion, and the parts connected with it, at the same time relieving the plate  $S$ , and allowing it to revolve with the spindles.

Fourth. I claim the quadrant shaped grooved arm, on the pointing tool stock, which, in connection with the spring  $i^1$ , or its equivalent, receives the blank from the hopper, and conveys it to the grippers, and supports it while being pointed, substantially as described.

Fifth. In combination with the quadrant, I claim the reciprocating motion of the hopper for the purpose of depositing the blanks in the quadrant, to be conveyed to the grippers.

Sixth. I claim the triangular grooved cam  $J J^1$ , in combination with the hopper  $L$ , so constructed that when moved in one direction by the action of the tool stock or otherwise, the hopper is depressed, and when moved in a contrary direction the hopper is elevated, for the purpose of depositing the blanks in the quadrant, or other mechanical device for receiving them.

Seventh. In combination with an apparatus for threading and pointing screw blanks by the same machine, I claim the worm  $F$ , when combined with the gears  $b c$  and  $e$ , or equivalent arrangement, by which the revolution of the worm causes the spindles to rotate round a central point, substantially as described.

Eighth. I claim the rocking feed levers  $o^1 o^2 o^3$ , constructed substantially as described, for the purpose of regulating the depth of cut of the threading tool.

Ninth. I claim the ratchet  $S$ , and revolving cam  $r$ , when combined with the feed lever, substantially as described, for the purpose of raising the cutting tool out of the thread, in its backward motion, and increasing the depth of cut of the threading tool.

Tenth. In combination with the rod for opening the grippers, I claim the movable nut  $u^1$ , which acts upon the thread in the edge of the rod  $Z$ , to withdraw the cone and release the screw.

Eleventh. I claim the traversing arm  $e^1$ , in combination with the spring lever  $f^1$ , or its equivalent, for the purpose of removing the screw from the grippers, when released.

Twelfth. I claim the sliding cam  $w^2$ , in combination with the threading cam, for the purpose of removing the screw from the grippers and releasing it, substantially as described.

Thirteenth. I claim the arm  $m^2$  on the threading tool stock, in combination with the threading tool and rod  $n^2$ , or its equivalent, for the purpose of giving the proper form to the thread, and curvilinear shape to the point of the screw.

Fourteenth. In combination with the spindles or blank holders, I claim the gears  $f^1 g^2 h^3$ , on the spindles, for the purpose of equalizing their motion and causing them to revolve round the shaft  $c$ , while changing their position, whether the driving belt rests or acts on one or both the spindles.

No. 24,965.—HORACE VAUGHN, of Providence, R. I., and WILLIAM HUTTON, of Baltimore, Md.—*Improvement in Lubricating Compounds*.—Patent dated August 2, 1859.—The inventors say: The manner of making this compound is as follows: Take a 40 gallon cask and put from 40 to 50 pounds of lime therein; pour into the cask soft water till the lime is nearly slaked; then put in one pound of sulphur and a half pound of soapstone, or a pound and a half of sulphur without any soapstone. The proportions of these compounds may be varied.

*Claim*.—The cooling compound solution, as described.

No. 24,966.—ALLEN WILSON and GEORGE C. FLETCHER, of St. Thomas, Mo.—*Improvement in Hemp Brakes*.—Patent dated August 2, 1859.—On each side of the framing  $A$ , a board  $c$  is placed obliquely, and between these boards the plates  $M M^1$ ,  $N N^1$ , and  $O O^1$  are placed. The rods  $d$  of the plates  $M N$  are connected to the cranks of the shaft  $I$ , while the rods of the plates  $M^1 N^1$  are connected to the cranks of the shaft  $L$ .

*Claim*.—The arrangement and combination of the plates  $M M^1$ ,  $N N^1$ ,  $O O^1$ , each pair of plates  $M M^1 N N^1$  moving in opposite directions, through the medium of double cranks upon shafts  $I L$ , as and for the purposes shown and described.

No. 24,967.—D. J. WILCOXSON, of Milan, Ohio.—*Improved Ship's Hoisting Apparatus*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, arranging the pawl and ratchet substantially as described, so as to allow the hoisting shaft to turn backward in lowering without disconnecting the pawl from the ratchet.



Second. Forming the connection between a friction pulley and hoisting shaft by means of a pawl and ratchet, substantially so that the friction pulley is only in connection with the shaft while lowering.

Third. The combination of the friction pulley, friction brake, and friction lever, arranged substantially as described, so that by the movement of the brake the friction pulley is released to revolve with the shaft, and power of the brake simultaneously applied to the pulley to regulate the velocity of the shaft in lowering.

Fourth. Combination of the vibrating pawl plates G, cam levers H, and the eccentrics, arranged as described, to give motion to the hoisting shaft.

No. 24,968.—WILLIAM F. WARBURTON, of Philadelphia, Pa.—*Improvement in the Manufacture of Hats*.—Patent dated August 2, 1859.—This invention consists in perforating hats by means of metal points heated to such a degree that as they pass through the material they will melt the stiffening with which the hats are prepared, thus making a clear opening which will not close on the withdrawal of the points, and leaving a strong edge to the orifice, thereby avoiding the weakening of the hat, which is the result of the perforations made by punches or by cold metal points.

*Claim*.—The process described of perforating the bodies of hats by means of heated metal points, for the purpose specified.

No. 24,969.—AUGUSTUS WATSON, of Walnut Run, Ohio.—*Improvement in Mole Ploughs*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* suspending the coulter C to the lever D and guiding it between rollers, so that it may be raised or lowered independently of the beam or frame of the plough, substantially in the manner and for the purpose described.

I also claim making one or both of the beam plates G H adjustable, for the purpose of adjusting the position of the coulter, so as to give it the proper tip or inclination, substantially in the manner and for the purpose described.

I also claim, in combination with the beam plates and the coulter C, the grooved guide rollers *f g*, for the purpose of guiding the coulter in its vertical motion, and preventing any side or twisting motion of the same, substantially as described.

I also claim, in connection with the coulter and mole, the pivoted tongue *p*, substantially in the manner and for the purpose described.

I also claim, in combination with the coulter and the mole, the link P, whose ends are secured by a screw sleeve, for the purpose described.

No. 24,970.—ROBERT D. DWYER, of New York, N. Y., assignor to ABRAHAM B. SANDS and DANIEL SANDS, of said New York.—*Improvement in the Manufacture of Lint*.—Patent dated August 2, 1859.—In preparing this lint, the flax is first to be cut into suitable lengths by any suitable knife or chopper. It is then to be soaked in water of a temperature not to exceed 70° Fahrenheit, for some eight or ten hours, and in a wooden tub or other vessel of anti-corrosive character. From this vessel it is taken and submitted to a breaker. It is then submitted to the action of ley of wood ashes, at a temperature of 120° Fahrenheit, for ten hours; after which, it is washed in clear water, and then immersed in a bath of diluted pyroligneous acid; after this, the material is to be dried between steam heated rollers, and then carded, spun, and woven.

*Claim*.—The new article of manufacture described, being surgeons' lint, produced directly from new flax, in the manner substantially as set forth.

No. 24,971.—JOHN G. ERNST, of York, Pa., assignor to Himself and S. R. SLAYMAKER, of said York.—*Improved Machine for Bending Plough Handles*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of the form block H, fitted in the frame A, with the chain R attached, with or without the weight *c\**, in connection with the roller P, and the toothed segments *o o*, and stop N, the latter being attached to the bed K, in carriage B, the whole being arranged to operate as and for the purpose set forth.

Second. The arrangement of the lever *h*, connected with clutch *g*, the connecting bar *j*, and the lever *k*, attached to shaft G, in connection with the rod *h<sup>1</sup>*, and lever or button *i<sup>1</sup>*, substantially as shown, whereby the operation of the machine, so far as the gigging back motion is concerned, is rendered automatic throughout.

Third. The movable rack C, when adjusted and arranged substantially as shown, with the wheel F<sup>1</sup>, for the purpose of stopping the feed or forward movement of the carriage B.

No. 24,972.—JAMES A. HAMER, of Reading, Pa., assignor to Himself and NORRIS MARIS, of Kimberton, Pa.—*Improvement in Brick Moulds*.—Patent dated August 2, 1859.—This invention consists in so constructing and arranging, in relation to each other, the various component parts of a brick mould, that by means of a simultaneous action thereof the side boards M M may be moved apart, and the end boards A A, and mould partitions B B C, be withdrawn so as to disengage all the upright sides of the bricks from contact with



the side and end boards and partitions of the mould, preparatory to removing the latter from the bricks.

The inventor says: I *claim*, first, the construction, combination, and arrangement of the operating parts of the brick mould, substantially as set forth for the purpose described.

Second. The combination of the sides and partitions of the mould, operating substantially as and for the purpose described.

Third. The combination of the levers D D, with the arms F F, and pins, J J, for operating the sides and partitions of the mould, as and for the purpose set forth.

No. 24,973.—GEORGE L. JENCKS, of Providence, R. I., assignor to Himself, GEORGE KENDALL, and JOHN KENDRICK, of said Providence.—*Improvement in Sewing Machines*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination in a single thread sewing machine of a perforated barbed needle, which is arranged obliquely to the feed movement of the cloth or material being sewed, with a pair of nippers or other equivalent device, which will, as the inclined needle is operating to assist in forming the stitch, retain and present the thread to the needle, in a manner to allow the necessary loop to be formed, shortened, and drawn into or tight on the cloth, substantially as and for the purposes set forth.

Second. The combination with a barbed needle of the spring nippers, thread guide, and adjusting nipper closing bracket, when constructed, arranged, and operating substantially as and for the purposes set forth.

No. 24,974.—DANFORTH JOHNSON, of Chicago, Ill., assignor to BENJAMIN B. WORDEN and WILLIAM CADWELL, of said Chicago.—*Improved Clothes Dryer*.—Patent dated August 2, 1859.—Into a base B is inserted a suitable standard, or spindle A, so as to turn freely therein. Upon this slides a collar E, and on the top is a socket cap D, which may be simply held in place by a screw, or pin g, but is allowed to turn round freely on the spindle. Both the cap and the collar are provided with eyes *d d* and *e e*, respectively, which are cast therewith, so that both cap and collar are each cast in one piece.

*Claim*.—The employment of flexible braces H H, in combination with the freely sliding collar E, on the spindles A, for the purpose specified.

No. 24,975.—WILLIAM JOHNSON, of Milwaukie, Wis., assignor to Himself and EIBERT SCHUMACHER, of said Milwaukie.—*Improvement in Bank Locks*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, operating the regulator wheels or guard plates by the screw pins, which are susceptible of being changed in the holes of the plates, and in relation to each other, as set forth.

Second. I claim the tapered indicators, stem, and beveled plate of the stem, fitting into the tapered recesses, as and for the purposes set forth.

Third. In combination with a series of regulator wheels or guard plates, operated as described, I claim the means for indicating the position of such plates, constructed and arranged as set forth.

Fourth. I claim the cock wheel, or toothed disk, in combination with the tumbler and the regulator wheels or guard plates, as described.

No. 24,976.—ROBERT POOLE, of Baltimore, Md., assignor to Himself and GERMAN H. HUNT, of said Baltimore.—*Improvement in Casting Chilled Plates*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Making the chill for casting plates in sections, when said sections are secured to a bed plate in such a manner as to leave spaces between them, which are filled with sand or other yielding material, substantially in the manner and for the purpose described.

No. 24,977.—JOHN B. POWELL, of Philadelphia, Pa., assignor to Himself and GEORGE B. FRICK, of said Philadelphia.—*Improved Machine for Winding up Clocks*.—Patent dated August 2, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: Without confining myself to any specific arrangement of parts, I *claim* the spring lever D, spring pawl or catch C, and ratchet wheel B, with the supplementary lever H, and permanent pin *e*, or their equivalents, when applied substantially in the manner set forth, to the winding up of clocks, or other machines, in which a spring or weight is used as a prime mover.

No. 24,978.—H. O. AMES, of New Orleans, La.—*Improvement in Apparatus for Heating Evaporating Pans*.—Patent dated August 9, 1859.—This invention consists in a certain arrangement of the evaporating, supply, and escape steam pipes and their connections, whereby provision is made for heating all parts of the pan to a uniform, or very nearly uniform, temperature; the collection of the water of condensation to any extent in the evaporating pipes is prevented; all the connections of the pipes are brought outside of the pan.

*Claim*.—The arrangement of the parallel evaporating pipes D D, with their elbows and



collars and screw nozzles *a a*, passing through the bottom of the pan, and the parallel external supply and escape pipes B and C, with the nozzles *d d*, and union couplings *l l*, for making the connections with the nozzles *a a*, substantially as described.

No. 24,979.—JOHN ANDREWS, of Clinton, Mass.—*Improvement in Seeding Machines*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination of the vibrating bars or blocks *g*, frame *a*, axle *d*, cam *c*, and seed slide *n*, as set forth, whereby the cam which operates the harrow also moves the seed slide, and the harrow bars *g* have a horizontal vibration, and also a vertical play with the frame upon the axle *d*.

No. 24,980.—JOHN ANDREWS, of Clinton, Mass.—*Improvement in Seeding Machines*.—Patent dated August 9, 1859.—*a a a* represent the two side or bed pieces, and the cross piece in front of the harrow; *b b b* represent a series of joist or rectangular blocks, arranged parallel with each other, so as nearly to fill the space between the two side or bed pieces. The blocks are not brought close to each other, but are placed a short distance apart, and are made nearly the length of the side pieces, leaving a space between the cross piece on the front of the harrow and the ends of the blocks.

The inventor says: I *claim*, first, the arrangement and combination of the blocks *b*, circular plates *g*, teeth *f*, levers *u*, and seed sliders *p*, substantially as shown and described.

Second. The arrangement and combination of the covering apron *l*, bar *d*, blocks *b*, rod *y*, and lever *x*, as shown and described.

No. 24,981.—FRANCIS ARMSTRONG, of New Orleans, La.—*Improvement in Brakes for Railroad Cars*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* making the adjustment from the pull or the coupling, when actuating on distinctly detached parts, namely: the latch *c* and tongues *t*, when constructed and operated as, or substantially as, described.

I also claim, in combination, the arms *n*, bar *r*, and levers *m*, when arranged and operated substantially as described and for the purpose set forth.

No. 24,982.—MOSES S. BEACH, of Brooklyn, N. Y.—*Improvement in Machinery to Feed Sheets of Paper to Printing Presses*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, feeding sheets to the impression cylinders of printing presses by means of revolving arms or scrapers *a*, operating in combination with rollers *b*, in the manner substantially as described.

Second. Retaining the paper in connection with the impression cylinders of printing presses, during the process of printing, by means of holders *f* and *g*<sup>1</sup>, in the manner substantially as described.

Third. Detaching the paper from the impression cylinders by means of deflectors *p* and *q*, operating substantially as described.

No. 24,983.—GEORGE W. BEARD, of Canton, Miss.—*Improvement in Cotton Cultivators*.—Patent dated August 9, 1859.—This invention consists in combining, with two right and left turn ploughs, having their standards fixed in a laterally adjusting frame, peculiar shaped scrapers or cutters, which are made laterally and longitudinally adjustable on the mould boards of the ploughs, for acting on both sides of a ridge at a single operation.

*Claim*.—The peculiar shape given to the scrapers or cutters *J J*, and their lateral and vertical adjustment, in combination with the adjustable plough beams *C C*, when the same are all arranged in the manner and for the purposes set forth.

No. 24,984.—ELIJAH P. BEAUCHAMP, of Preston, Ga.—*Improvement in Cotton Seed Planters*.—Patent dated August 9, 1859.—The box 1 is attached to the rear end of the side pieces or frame 4. This frame is secured to the beam, as seen at 5, by a bolt, and is so constructed as to allow the beam 6 and stock 7 to move up and down freely between the side pieces. The wheel 3 carries the seed box clear of the ground, being arranged to run on each side of the furrow made by the plough.

*Claim*.—The arrangement of the box 1, axle 2, wheels 3, side pieces or frame 4, bolt 5, beam 6, stock 7, follower 8, furrow opener 9, and brace 10, as described, for the purposes set forth.

No. 24,985.—LAURENT BEAUDREAU, of Fond-du-Lac, Wis.—*Improved Shingle Machine*.—Patent dated August 9, 1859.—This invention consists in a novel combination and arrangement of means for regulating one saw so as to cut shingles alternately from each side of the bolt.

*Claim*.—The relative arrangement, for united operation, of the intermediate circular revol-



ing saw B, open reciprocating double carriage C,  $c c^1$ , toothed clamps G G<sup>1</sup>, bars H H, rollers  $m m^1$ , springs I I<sup>1</sup>, inclined or curved guiding plates  $n n^1$ , horizontal rocking cradles J J, cams  $r r^1$  and S S<sup>1</sup>, shafts  $t t^1$ , bars  $u$ , and hinged flaps or pawls  $v v^1 v^2 v^3$ , all substantially in the manner and for the purpose described.

No. 24,986.—PHILIP BETTLE, of London, England.—*Improvement in Watch Cases*.—Patent dated August 9, 1859; patented in England, November 18, 1857.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the attachment of the inner case, containing the movement of the outer case, by means of pins or pivots, so that the movement case can be turned over, to face the open or closed side of the outer case, without being removed from the outer case.

Second. Attaching the pendant handle to the movement case, so that it forms one of the centres or pivots on which the watch turns, in connection and combination with a pin or pivot on the opposite side of the case.

Third. The particular form and manner of constructing the pendant, and attaching the same to the inner or movement case before described and shown.

No. 24,987.—WILLIAM BILLINGHURST, of Rochester, N. Y.—*Improved Fishing Reel*.—Patent dated August 9, 1859.—This invention consists in so constructing the reel that when the line is wound up it shall form a ring instead of a cylinder, thus providing for its drying without unwinding the line and spreading it out, while at the same time the weight and cost of the reel are reduced.

*Claim*.—The combination of the skeleton ring R R R with the other parts of the reel, the whole being arranged in the manner and for the purpose substantially as set forth.

No. 24,988.—EDMOND BLANCHARD, of Greenfield Mills, Md.—*Improvement in Composts*.—Patent dated August 9, 1859.—The claim explains the nature of this invention.

*Claim*.—As a new article of manufacture, a fertilizing compost, composed of lime, chloride of sodium, wood ashes, charcoal, wheat bran, chimney soot, and gypsum, combined in the proportions and manner described.

No. 24,989.—E. BURROUGHS, of Rochester, N. Y.—*Improvement in Machines for Cutting Paper*.—Patent dated August 9, 1859.—This invention consists in the use of an oscillating reciprocating knife, arranged and operating in a peculiar way, and used in connection with a movable bed for adjusting the paper beneath the knife, and a clamp for holding the paper in proper position on the bed while being cut.

The inventor says: I *claim*, first, the employment or use of the reciprocating and oscillating knife G, when arranged to operate substantially as and for the purpose set forth.

Second. The knife G, in connection with the cone of pulleys T, attached to the shaft S, the hollow shafts  $y z$ , with their respective gearing  $a^1 h^1 h^1$  and  $a^2 i^1 j^1$ , and the shaft R, with its gearing  $v w$ , and the racks I I, attached to the knife bar F by the rods H H, the whole being arranged to operate substantially as set forth.

Third. The arrangement of the shaft U, with spring  $g^1$ , the arm  $f$ , cone of pulleys T, levers V W, rack  $l^1$ , substantially as shown, for the purpose of automatically changing the movement of the knife from a descending to an upward movement.

Fourth. The clamp formed of the vertical and horizontal plates  $p q$ , when arranged as shown, so as to be adjusted by the screw  $s$ , and pinion or worm wheel  $r$ , pinions  $u u$ , and racks P P, the latter serving in the capacity of both racks and guides, substantially as and for the purpose specified.

Fifth. Attaching to the shaft F an index  $b$ , arranged to move over a graduated stationary plate  $c$ , attached to the frame A, substantially as shown, for the purpose of enabling the operator to accurately adjust the paper beneath the knife.

No. 24,990.—JOHN T. CAMPBELL, of Rockville, Ind.—*Improved Adding Machine*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of a series of wheels provided with ten cogs or teeth, and carrying the ten numeric figures on their outward faces, in combination with the stationary plate containing like numeric figures arranged on the circle, surrounding each of the wheels in the series, substantially as described.

And in combination with the parts above claimed, arranged as described, I claim the stop bars Y Y, and spring slides G G, and oscillating arms or pawls F F, with the cam  $e e$ , the whole being constructed and arranged for joint operation, substantially as set forth.

No. 24,991.—WALTER CLARK, of Palmyra, Ohio.—*Improvement in Seed Planters*.—Patent dated August 9, 1859.—This invention consists in an arrangement of devices, which is made up of a series of pins on the wheel of the planter, in combination with a frame having an arm resting upon the pins on the wheel, and a swinging rod passing through the discharge opening in the hopper, so that by revolving the wheel the arm of the frame is



raised by the pin on which it rests, and it having passed, falls on the next, thus raising and lowering the frame and constantly keeping the rod in motion through the discharge, so as to prevent the seed from clogging the opening, and assisting its free passage therefrom.

*Claim.*—The arrangement of the reciprocating agitating rod *r*, when passing through the adjustable seed discharge opening in the side of the hopper, with the frame *F*, wheels *W*, pins *P*, teeth *a b c*, hopper *H*, and adjustable slide *S*, the whole being constructed as and for the purposes set forth.

No. 21,992.—W. COGSWELL and C. A. MATHEWSON, of Ottawa, Ill.—*Improvement in Corn Harvesters.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The circular cutter *F*, and the reciprocating sickle *r*, with its stationary toothed plate *s*, in connection with movable bed, or fingers *I*, the whole being placed on a mounted frame, and arranged for joint operation substantially as and for the purpose set forth.

No. 24,993.—JAMES P. COONLEY, of Farmington, Mich.—*Improvement in Corn Planters.*—Patent dated August 9, 1859.—The seed is dropped in the usual manner from the roller *H* through the tooth *E*. This tooth is of peculiar construction, consisting of two tubes, one sliding within the other and connected together by the spiral spring *e* and pin *f*, which serves to prevent the outer tube *g* from turning on the other, and at the same time it is free to move upward as the spring is compressed by pressure from beneath, by means of the slot *h*.

*Claim.*—The arrangement of seeding roller *H*, gear wheels *d d*, slide plate *I*, levers *c*, adjustable teeth *E*, coverers *F*, and tracking gauge *M*, constructed and operated substantially as and for the purposes set forth.

No. 24,994.—B. T. CURRIER, of Bath, Me.—*Improvement in Corn and Cane Harvesters.*—Patent dated August 9, 1859.—This invention is more particularly intended for cutting the stalks of the sugar cane, which from the peculiar character of the stalk require to be held steady and firm while being cut. For this purpose, says the inventor, I construct a suitable frame *A*, mounted upon wheels, and having a cross piece *B* fixed to the front of this frame, in the centre of which piece are two scythe shaped cutters *B*<sup>1</sup>, pivoted together like a pair shears at *a*, and secured to the piece *B* by a nut *C*.

*Claim.*—The arrangement and combination of the scythe shaped cutters *B*<sup>1</sup> *B*<sup>1</sup>, rods *D* *D*<sup>1</sup>, cranks *E* *E*<sup>1</sup>, adjustable frame *J*, and standards *A*, as and for the purposes shown and described.

No. 24,995.—EDWARD DAVIDSON, of Batesville, Ark.—*Improvement in Hoop Fastenings for Cotton Bales, &c.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Forming the socket of two parts to admit of the same being opened to receive the bent or doubled and lapped ends of the bale hoop, and closed to secure the ends of the hoop together, substantially as and for the purpose specified.

No. 24,996.—ALVAH GOODRICH DE WOLFE, of Seymour, Conn.—*Improvement in Vulcanized Gums.*—Patent dated August 9, 1859.—*A A* is the body of the mould, *B B* the cavity for receiving and pressing the rubber article, previously dusted over with the vulcanized rubber; *C C* are ears to aid in clamping the moulds together during vulcanization.

*Claim.*—The use of pulverized, vulcanized rubber, gutta percha, or other vulcanized gum, in the manner and for the purpose specified.

No. 24,997.—CHARLES S. DICKINSON, of Cleveland, Ohio.—*Improvement in Centrifugal Guns.*—Patent dated August 9, 1859.—This invention consists in constructing and arranging the several parts together for the purpose of discharging balls from the barrel of a centrifugal gun.

The inventor says: I *claim*, first, the employment of lever *C*, provided with a collar which surrounds the shaft *B*, pivoted or hinged at *x*, and provided with a pin or rod *I*, when the same is used, substantially as and for the purpose specified.

Second. Operating lever *C*, in one direction, by means of rod *D* and its connections through the centre of the shaft *B*, and in the other direction by means of spring *F*, for the purpose of discharging the balls from the barrel at the proper time, substantially as set forth.

No. 24,998.—RUDOLPH DIRKS, of Philadelphia, Pa.—*Improvement in Seats for Sleeping Cars.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the cushioned platform *E* and the frame *F*, with its detachable cushion *f* and movable legs *h* in combination with the permanent partitions *D D*, the said platform and frame being hinged together and otherwise arranged, as set forth.



Second. The boards G and K, adapted to and sliding in or against the partitions D D, and arranged as specified, so as to form the foot and head boards for the couches.

Third. The frame H, as hinged to the side of the car, and the frame I so hinged to the frame H that both frames may assume the positions illustrated in Figs. 1 and 2, in combination with the partitions D D and their sliding frames G.

Fourth. Forming the upper couch of the board L hinged to the side of the car, and one or more boards M hinged to the board L, when arranged as set forth, in combination with the permanent partitions D D.

No. 24,999.—ZACHARIAH FEAGAN, of Palmyra, Mo.—*Improvement in Hemp Brakes.*—Patent dated August 9, 1859.—This invention consists in an arrangement and combination of stationary bars, under which the hemp is introduced, finger guards for preventing the forward motion of the hemp, vibrating spring levers for breaking the hemp, and cams for operating said spring levers.

*Claim.*—The arrangement and combination of the stationary bars L L, finger guards O O, vibrating spring levers E E, and cams D D, the whole being constructed and operated substantially in the manner and for the purpose set forth.

No. 25,000.—ANDREW DOUGHERTY, of Brooklyn, N. Y.—*Improvement in Printing Presses.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the inking apparatus at the side of the main cylinder of a press, with a carriage that can be moved from and towards the main cylinder and with a stop that controls the position of the carriage; the combination, as a whole, operating substantially as set forth.

No. 25,001.—ALBERT EAMES, of Bridgeport, Conn.—*Improved Die for Swaging Bolt Heads.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* making dies for swaging bolt heads and other articles in two or more parts, the parts forming the bottom being fitted to and in the part forming the periphery, substantially as described, and the whole fitted to and secured within the drop, or equivalent therefor, as set forth.

And I also claim, in combination with the die, the bottom of which is made separate from and inserted in the part forming the periphery, grooving the periphery of the part forming the bottom for the escape of air, substantially as described.

No. 25,002.—J. P. EMSWILER, of Knight's Town, Ind.—*Improvement in Sewing Machines.*—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the slide M, or its equivalent, arranged substantially as described, with the feeding mechanism, for the purpose of adjusting the bed to the feeding mechanism for materials of various thicknesses, without changing the position of the feeding mechanism.

And I also claim, in combination with the bobbin, arranged as described, to vibrate on the shuttle, the longitudinal arched pressure spring, arranged substantially as described for the purpose set forth.

No. 25,003.—MOSES G. FARMER, of Salem, Mass.—*Improvement in Windlasses.*—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination of the roller A, the ratchet wheel B, the retaining ratchet F, and the actuating ratchet D, with the lever C and toggle joint E, so arranged that the thrusting power of the toggle joint E shall be wholly exhausted, when the lever C is fully depressed, and the joint E brought into a straight line, which intersects the axis *l*, and the point of the actuating ratchet which is in contact with a tooth of the wheel B.

I claim the means described of permitting the backward motion of the roller A, viz: by causing the motion of the lever C to release alternately the actuating and retaining ratchets through the agency of such means as the springs K, the projecting arms L M, and the proper position of the collar J, substantially as described.

No. 25,004.—CHESTER N. FARR, of Philadelphia, Pa.—*Improvement in Sewing Machines.*—Patent dated August 9, 1859.—This invention relates to the manner of adjusting and controlling the motions of a looper which enters the loop of a needle thread, and then crosses the needle's path when the needle has risen, so that on the needle's again descending it takes a loop of second thread on the opposite side of the looper, and the said looper, retiring, drops the loop of the needle thread around the loop of the second thread, and then moves laterally, and again passes on the other side of the needle and takes a loop, and proceeds as before.

The inventor says: I *claim* the arrangement of the fulcrum slide *r*, stops *q* and *s*, and loop-bar *p*, for regulating and adjusting the motions of the looper, as set forth.



And in combination with said looping bar, adjusted as described, I claim the rocking lever *o*, fitting and acting as specified.

No. 25,005.—BENAIHA FITTS, of Worcester, Mass.—*Improvement in Governor Valves*.—Patent dated August 9, 1859.—This invention consists in the peculiar manner of mounting the valve, so as to dispense with the use of stuffing boxes, whereby the resisting action of pressure of steam and of friction upon the valve is diminished.

*Claim*.—The manner of mounting the valve, substantially as described, that is to say, resting or supporting the valve, as shown at M, and retaining it into its seat, as shown at N, for the purposes set forth.

No. 25,006.—PARLEY F. FREELAND, of Newark, Ill., assignor to V. R. DAVID, of Morris, Ill.—*Improvement in Cultivators*.—Patent dated August 9, 1859.—The object of this invention is to obtain a cultivator which may be made to answer equally well for eradicating weeds and pulverizing the soil and for hilling, or earthing up plants; an instrument that may be used for general work in the cultivation of what are generally termed "hoed crops," or such as are grown in hills or drills.

*Claim*.—The arrangement of the tongue A, curved or segment bar B, beams E E, with screw rod *c*, and pendants *d*<sup>1</sup>, and shares F, attached, substantially as and for the purpose set forth.

No. 25,007.—EDWIN GOMEZ, of New York, N. Y.—*Improved Apparatus for Folding or Wrapping Papers*.—Patent dated August 9, 1859.—From the folder *f* the paper passes into the first twister *i*, which is composed of a piece of sheet metal bent into a U shape and having a compound twist, so that the folded edge of the paper entering horizontally comes out vertically, or nearly so, and proceeds to the second folder and then to the second twister, and so on until the desired number of twists or folds are obtained.

*Claim*.—The folders *ff*, formed with the lips 4 4, and volutes 3 3, in combination with the intermediate twist-ers *i i*, in the manner and for the purposes specified.

No. 25,008.—GEORGE P. GORDON and F. O. DEGENER, of New York, N. Y.—*Improvement in Printing Presses*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, combining with the tympan frame the sheet-holding and relieving nippers or grippers, for the purpose of holding the sheet, and for relieving the sheet from the type.

Second. We claim the combination of a cylinder, or segment of a cylinder, with its wheel bearers, the impression cylinder, roller pendants, and the racks or gearing.

Third. We claim the frictionless roller, or its equivalent, in combination with the tympan frame, for the purpose of closing the tympan and properly laying the sheet upon the form in advance of the passage of the impression cylinder or its equivalent.

Fourth. We claim operating the sheet-holding and relieving grippers by or through the motion of the tympan.

Fifth. We claim attaching a tympan frame to an adjustable bed in such a manner that they, at all times, shall retain their relative positions towards each other, in the manner described.

Sixth. We claim hanging, hinging, or attaching the inking apparatus to the frame of the press, or to the press, in such a manner that it may be turned, swung, or set aside, so as to allow the workmen to get at the form to make any necessary alterations, or to make the form ready, or for the purpose of using the bed as a imposing stone.

No. 25,009.—RALPH GREENWOOD, of Altoona, Pa.—*Improvement in Fire Boxes for Locomotive Engines*.—Patent dated August 9, 1859.—This invention consists in the use of a "midfeather," or water chamber, placed directly over the fire, and provided with a plurality of small flues, which form a communication between the fire box and a gas chamber above, into which, as well as into the fire box below, air is admitted through hollow stay bolts at the sides and end of the boiler.

The inventor says: I *claim* the midfeather C, when used in connection with a gas chamber D and fire box A, provided with openings *e f g h*, the parts being arranged relatively with each other to operate substantially as and for the purpose set forth.

I further claim the cylinders E F, when applied to the orifices of the gas chamber and fire box and connected by a lever G, to operate simultaneously as and for the purpose set forth.

No. 25,010.—LEONARD B. GRISWOLD, of Pennfield, N. Y.—*Improvement in Potato Diggers*.—Patent dated August 9, 1859.—This machine is drawn by a team, the truck wheels passing in the space between the rows, and the fork operating directly on the row. It can be raised or lowered on the spindle, by means of a nut *c* and washers *a*, to work deep or shallow, as the nature of the soil and the position of the tubers require. The forward prongs *d* enter the ground, raising the potatoes from the earth and carrying them by its revolving motion to the gutter on one side, where they are deposited and left on the surface.



*Claim.*—The employment of a rotating head or disk, having teeth or spurs arranged around an upright shaft in a direction oblique to the axis thereof, in combination with the truck B and driving wheels G F, or their equivalents, for giving the required motion, substantially as and for the purpose set forth.

No. 25,011.—W. D. HARRAH and B. S. BALDWIN, of Davenport, Iowa.—*Improvement in Seed Planters.*—Patent dated August 9, 1859.—This invention consists in certain peculiar arrangements of mechanism of a seed drill, whereby the accurate disposition of seed in rows is secured; and at the same time the operation of the machine is facilitated.

The inventors say: We *claim*, first, the combination and arrangement of the peculiarly constructed hopper F  $f f^1 f^2 f^3$ , regulating plate G, sliding frame H, slides  $h^2$ , pitman  $b$ , edged leading wheels B, hinged seed tubes I, grooved covering wheels C C, foot lever J, caster wheel D, and hand lever K, all substantially as and for the purpose described.

Second. In combination with the hopper F, the arrangement of the foot lever J and hinged bar  $i$ , when the latter is so hinged as to throw the points of the seed tube forward in their adjustment, or when the foot lever is depressed, substantially as and for the purpose described.

No. 25,012.—ROBERT S. HARRIS, of Galena, Ill.—*Improved Water Gauge for Steam Boilers.* Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The within specified manner of constructing and attaching the float stem to the boiler, whereby it is made to answer for carrying the float and as an index for indicating the height of the water in the boiler, and, if desirable, as a trip for opening a valve for an alarm whistle, all in the manner and for the purpose described.

No. 25,013.—JAMES HARRISON, jr., of New York, N. Y.—*Improvement in Sewing Machines.* Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the switching lever  $n$ , constructed and operated as set forth, for directing the thread to the beard or barb of the needle, and preventing the escape of the thread therefrom.

Second. I claim controlling the feed and the stitch by the raising or lowering of the needle, as set forth.

Third. I claim rotating the needle and carrying with it the thread, thus forming a twisted threaded loop, as described.

No. 25,014.—GEORGE R. HAY, of Berea, Ohio.—*Improved Machine for Cutting Out Wooden Ware.*—Patent dated August 9, 1859.—The saw is revolved by means of a pinion having short pointed teeth which fit into the holes I in the saw H. This pinion is supported by a cross bar M extending across the inner portion of the semi-circular groove J. The pinion L is revolved by means of the pulley N upon the shaft of said pinion. As all these parts are attached to the shaft K, if this shaft is rotated, the saw and pinion are rotated with it.

*Claim.*—The rock shaft K, in combination with the hoop saw H, constructed and arranged as described, and operated by means of the pinion L, in the manner and for the purpose substantially as set forth.

No. 25,015.—JAMES HAYNES, of Hollis, Me.—*Improved Wood Saw Frame.*—Patent dated August 9, 1859.—The inventor says: In this invention, an inclined plane ratchet is fastened to the outer edge of the lower piece of the frame, at the bottom end, having a slot in it corresponding with the slot in the piece to which it is attached. This ratchet piece is thinner at the lower end and grows considerably thicker as it extends up, so as to form the inclined plane of sufficient increase in giving additional strain to the saw as the setter or strainer is advanced up a notch in straining the saw.

*Claim.*—The inclined plane, ratchet, and the nipper or strainer, applied to the saw and frame, as described and represented in the drawing accompanying these specifications.

No. 25,016.—STANISLAS HOGA, WILLIAM PETER PIGGOTT, and SEPTIMUS BEARDMORE, of Middlesex county, England.—*Improved Mode of Generating and Applying Electric Currents in Telegraphing.*—Patent dated August 9, 1859.—This invention consists in transmitting the electric current directly through and by means of the earth or natural body of water, using the line wire only for the return current.

*Claim.*—The application to telegraphic instruments of currents of electricity, produced from metals or substances arranged in the earth, or in natural bodies of water, in the manner and for the properties and relations described.

No. 25,017.—ROBERT HOOPER, of Baltimore, Md.—*Improvement in Steam Boilers.*—Patent dated August 9, 1859.—The nature of these improvements is explained by the claim and engravings.



The inventor says: I *claim*, first, contracting that part of the boiler immediately above the fire flues, in combination with the widening and extending of that part which is beyond or in the rear, and above the end of the fire box, substantially as and for the purposes set forth.

Second. Forming a water circulating passage below, in rear, and above the fire box, and nearly or wholly isolating said passage from the fire box, by means of a large space existing between the fire box and the partition walls of the said water circulating passage, substantially as and for the purposes set forth.

No. 25,018.—ANTHONY ISKE, of Lancaster, and JACOB B. ERB, of Conestoga township, Pa.—*Improved Approach Opening Gate*.—Patent dated August 9, 1859.—In this invention two sills *c c* are laid across the road; between those sills is the iron rail *D*; the hinged platforms *G* are connected to one end of the lever *J* by the pieces *H*; the lever has its fulcrum at *I* under the sills; the other end has a rod *K* hinged to it and connected with the projecting arm *o* on the top of the rear slat *Q* of the gate.

*Claim*.—The arrangement of the platforms *G*, uprights *H*, to the lever *J*, with the connecting rod *K*, attached to the arm *O* on the slat *Q*, the groove *b* on the inside of the post *B*, for operating a series of cross slats, connected by pivots to the slats *Q R*, as shown when combined in the manner set forth, or substantially the same.

No. 25,019.—JOHN W. KINGMAN, of Dover, N. H.—*Improvement in Machines for Milking Cows*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the teat cups or tubes, partially covered at their upper ends, with an elastic flange, substantially as described, which will yield for the insertion of the teat, and gripe it so as to hold the cup upon the teat during the process of milking, and form a packing between the edge of the cup and the teat, which will be pressed against the teat by the external air when the internal air is exhausted; and, in combination with the device above claimed, I claim a vessel provided with an air pump, and connected with said cup or cups by flexible tubes, so arranged as to exhaust the air and draw the milk from the cow or other animal, substantially in the manner described.

No. 25,020.—EBENEZER A. LESTER, of Boston, Mass.—*Improvement in Railroad Car Wheels*. Patent dated August 9, 1859.—This invention consists in a peculiar manner of attaching the wheels to their axle so that an independent motion is given to each wheel, while both have a secure and durable attachment to their axle.

*Claim*.—Attaching the wheel *D* to its axle, by means of the auxiliary hub *E*, with its recess *f*, and groove *e*, and the segmental ring *H*, or its equivalent, connected with the wheel, in the manner substantially as set forth.

No. 25,021.—THEODORE LIPSHUTS and DANIEL C. JONES, of Balston Spa, N. Y.—*Improved Self Acting Battery for Scaring Crows, &c.*—Patent dated August 9, 1859.—This invention consists in arranging a rising and falling box in such relation to a revolving battery that the same when it is filled with sand sinks down and causes a hammer to discharge one of the chambers of the battery, and the box itself is so arranged that its contents are discharged as it strikes the ground, so that it is raised by the action of weights ready for a new charge and ready for renewed action.

*Claim*.—The rising and falling box *K*, arranged with the slide *g*, and apertures *p*, and operating in combination with the dog *J* and pulley *E*, substantially in the manner and for the purpose specified.

No. 25,022.—SAMUEL W. LOWE, of Philadelphia, Pa.—*Improvement in Machines for Milking Cows*.—Patent dated August 9, 1859.—This invention consists in providing a cup on which is stretched a diaphragm perforated with holes for receiving the cow's teats, and also adapted for being connected with an air pump in any suitable manner.

*Claim*.—The cup *A*, with the perforated diaphragm *B*, when constructed as described, to receive all the teats of the cow's bag, by having an opening in the diaphragm for each teat, and combined with an exhausting apparatus, constructed substantially as described and for the purpose set forth.

No. 25,023.—MOSES MARSHALL, of Lowell, Mass.—*Improved Device for Making Electro-Magnetic Currents Constant or Intermittent*.—Patent dated August 9, 1859.—This invention consists in obtaining both the single and double electric current in the same machine, and changing it from the double to the single, or from single to the double.

*Claim*.—The spring *g*, so constructed and arranged as to be insulated from or connected to the two ends of the helical wires by springs *l* and *k*, or otherwise, essentially in the manner and for the purposes fully set forth.

No. 25,024.—W. McELWEE, of Shelbyville, Ind.—*Improved Kitchen Safe*.—Patent dated August 9, 1859.—This invention consists in mounting the body of the safe upon hollow



posts extending from the floor to the top of the same, provided with water cups near the bottom of each leg, and perforated so as to form a communication of the external air with each compartment of the safe.

*Claim.*—The combination and arrangement of hollow posts B with water cups D, arranged in the manner and for the purpose specified.

No. 25,025.—E. McKENNEY, of Montgomery, Ohio.—*Improvement in Seeding Machines.*—Patent dated August 9, 1859.—This invention consists in arranging the distributing disks in combination with check valves and with a bell hammer in such a manner that the time when the check valve opens and when the corn is deposited on the ground is indicated by a stroke of the hammer against the bell.

*Claim.*—The arrangement and combination of the distributing disks L, levers N, check-valves *q*, and buttons *u*, to operate together with the hammer *o* and with the bell M, substantially as and for the purposes set forth.

No. 25,026.—J. B. McMILLAN, of Tipton, Ind.—*Improvement in Seed Planters.*—Patent dated August 9, 1859.—This improvement relates to that class of machines which deposit seed in rows and in hills of any required distance from each other. The machine is constructed in the general form of a cart.

*Claim.*—The planting and covering apparatus, when constructed and arranged in the manner and for the purposes set forth.

No. 25,027.—ADAM MILLER, of Mount Pleasant, Iowa.—*Improvement in Underground Draining Machines.*—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination and arrangement of the mole with the drain protectors, as described, for the purpose of expeditiously and economically giving protection to the upper part of the ditch, and of disengaging the protectors from the mole plough with facility after they are laid.

No. 25,028.—ALEXANDER MILLER, of Newbern, N. C.—*Improvement in Drivers for Millstones.*—Patent dated August 9, 1859.—This invention consists in having a friction roller attached to each end of the driver at opposite sides, and having steel plates fitted in the eye of the stone to form durable and plane bearing surfaces for the rollers.

*Claim.*—The employment or use of the friction rollers B B applied to the driver A, in connection with the plates C C, or their equivalents, fitted in the recesses adjoining the eye of the stone or runner, for the purpose of forming proper bearing surfaces for the rollers, the whole being arranged substantially as and for the purpose set forth.

No. 25,029.—SAMUEL C. MOORE, of Providence, R. I.—*Improvement in Hoops for Skeleton Skirts.*—Patent dated August 9, 1859.—This invention consists in an improved hoop made of thin sheet metal, corrugated so that the folds or wrinkles run lengthwise of the strip of metal forming the hoop.

*Claim.*—The corrugated sheet metal hoop for ladies' skirts described, as a new article of manufacture.

No. 25,030.—OLIVER P. MORAN, of Haynesville, Mo.—*Improved Device for Holding Together the Panels of Portable Fences.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the notched projections or projecting pieces of the upper and lower rails in combination with the right angled notches *i i*, in the end battens, substantially in the manner and for the purpose specified.

No. 25,031.—SAMUEL MOWRY, of Wornelsdorf, Pa.—*Improvement in Cultivators.*—Patent dated August 9, 1859.—A is the tongue or draft piece, B the wheels, B<sup>2</sup> the seat, C a wheel connected with the hub of the wheel working the pinion C<sup>1</sup>, for the purpose of working the wheels D D, which give motion to the seed regulations F, attached to and at the bottom of the box E.

*Claim.*—The arrangement of the axles B<sup>3</sup>, wheels B, stretch bars L, levers H, I, and L<sup>3</sup>, frames M, wheel C, ratchet bar J, and cultivator bar P, the whole being constructed as described and set forth.

No. 25,032.—A. A. MOSS, of Philadelphia, Pa.—*Improvement in Hydro-Carbon Vapor Apparatus.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The steam generator A, and dryer E, in combination with a distinct hydro-carbon vaporizer C, the same being also connected with the retort D, and the whole arranged together so as to generate the steam and hydro-carbon vapor separately, and for their subsequently mingling and combination, substantially in the manner and for the purpose described.



No. 25,033.—MATTHEW MITCHELL, of Alton, Ill.—*Improvement in Corn Planters*.—Patent dated August 9, 1859.—This invention consists in the arrangement and combination of the parts of a seed planter, designed to plant sod ground by cutting through and depositing the seed under the sod, or to plant in old and mellow ground.

*Claim*.—The arrangement of the frame B, seats E and G, hoppers H, shoes S, and cutters N, with the device for operating them, in combination with the frame K hung on the axle D, and with the slides operated as described, the whole being constructed and arranged substantially in the manner and for the purposes set forth.

No. 25,034.—DON J. MOZART, of Yellow Springs, Ohio.—*Improved Arrangement of Dead Beat Escapements*.—Patent dated August 9, 1859.—In the engravings a wheel D gears into the pinion *p* of the scape wheel E, the said wheel may be the main wheel of the movement, the ratchet wheel *s*, for winding up, may be on the axis or spindle *b* of the scape wheel. The crescent scapers G G have counter plates G<sup>1</sup> G<sup>1</sup> to receive the opposite journals of the pallet rollers *f f*, and the counter plates are secured to the pivots *d d*, on which the scapers vibrate to keep them in place.

*Claim*.—The improved arrangement of the double “scapers” G G, with the star scape wheel E, or its equivalent, substantially as and for the purposes specified.

No. 25,035.—EDWARD NORTON, of Boston, Mass.—*Improvement in Skates*.—Patent dated August 9, 1859.—This invention consists in making the heel and toe straps for securing the skate to the foot of sheet metal, which are secured tightly to the foot by a peculiar fastening.

*Claim*.—The metal straps D and E, and the slotted plates J, and screw G, for tightening the skate to the foot, substantially as shown.

No. 25,036.—MARCUS P. NORTON, of Troy, N. Y.—*Improvement in Post Marking Stamps*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The blotter J, connected or attached to the main part of any “post office post marking stamp,” for the purpose of cutting and inking, blotting and effacing, so as to successfully cancel the frank or postage stamp of any letter or any package at the same time and operation of making upon such letter or package the name of any post office, the year, the month, and the day of the month, substantially as and for the purpose set forth.

No. 25,037.—LEONARD PACKARD, of Galesburg, Ill.—*Improvement in Cultivators*.—Patent dated August 9, 1859.—To the plough beams are attached four arms S, one on each side of the beam, to which the blades T are fastened in a diagonal position right and left, so that by changing them they will turn the soil to or from the grain. To the arms, and near the steel blades T, are braces W, running up and forward to the beams that hold the blades in a proper position. The blades T may be made in a diamond or shovel form.

*Claim*.—The arrangement of the beams P, the irons Z Z<sup>1</sup>, and the projection X, on the ends of the beams, the adjustable arms S, braces W, blades T, lifting rods 1, adjusting bar 3, levers 5, fulcrum 6, and hinged pole L, as described, for the purpose set forth.

No. 25,038.—J. J. PARKER, of Marietta, Ohio.—*Improved Egg Beater or Churn*.—Patent dated August 9, 1859.—This invention consists in making a tube of tin, or any other metal, of any desired size or height, with a piston head neatly fitted in it, with a rod attached so as to move the piston up and down, in the manner of a pump, by means of a crank or handle attached to the rod.

*Claim*.—The tube A, in combination with the band C and grated bottom M; all constructed, arranged, and operating substantially in the manner described.

No. 25,039.—HORACE PARKHURST, of De Kalb, Ill.—*Improved Clothes Frame*.—Patent dated August 9, 1859.—This invention consists in constructing the frames in such a manner that, when closed, they occupy less space in every direction than most other clothes racks, so that they may be set away in the most compact form; also, with intervening posts to break the length of line, whereby they are enabled to hold the largest articles spread out.

*Claim*.—The combination and arrangement of the standards A, the rails B, the head blocks C, the clasps E, the cords F, substantially as and for the purpose specified.

No. 25,040.—DUBOIS D. PARMELEE, of New York, N. Y., assignor to JOHN A. GREEN, of Beverly, Mo.—*Improvement in the Mode of Uniting Solid Substances*.—Patent dated August 9, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim* the method and process described of uniting various substances or bodies of the same or different character and properties, by the interposition between the surfaces of said substances or bodies to be united, of one or more sheets or layers of India rubber and gutta percha, separately, or when combined with the substances, such sheets or layers having previously been treated in the manner described, to produce the change specified; whereby, on completion of said change, a water proof cement is obtained, which, while it possesses the requisite rigidity and coherence to keep the bodies firmly and strongly



united, possesses a sufficient degree of elasticity to compensate for the expansion or contraction of the fibres of the bodies, for the purposes substantially as set forth.

No. 25,041.—LAWSON G. PEEL, of Webster county, Ga.—*Improvement in Corn Planters*.—Patent dated August 9, 1859.—A is the hopper; B, a wheel; C, a cylinder attached firmly to the shaft of wheel B. This cylinder revolves on the bottom of the hopper, and contains a depression of capacity sufficient to supply seed to each hill, which it deposits in the furrows made by the plough at each revolution of wheel B. D is a frame, composed of two side pieces.

*Claim*.—The arrangement of the beam F, stock E, frame D, bolt *a*, hopper A, wheel B, and cylinder C, as described, for the purposes set forth.

No. 25,042.—COLWELL P. POOL, of New Market, Ala.—*Improvement in Filing Cotton Gin Saws*.—Patent dated August 9, 1859.—This invention consists in arranging, in a common file case, a series of files in suitable sockets, in such a manner that a reciprocating as well as an oscillating motion can be given to the files, and that, when the same are brought in the proper relation to the saws of a gin cylinder, the teeth of the several saws may be scored by one and the same operation, and also whetted and rounded, so that it is not necessary to go through the same operation for every single saw.

*Claim*.—The arrangement of the file case B with the file holder *b* and sleeves *b*, to operate in combination with the bar C and with the slide E and ridge *e*<sup>1</sup>, substantially in the manner and for the purpose specified.

No. 25,043.—WILLIAM F. PRATT, of Bristol, Pa.—*Improvement in Sewing Machines*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of the thread case with an angular projection *j* extending across its centre, and the construction of the slide ring or its equivalent, with a similar angular projection *l* fitting to the said projection *j*, as described, and operating in combination therewith in the manner substantially as specified, not only to prevent the twining of the thread case, but to check and control the loops in their passage over said case, thereby avoiding the use of separate thread controlling apparatus.

No. 25,044.—JAMES M. QUIMBY, ALBERT H. BROWN, GEORGE H. RENTON, and JAMES CRISWELL, of Newark, N. J.—*Improved Furnace for Making Iron Direct from the Ore*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the arch K, the hopper damper E, the rods or bars *o o o o*, arranged and operated substantially as described in the drawings.

We also claim the dampers at the bottom of the tubes for discharging one or more tubes at the same time into one box or hopper, as shown.

No. 25,045.—JOHN B. READ, of Cold Spring, N. Y.—*Improvement in Apparatus for Tanning*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* an improved apparatus for tanning and other purposes, said apparatus consisting of one or a number of smooth porous or perforated surfaces of wood, or other fixed material, placed singly or in succession in open or closed vats or vessels, or arranged in pairs so as to form closed hollow cases, upon which skins or other substances to be operated upon are to be smoothly stretched, and then the tannin or other fluids forced through them by hydrostatic or other pressure into the interior, whence means of escape are provided, as described.

I claim, also, the use of tarpaulin sheet metal, or other waterproof substances in form of sheets, to cover over the perforated parts of the cases not overlaid by the skins, &c., that the fluids used may be afforded no passage except by percolating through the skins, &c.

No. 25,046.—CHARLES A. ROBBE, of Augusta, Ga.—*Improvement in Gas Retorts*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A gas generating chamber of a retort, made in two parts, when the said parts are constructed so as to lock together and form a tight joint by the simple act of sliding one portion into gear with the other, substantially as set forth.

No. 25,047.—THEODORE B. ROGERS, of Wetherfield, Conn.—*Improvement in Seed Planters*.—Patent dated August 9, 1859.—This improvement consists in so constructing and operating parts of seed planters, that the operator is enabled to sow and drop various kinds and sizes of seed, in drills or at any desired intervals; also, to cut the seed when it is larger than the ordinary size (the potato, for instance,) while the machine is in operation; also, forming the drill, covering it up again as the seed is planted, and marking off the ground on the right or left for the return of the row or drill, by the use and arrangement of the devices in this machine.



*Claim.*—The arrangement of slides I I<sup>1</sup> I<sup>2</sup>, lever L, former G, floats H, adjustable pins E, and markers R, as described, for the purpose set forth.

No. 25,048.—JAMES RUE, of Englishtown, N. J.—*Improvement in Cultivators.*—Patent dated August 9, 1859.—The draft animals are hitched to the bolt *h*, and the front end of the pole is secured to a cross bar resting on the necks of the animals, and as long as the rear of the pole is confined to the guide rods H by the pin *g*, the front ends of the shares will be raised from the ground, and the cultivator can be drawn from place to place.

*Claim.*—The arrangement of the loose draft pole G, bracket *f*, cultivator frame B H, hinged rods *a b*<sup>1</sup>, devices *i j h*, bracket *d*, and pin *c*, all arranged and operating substantially in the manner and for the purposes described.

No. 25,049.—EZRA D. SARGENT, of Indianapolis, Ind.—*Improvement in Seats and Couches for Railroad Cars.*—Patent dated August 9, 1859.—This invention consists in providing a simple and economical form and arrangement of seats and their backs, which can be changed into night couches from day seats, by a simple process.

The inventor says: I *claim*, first, the side lounge G, or nurse couch, constructed and arranged as and for the purpose set forth.

Second. Its combination with the backs *a L M*, seats F G H J, partitions P, brackets Z, and stops V; all arranged, constructed, and operated substantially as set forth in the specification.

No. 25,050.—JOHN SHAEFER, of Lancaster, Pa.—*Improvement in Grinding Cylinders for Apple Mills.*—Patent dated August 9, 1859.—The inventor says: The peculiar tangential curves of the teeth on the cylinders obviate the necessity of other cog gearing, their cutting edges allowing space for a large sized apple to lodge, which cannot escape, and is necessarily cut and effectually bruised into minute divisions as it passes between the cylinders.

*Claim.*—The tangential, curved, longitudinal, toothed cylinders A B, as set forth and described.

No. 25,051.—JOHN P. SHERWOOD, of Fort Edward, N. Y.—*Improvement in Nail Plate Feeders.*—Patent dated August 9, 1859.—This invention consists in a novel system of mechanism applied, in combination with the plate holder, for the purpose of producing all the necessary movements of the nail plate.

*Claim.*—The employment of the stationary inclined plane N, and the tumbler O, having an inclined face *k*, in combination with the arms *m m*<sup>1</sup> of the hollow shaft P of the plate-holder, and with the feed screw and nut, and the driving cam D, or their equivalent, the whole operating together substantially as described to produce the several movements specified

No. 25,052.—EVAN SKELLY, of Plaquemine, La.—*Improvement in Apparatus for Heating Evaporating Pans.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, in an evaporating pan, of a conical steam heater, with a central opening and a passage around its exterior and under its bottom, substantially as described.

No. 25,053.—N. B. SLAYTON, of Madison, Ind.—*Improvement in Securing Artificial Teeth.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, securing artificial teeth on plates of gold or silver, by means of an amalgam of gold or silver, or both, combined with mercury, substantially as described, for the purposes set forth.

Second. I *claim* forming, by means of said amalgam, an outer flange or rim *a*, covering and supporting the base of the teeth, substantially as and for the purpose set forth.

No. 25,054.—SOLOMON P. SMITH, of Crescent, N. Y.—*Improvement in Straw Cutters.*—Patent dated August 9, 1859.—The inventor says: By arranging the crank shaft and pitman with the knee jointed lever, knife, and straw box and cutter block, so that the crank shaft makes just one complete revolution while the knife makes one cut through the straw or other substance, and against the block D, and returns, the knee jointed lever F not only exerts a progressively increasing pressure upon the knife as the resistance offered by the straw increases, but the crank and the pitman M N at the same time also exert a progressively increasing pressure upon the knee jointed lever.

*Claim.*—The arrangement of a crank shaft M, pitman N, knee jointed lever F, knife C, with a straw box B and cutter block D, for conjoint use, as specified and shown by the drawings.

No. 25,055.—ABEL SPENCER, Jr., of South Port, N. Y.—*Improved Mortising Machine.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The frame made with cross heads connected together by means of the jointed rods



J J, and having those rods jointed at or nearly in line with the cutting edge of the chisel, and the mode of applying or using it, or any other manner substantially the same.

No. 25,056.—LAFAYETTE STEVENS, of Elmira, N. Y.—*Improved Machine for Tenoning Blind Slats*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* constructing the cutter head with grooved cheeks *f*, clamping nuts *k*, and bearing studs *j*, whereby the plane cutter knives *g*, are held in an oblique position with the plane of rotation, with the cutting edge of the operating one terminating in conjunction with that of the hollow hub *h* and shoulder *e*, arranged and operating substantially as and for the purpose set forth.

I also claim the combination and arrangement of the rest *K*, with stationary and movable upper and lower jaws *o p*, and gauge *q*, substantially in the manner and for the purpose described.

I further claim the arrangement of devices for gauging the length of the slat, consisting of the automatic stop bolt *t*, as operated by inclined plane *u*, and lever *v*, to cause the carriage to stop alternately at the fixed stop gauges *s* and *w*, substantially as described.

No. 25,057.—STEPHEN STEWART, of Philadelphia, Pa.—*Improved Burglar's Alarm*.—Patent dated August 9, 1859.—A is a box, of which one end is a hollow chamber, open at one end and having its sides extended, as shown at C, forming guides. B is an air chamber, airtight except at the open end, which receives the piston D. E is the piston rod connecting D with the crosshead F, and having notches in its upper side. G is a gum spring, fast at one end to the back end of box A and at the other end to the crosshead F. There is a similar spring on the other end of the box A. H is a lever, moving freely on a fulcrum on the upper side of box A.

*Claim*.—The combination of the several parts A B C D E F G H I J K L M N and O, as described, and arranged to operate substantially as and for the purposes set forth.

No. 25,058.—WILLIAM A. SUDDITH and JOHN F. SUDDITH, of Charlestown, Va.—*Improved Washing Machine*.—Patent dated August 9, 1859.—This invention consists in a semi-cylinder with a diagonal corner and spiral spring attached to the hinge part of the cylinder.

*Claim*.—The hinged part of cylinder as set forth in drawing at Fig. 7.

No. 25,059.—GEORGE S. TAPLEY, of Bristol, Conn.—*Improvement in Sewing Machines*.—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the movable cup *g* and its appendages, for gripping and automatically releasing the shuttle at intervals, substantially as specified.

I also claim the construction and arrangement of the feed apparatus, as and for the purpose set forth.

No. 25,060.—HORACE TRUMBULL, of Jersey City, N. J.—*Improvement in Machines for Washing and Separating Ores after being Pulverized*.—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The application to a rotary buddle or table, such as described, of vibrating brushes, when the same are arranged and operated essentially as specified.

No. 25,061.—OTIS TUFTS, of Boston, Mass.—*Improvement in Elevators or Hoisting Apparatus for Hotels, &c.*—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, for the purposes of elevating, the combination of the screw and the passenger car or platform.

Second. I claim the construction of a screw for elevating, having stays or bearers at intervals, attached to the wall of a building or any fixed adjacent structure.

Third. I claim the construction of a nut with a slot or opening in the back or side, to enable it to pass by the bearings or stays before referred to, and as described.

Fourth. I claim constructing a nut or carriage with wheels or rollers running upon the thread of the screw, substantially as described.

Fifth. I claim controlling the descending motion of elevators or hoisting apparatus by means of fluid retarders, constructed substantially as described.

Sixth. I claim regulating the action of fluid retarders by means of a fly ball governor, or its equivalent, substantially as described.

Seventh. I claim the construction, arrangement, and operation of passenger cars of an elevator or hoisting apparatus, substantially as described; that is, providing the platform with side walls and doors or gates, said doors or gates being combined with suitable mechanism arranged in relation to stationary cams or projections on the gallery floors, or any contiguous parts of the building, so as to open and close automatically, in the manner and for the purposes substantially as set forth.

Eighth. I claim opening and closing the doors of the galleries or landings automatically,



y means of cams or projections on the car through a system of compound or multiplying levers, constructed and arranged substantially as described and for the objects set forth.

Ninth. I claim fastening and unfastening, automatically, the doors or gates of the cars by spring latches, or their equivalents, operated by cams or projections upon the gallery floors or adjacent walls of the building, substantially as described.

Tenth. I claim fastening and unfastening, automatically, the doors or gates of the galleries or landings by spring latches, or their equivalents, operated by cams or projections upon the car, substantially as described.

Eleventh. I claim the arrester  $w^1$ , in combination with the fluid retarder, for the objects and purposes set forth.

Twelfth. I claim passing the shipping rods and the cord or rod that operates the friction brake through the car or platform, for the objects and purposes set forth.

No. 25,062.—WILLIAM B. TWIFORD, of Chincoteague, Va.—*Improvement in Dumping Wagons*.—Patent dated August 9, 1859.—This invention consists of an open frame which has no rear end piece, and is fitted to have four wheels hung to it in combination with a crank axle, which is made stationary with said frame, and arranged so that it braces the frame near the centre of its length, and yet provides journals near the ends of the side pieces for the said wheels to turn upon, and with a wagon body, which works freely between the side pieces of the frame, and is pivoted to the same at a point near the centre of its length.

The inventor says: I claim the three sided, four wheel, open frame C, stationary crank axle B, and long wagon body D, when constructed and arranged for operating together, in the manner and for the purpose described.

No. 25,063.—FELIX TYLEE, of Cleveland, Ohio.—*Improved Spring Bed Bottom*.—Patent dated August 9, 1859.—The operation of this machine is as follows: Each part being constructed and properly adjusted, the mattress is placed upon the slats D D, of which a sufficient number must be provided to afford ample support. As the slat D receives the weight it is communicated to springs  $d d$  by means of supports  $f f$ ; the slats B B having also a portion of the weight imparted to them, a double or compound spring is thus given to the mattress.

The inventor says: I claim, first, the central support C, when the same shall be constructed substantially in the manner and for the purpose set forth and described.

Second. I claim the combination and arrangement of upper slat D, pin  $e$ , supports  $f f$ , with central support  $c$ , spring  $d d$ , and blocks  $a a$ , when all shall be constructed and arranged in relation to each other as fully set forth and described.

No. 25,064.—LORENZO TYLER, of Havana, New York.—*Improvement in Machines for Sowing Fertilizers*.—Patent dated August 9, 1859.—The inventor says: To use my invention put the fertilizer into the forward part of the box and raise the slide M, open the valve L, and adjust the slide J and proceed, and find by trial the quantity that is sown.

Claim.—The arrangement of the frame A, hopper B, partition N, adjustable slide M, valve L, cylinder H, concave I, adjustable slide J, and flexible clasps K, the whole being constructed and operated as and for the purpose set forth.

No. 25,065.—GEORGE H. VAN VLECK and HORACE TUPPER, of Buffalo, N. Y.—*Improved Hose Coupling*.—Patent dated August 9, 1859.—The inventors say: By turning down the edge of the male screw, whereby the same is provided with a guide, the use of double, or triple threads has been rendered practicable, and the rim E protects the ends of the threads from bruising, so that our couplings can be set up under all circumstances with equal facility.

Claim.—The arrangement on the thimble  $A^1$  of the head C, with two or more screw threads D, having its upper end turned down, as described, and being provided with a projecting rim E, to operate in combination with the thimble A and with the nut B, substantially as and for the purpose set forth.

No. 25,066.—AMSEY WARREN, of Westport, Conn.—*Improvement in Cultivators*.—Patent dated August 9, 1859.—This invention consists in the use of a rake, hoe blade, or shares, and a parting or deflecting bar attached to a mounted frame, having a handle secured to it by which the device may be shoved along manually between the rows of the crop under cultivation, and the soil pulverized and weeds eradicated.

Claim.—The parting or deflecting bar D, hoes or shares E E F G, and rake C, when applied to a suitable frame A provided with wheels B, the whole being arranged and combined to operate as and for the purpose set forth.

No. 25,067.—JAMES F. WATERHOUSE, of Germantown, Pa.—*Improvement in Knitting Machines*.—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim first, the application of a drum 5, or its equivalent, with detachable pegs, to operate a series of independent thread guides having independent springs, when constructed and operating substantially as set forth and for the purposes specified.



Second. The striker V, or its equivalent, constructed and arranged in respect to the thread guides, and operating substantially as specified, so as to control such of the thread guides as are not under the control of any of the pegs in the drum.

Third. Moving the pegged drum, or its equivalent, at intervals, first in one direction and then in another, by means of the revolving disk 3, and its two inclined projections, in combination with the ratchet wheel 2.

Fourth. Imparting a combined lateral and vertical reciprocating motion to the needle bars, by means of the devices described, or their equivalents.

No. 25,068.—JEPHTHA AVERY WILKINSON, of Brooklyn, N. Y.—*Improved Machine for Receiving and Piling Paper*.—Patent dated August 9, 1859.—This invention consists in projecting the sheets through the air in such a manner that they fall in regular succession upon each other, and are taken away by an endless apron, or equivalent device, to be stacked up in reams, or folded ready for use.

The inventor says: I *claim*, first, the accelerating bands  $p^1 p^3$  and roller  $o$ , arranged and acting as set forth, to project the sheets of paper successively over each other, as they subside in the air, and in combination with the foregoing parts, I claim the endless apron receiving such sheets as specified.

Second. I claim the retarding bands  $q$  and  $s$  and  $q^2$ , in combination with the delivering bands  $p^1 p^3$ , for the purposes specified.

No. 25,069.—JEPHTHA AVERY WILKINSON, of Brooklyn, N. Y.—*Improvement in Rotary Presses*.—Patent dated August 9, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the curved demi-grab  $c$ , with the sliding clamp 6 and lip 5, for the purposes as specified.

Second. I claim the curved compositors' shield  $C^3$ , for the purposes specified.

Third. I claim the arrangement of the proof cylinder B, and rollers  $c b$  for inking the type on the proof cylinder, as described and shown.

Fourth. I claim the plate  $a^1$  and roller  $b^2$ , for giving pressure in taking a proof from the types on the cylinder B, as set forth.

Fifth. I claim the horizontal gudgeon  $a^3$  and binding screw to secure the proof cylinder, and facilitate the correcting of the types, as set forth.

Sixth. I claim the movable clamping segments  $d^1$  at the heads of the type or proof cylinders to secure the types in place, and also allow for the removal of portions thereof, as specified.

Seventh. I claim revolving the type cylinders in a trough containing alkaline or other suitable solution for washing the types as specified.

Eighth. I claim the apron  $f$  for leading the paper into the press, and on which said paper lies, while receiving the first impression against the cylinder K, thereby said feeding apron becomes also the tympan sheet, as set forth.

Ninth. I claim a curved arch or bridge, over which the paper or fibrous material passes, to give direction thereto and prevent buckling or twisting, as described and shown.

Tenth. I claim corrugating or forming ribs on said curved bridge in diverging lines, so as to spread the paper widthways, as the same passes over the bridge, as specified.

Eleventh. I claim the auxiliary frame F, hinged into the main frame F, and carrying the upper linking apparatus, by the elevating of which both type and cylinders are exposed to view or can be lifted out of their place for varying the composition or otherwise, as set forth.

Twelfth. I claim the manner specified of throwing off both impressions by raising the auxiliary frame  $F^1$  and lowering the impression roller K, for the purposes and substantially as described and shown.

Thirteenth. I claim in a rotary printing press an endless tympan sheet, let off a sufficient distance, and so fitted that the offset from the ink of the first impression does not again reach the paper until removed or sufficiently dry, so as not to produce blurring or offset on the paper, as specified.

Fourteenth. I claim the arrangement of the ink rollers  $l^1 l^2 l^3 l^4$ , in the manner and for the purposes set forth, whereby the rollers  $l^1 l^2$  act to supply the required amount of ink to the rollers  $l^3 l^4$ , that supply and work the ink on the cylinder I or  $I^1$ , as specified.

Fifteenth. I claim the arrangement of the ink rollers  $i^1$  and workers  $k k^1$ , in their adjustable bearings  $i^2 k^2$ , substantially as and for the purposes set forth.

No. 25,070.—ERI WILLS, of Augusta, Me.—*Improvement in Stump Extractors*.—Patent dated August 9, 1859.—The engravings represent a perspective view of the machine, which consists of a frame O O, tongue P, shaft A, two wheels R R, ratchet device H G I, levers F F, and rope or chain B.

*Claim*.—The combination of the frame O O, tongue P, and shaft A, with the wheels R R, ratchet device H G I, levers F F, and chain B, constructed and arranged in relation to each other as and for the purposes set forth.

No. 25,071.—A. P. WINSLOW, of Cleveland, Ohio.—*Improvement in Roofs for Railroad*



*Cars.*—Patent dated August 9, 1859.—The inventor says: The plates here shown are curved for the purpose of conveying all moisture or wet that may get under the roof A to the centre of the plates from the sides and grooves. Straight, angular, or corrugated plates may be employed instead of plates D.

*Claim.*—The plates D, caps F, and grooved rafters B, when arranged substantially as set forth for the purpose described.

No. 25,072.—J. F. WISNEWSKI, of Cincinnati, Ohio.—*Improvement in the Preparation of Glycerine.*—Patent dated August 9, 1859.—The object of this invention is to produce pure glycerine from the refuse or waste water resulting from the manufacture of stearic acid, which is usually thrown away as useless. For a description the reader is referred to the specification.

*Claim.*—The employment or use and introduction of the within named chemicals, in the relative quantities, manner, and combination described, for the purposes set forth.

No. 25,073.—EDWARD F. WOODWARD, of Brooklyn, N. Y.—*Improvement in Skeleton Skirts.*—Patent dated August 9, 1859.—This invention consists in the employment of an extending elastic sectional skirt, attached at the top and sides to the extension skirt behind, thereby making a double skirt at that part, and forming from the intersecting lines two sections of circles of nearly equal radii, whose centres are separated according to the distance required.

*Claim.*—The sectional extension skirt, when combined and attached to the circular skirt, the whole being arranged and constructed in the manner and for the purpose set forth.

No. 25,074.—ALBERT H. WRIGHT, of Camden, N. J.—*Composition of Matter for Ornamental Purposes.*—Patent dated August 9, 1859.—The claim explains the nature of this invention.

*Claim.*—The composition of the matter described, the same consisting of the clay and sulphur with the emery, or its substitute, combined together substantially as and for the purposes described.

No. 25,075.—JOHN K. WRIGHT, of Philadelphia, Pa.—*Improved Machine for Printing in Different Colors.*—Patent dated August 9, 1859.—This improvement consists in hanging the rollers for imparting one color to frames independent of those to which are hung the rollers for printing the other colors, and the frames being adjustable longitudinally in respect to each other, whether one printing roller on each independent frame be used to print on one side of the fabric or two rollers be used on each frame for printing both sides of the fabric simultaneously.

*Claim.*—Hanging the rollers used for printing separate colors and patterns on separate frames D E, and constructing and arranging the said frames so that they may be adjusted independently of each other on the rails B, as and for the purpose set forth.

No. 25,076.—NATHAN AMES, of Saugus, Mass., assignor to Himself and WARD McLEAN, of New York.—*Improvement in Revolving Stairs.*—Patent dated August 9, 1859.—This invention consists in arranging steps or stairs upon an inclined endless belt, chains, or ropes, or in attaching the stairs or steps together by links or joints, so as to form an endless inclined flight of steps or stairs, which are placed on, over, or around rollers, so that the stairs or steps shall serve as elevators when motion is transmitted to the rollers.

The inventor says: I *claim*, first, arranging steps or stairs upon an endless belt, or in any manner equivalent, and placing them over rollers, substantially as described, so as to form a revolving flight of stairs which may be used both as a common flight and as an elevator.

Second. The triangular arrangement of the stairs, as shown substantially in Fig. 3, whereby an endless flight is made to pass around three rollers, B D D, for the purpose described.

Third. The double parallel arrangement, as shown substantially in Figs. 1 and 3, whereby ascending and descending flights are placed side by side.

Fourth. The use of auxiliary stationary steps or stairs, to operate in connection with the revolving stairs, substantially as and for the purpose set forth.

Fifth. The employment or use of rods or slots, to operate in connection with the slotted stairs, substantially as described, and for the objects specified.

No. 25,077.—L. S. BALDWIN and LUCIUS PARKS, of Le Roy, N. Y., assignor to L. S. BALDWIN, aforesaid.—*Improved Construction of Lightning Rods.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the employment of a quadrangular tube of sheet metal, with spiral fluted sides A, in combination with the straight central supporting rod B, substantially in the manner and for the purpose set forth.

No. 25,078.—R. EICKEMEYER, of Yonkers, N. Y., assignor to Himself and E. UNDERHILL,



of said New York.—*Improvement in Sewing Machines.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the angular supporting plate F, with a needle applied and arranged to work through an opening in the angle of the said plate, and obliquely to both faces of the said plate, substantially as described, for the purpose of sewing obliquely through any substance supported in the angle of said plate.

Second. I claim the combination of the angular supporting plate, the obliquely arranged needle, and a looper, applied and operating so as in its movements to follow the angle of said plate, substantially as described.

Third. I claim the combination of the looper *v w*, constructed with a two pronged hook, and having a triple movement, as described, with a stationary guide 25, applied and arranged relatively to the needle and the angular supporting plate, substantially as described.

Fourth. I claim the arrangement of the feeding dog and presser, in a swinging frame I, so applied, in combination with the angular supporting plate, as to provide for the introduction and removal of the hats to and from the machine, substantially as described.

Fifth. I claim the slide, fitted as described to the angular plate F, opposite the feeding dog, with its face recessed behind the general surface of the plate, as shown in Fig. 7, and having applied to it a spring S, by which it is operated as described, in combination with the feeding dog, for the purpose set forth.

Sixth. I claim the plate 26, with its lips 27 28, applied substantially as described, in combination with the plate F.

No. 25,079.—ASAHEL ELMER, of Shabbona Grove, Ill., assignor to NATHAN ELMER and R. M. PRICHARD, of said Shabbona Grove.—*Improvement in Portable Capstans and Crabs.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—So combining with the truck wheels or ground supports a capstan and crab, and a flexible rigging, as that the power of the team that draws the apparatus and works the capstan may be used for setting or anchoring the said crab and capstan, as well as to raise it up, reload it on the truck, and transport it from place to place, substantially as described.

No. 25,080.—ISAAC GOODSPEED, of Norwich, Conn., assignor to Himself and GEORGE A. MANSFIELD, of Boston, Mass.—*Improvement in Bomb Lances.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the compound wing described, consisting of the wing proper *d*, the lever *f*, and the pin and slot at *g*, the whole being combined, arranged, and operated substantially as herein set forth.

Second. I claim the construction of a projectile having a prismatic shank with guiding wings of copper or any thin substance, fixed to the exterior surfaces of the prism in such a manner as to expand in coincident plates, substantially in the manner and for the purposes set forth.

No. 25,081.—LOUIS KOCH, of New York, N. Y., assignor to himself and H. FORSTRICK, of said New York.—*Improvement in Railroad Station Indicators.*—Patent dated August 9, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The apron or band K, with the names of the streets or stations on the line of the route marked thereon, attached to and working on rollers I I, or a revolving plate, or stationary plate and revolving index, when said apron, plate, or index are operated from the running gear of the car by suitable mechanism to give the same a continuous movement and simultaneous with that of the car, for the purpose set forth.

No. 25,082.—MORRIS POLLAK, of Hoboken, N. J., assignor to MORRIS TALKEMAN, MORRIS POLLAK, and SOLOMON WEIMER, of said Hoboken.—*Improved Double Clasp Hook for Watch Chains, &c.*—Patent dated August 9, 1859.—This invention consists in a peculiar construction of double clasp hook that becomes an independent article and is used to connect the ring of the watch with the ring or eye on the guard or vest chain or other article, said hooks being so constructed that the spring mouths are simultaneously opened, so that the operator is aided, for he can open one mouth and insert the ring in the other.

*Claim.*—The S shape or double clasp hook formed by the disks *b b*, and clasp jaws *d d*, on the centre pin *c*, that passes through the middle of the bent piece *a*, substantially as set forth.

No. 25,083.—GILBERT L. BAILEY, of Portland, Me.—*Improved Machine for Punching Holes in Leather.*—Patent dated August 16, 1859.—This invention consists in providing a hollow tube or cutter, and so connecting it with a lever, connecting rod, and treadle, that it may be operated by the foot of a person, while the hands are left free to handle the article to be punched.

The inventor says: I *claim*, first, the arrangement and combination of the bed piece L, lever A, and hollow cutter C, provided with a standard D, connecting rod E, and treadle H, as and for the purpose set forth and described.



Second. I claim the arrangement, as set forth, of the circular adjustable cutter bed D, in such a relative position to the cutter C as to accomplish the object specified.

No. 25,084.—WILLIAM T. BARNES, of Buffalo, N. Y.—*Improvement in Sewing Machines.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, working the needles vertically and alternately in the same hole in the bed plate, substantially in the manner and for the purpose set forth.

Second. I claim the arrangement of springs 5 and 7, wedge 10, finger 6, spring 18, and stop 20, substantially in the manner specified.

Third, I claim the arrangement of lever 13, slide 11, and lever 12, when said lever 12 is provided with points, is pivoted to slide 11, and made to operate substantially in the manner described.

Fourth. I claim the arrangement of the ratchet wheel *a*, serrated bar *c*, and ratchet *e*, with the spool rod and lever C C<sup>1</sup>, substantially as set forth.

No. 25,085.—MELLEN BATTEL, of Albany, N. Y.—*Improvement in Steam Generators.*—Patent dated August 16, 1859.—This invention consists in the employment in the furnace or flue of a boiler of vertical water tubes, with closed bottoms, suspended from the crown sheet or top plate and extending downward near to the fire or bottom of the furnace or flue and upward through the crown sheet above the surface of the water and combined with inner tubes which extend to near the bottoms of those first named.

*Claim.*—The combination with the tubes C C, extending downward through the tube sheet, or crown of the fire box, or downward into a flue, and upward through the water above the tube sheet of the inner tubes D D, applied in the manner described for the purpose set forth.

No. 25,086.—THEOPHILUS D. BERRY, of Lowell, Mass.—*Improved Clothes Rack.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the construction of my clothes rack, with divided centre, or of two sections, each to consist of centre piece A, slats F, braces H, and circumferential pieces E, united to each other as described, when these two sections are combined with each other by plates C, so hinged as to allow the rack to be folded and opened, both vertically and circumferentially, in the manner described, to obtain by this divided centre a rack suitable for use, when folded closely and circumferentially, for the purposes set forth.

No. 25,087.—EZEKIEL BOOTH, of Troy, N. Y.—*Improvement in Sewing Machines.*—Patent dated August 16, 1859.—This invention relates to that class of sewing machines in which two threads are used for forming a loop stitch, by means of a needle and looper. It consists in providing said looper with an auxiliary lever, which, when the needle is descending, will force the looper thread away from the looper, thus leaving a space between both, through which the needle may descend.

The inventor says: I *claim*, first, the combination of an eye pointed vibrating lever, and a looper, operating together substantially in the manner and for the purpose set forth.

Second. I claim the vibrating of the eye pointed lever by a positive motion given to it by the rollers *t t* entirely, and as contradistinguished from the use of a spring of any kind, by which means I ensure its reliable action under its rapid motions, as set forth.

No. 25,088.—MARO BRADLEY, of Dundee, Ill.—*Improvement in Horse Rakes.*—Patent dated August 16, 1859.—A represents the thills of the rake; B is the rake head, which is of cylindrical form and fitted in a suitable bearing *a*, at the back part of the thills; C represents the rake teeth, which are constructed of wire coiled around the rake head, and having their ends secured to the metal bars *b*, which are bolted or screwed longitudinally to the rake head, and having recesses *c* formed in their inner sides, to receive the coils of the teeth.

*Claim.*—The use of the recessed metal bar *b*, spurs E F, rods or shoes B, elastic bar I, lever J, slide rod K, and projection G, the whole being constructed and employed together, in the manner and for the purpose substantially as described.

No. 25,089.—JOHN DAVID BROWNE, of Cincinnati, Ohio.—*Improved Cabinet Furniture.*—Patent dated August 16, 1859.—This invention consists in the mode of constructing cabinets, so as to form either an inclosed or open front cabinet, and also to enlarge or extend the top.

*Claim.*—The arrangement of the folding ends C C<sup>1</sup>, as set forth, and the flaps or leaves E E<sup>1</sup>, hinged on the inside, for the purpose substantially described.

No. 25,090.—HENRY BURT, of Newark, N. J.—*Improved Door Fastener.*—Patent dated August 16, 1859.—This invention consists in an improved construction of metallic fastenings for the inside of doors, &c. These fastenings are to be placed on the door casings or jamb, instead of upon the door itself.

*Claim.*—A permanent door bolt, made with the fastening plate *b*, bolt case *a*, and bolt *c*, secured and operated as described.



No. 25,091.—JOSEPH CALEF, of Buffalo, N. Y.—*Improvement in the Running Gear of Carriages.*—Patent dated August 16, 1859.—This invention consists in the arrangement of jointed arms, or braces, in connection with the forward gear.

The inventor says: I *claim* the journal box E, constructed substantially as described, and combined with the friction rollers B, or slides W, for the purposes set forth.

The combination of the axle A, journal box E, friction rollers B, and equivalents, and hub D, for the purposes set forth.

The arrangement of the jointed braces L M N, in combination with the running gear of carriages, for the purposes set forth.

No. 25,092.—WILLIAM S. CARR, of New York, N. Y.—*Improved Water Closet.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* regulating the action of the cock or valve in water closets by the joint operation of the lever and weight of water in the pan, substantially as specified, whereby the cock or valve is kept open until the weight of water in the pan regulates the closing thereof.

I also claim the construction of the valve *c*, with the balancing diaphragm 12, valve 10, and spring 13, as set forth.

No. 25,093.—H. CHANCEY, of Perry, Ga.—*Improvement in Machines for Dressing Stones.*—Patent dated August 16, 1859.—The shaft R is placed directly under the pick or hammer shafts N N, and one end of the shaft has an arm *k* attached to it at right angles, said arm having a rod *l* connected to it; S is a driving shaft, which is placed on the framing A, and has a fly wheel T placed on it, and also a pulley *m*, the latter having a belt *n* passing around it from pulley K.

*Claim.*—The arrangement of the pick or hammer shafts N N, adjustable shaft R, and adjustable traverse bar P, when combined or used in connection with the reciprocating carriage C, and laterally moving or adjustable bed U, in the manner and for the purpose set forth.

No. 25,094.—ABRAM H. CLEAR, of Providence, R. I.—*Improvement in Pipe Connections for Steam Boilers.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Making the connections between the injection pipe or other similarly submerged pipe of a steam vessel, or any other vessel, with the side or exterior of the vessel, by means of a valve box situated within or between the inside and outside planking of the vessel fitted with a valve, capable of being operated by a screw, or its equivalent, by a person on or above the deck of the vessel, substantially as described.

No. 25,095.—JOSEPH H. CLIFTON, of New Castle, Pa.—*Improvement in the Manufacture of Machine Belting.*—Patent dated August 16, 1859.—The object of this invention is to obtain an article of belting that shall be strong, durable, and cheap.

This invention consists in so preparing goods of almost any fibrous material by successive coatings of size, rosin, and plumbago, that they shall possess, when completed, the above-named qualities in a high degree.

*Claim.*—The process of manufacturing belting for machinery from fibrous materials, substantially as described.

No. 25,096.—JOSEPH H. CLIFTON, of New Castle, Pa.—*Improvement in Belting for Machinery.*—Patent dated August 16, 1859.—This invention consists of a new article of manufacture made by so preparing a belt or band of fibrous material by successive coatings of size or starch, resinous substance, and plumbago, that it shall, when completed, be cheap, strong, and durable, and answer as a substitute for India rubber, gutta percha and leather.

*Claim.*—As a new article of manufacture, belting made of fibrous material by the process set forth.

No. 25,097.—EDWARD K. COLLINS, of Chili, N. Y.—*Improvement in Clover Bolts.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination and arrangement of two bolts in clover machines, when said bolts have a counter and upward movement produced in the manner and for the purposes specified.

No. 25,098.—THOMAS S. COX, of Lafayette, Ind.—*Improvement in the Mole of Drain Ploughs.*—Patent dated August 16, 1859.—This invention consists in forming the terraducts B on either side of the shank A in such a shape as to carry from the bottom of the ditch to the top, and deposit it in the rear of the shank A, which, by means of the elevated end of the mole C, entirely closes up the perforation made by the shank A.

*Claim.*—The peculiar shape of the mole C. By the forward movement of the mole C the



earth is carried from the bottom of the ditch by means of the terraducts B, from the point of the mole D, to the rear of the shank A, and pressed more densely by the increased earth coming in contact with the convex end of the mole C, in rear of the shank A, in such a manner as to make a better arch, and more durable than any heretofore made, leaving the bottom of the ditch almost entirely uncompressed; hence I do not claim anything except the invention of the terraducts B, ending in the convex on the top of the mole C.

No. 25,099.—JOHN H. CRANE, of Charlestown, Mass.—*Improved Carpet Sweeper*.—Patent dated August 16, 1859.—This invention consists in the means described, for extending, to any desired distance, the length and amount of surface of the belt, in contact with the carpet.

*Claim*.—The arrangement of belt, rotating guides, and driver pulley, operating in combination with carpet sweepers, essentially as set forth.

No. 25,100.—THOMAS B. DE FOREST, of New York, N. Y.—*Improvement in India Rubber Springs for Railroad Cars, &c.*—Patent dated August 16, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Composing a spring of a series of blocks or segments of a circle of vulcanized India rubber, placed and held between two parallel plates, or equivalents, substantially as described; but this I only claim when the series of blocks are so arranged and held between the two parallel plates that their contiguous faces shall not come in contact under light loads, but shall come into contact and give mutual support as the load increases, substantially as and for the purpose specified.

No. 25,101.—THOMAS DOUGHERTY, of Macon, Ga.—*Improvement in Switches for Railroads*. Patent dated August 16, 1859.—This invention consists in two movable flat bars of steel or iron, for the purpose of preventing the train from running off the rails when the switch is wrong.

*Claim*.—The combination and arrangement of the flat bars A A and the stationary end plates C C, provided with the guide rails D D in connection with the rails G, when constructed and operated substantially as and for the purpose set forth.

No. 25,102.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improvement in Self Releasing Whiffletrees*.—Patent dated August 16, 1859.—This invention consists in having two rods fixed longitudinally on the back of a whiffletree by metal guards, each provided with an oblique slot, through which passes a pin projecting from the rods; and in operating these rods with a rocking motion, so that they will recede from each other in locking or affixing the traces, and approach each other in detaching them.

*Claim*.—Operating the two rods simultaneously by means of the slotted guards D D, in combination with boxes G G and lips c c, in the manner and for the purposes specified.

No. 25,103.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improvement in Attaching Thills to Vehicles*.—Patent dated August 16, 1859.—This invention consists in attaching to the axle swivel coupling boxes, having elliptical eyes in their ends, and in forming on the ends of the thill irons fluke shaped enlargements, which will pass freely through the eyes in the coupling boxes when the boxes are turned so that the eyes stand perpendicular to the axle; and then, by turning the boxes one quarter round and fixing them in this position by hinged gates, the shafts will be securely attached to the axle.

*Claim*.—The combination of the swivel coupling boxes E, having an elliptical slot through their ends, thill irons having fluked portions G, and hinged gates J, or their equivalents, substantially as shown and for the purposes specified.

No. 25,104.—JACOB EDSON, of Boston, Mass.—*Improved Carpet Sweeper*.—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* producing the motive power of the machine by means of a belt of rubber or gutta percha interposed and running between the pulley or roller n and the surface to be swept or passed over, as set forth.

I also claim arranging the guiding wheel i upon the stationary hollow shaft or bushing K, through which the axle of the bush shaft passes, as described and for the purposes specified.

No. 25,105.—ASAHEL ELMER, of Shabbona Grove, Ill., assignor to NATHAN ELMER and REUBEN M. PRICHARD, of said Shabbona Grove.—*Improvement in Mole Plough*.—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, in combination with the adjustable block B on the plough beam, the scoring or levelling plough D in advance of it, substantially as and for the purpose described.

Second. I also claim, in combination with the plough beam and coulter, the swinging



weighted crane or lever for preventing the careening of the plough or for recovering its proper position after it has careened, substantially as described.

Third. I also claim the combination of a forked coulter, for cutting a wedge shaped or tapering slice over the coulter gash, with a pressing or driving device for forcing down said slice, and thus packing the coulter gash, as described.

Fourth. I also claim a mole or former, made of a series of conical shaped sections, which increase in size as they recede from the coulter, and which are so linked together as that they may move in a horizontal plane, but be comparatively rigid in a vertical plane, substantially as described and represented, and for the purpose set forth.

Fifth. I claim, in combination with the mole *L*, the scorer or shoe *m* on its rear section or end, said scorer forming a groove or channel in the bottom of the finished drain for admitting the water into it, the sides of the drain being so closely packed as to prevent the water from entering there, said scorer being constructed and arranged as represented.

No. 25,106.—DAN R. ERDMANN, of Philadelphia, Pa.—*Improved White Lead Apparatus*.—Patent dated August 16, 1859.—This invention consists of certain improvements in the machinery for producing white lead, to wit: a cylinder which rotates in a vat containing water, and both ends of which are closed by means of a double layer of wire netting with a piece of flannel between them, so that none but the very finest particles of pure white lead can escape from the cylinder; the vat is furnished with a tube which is carried nearly all the way round on the inside of the vat and near its top, and from which a number of branches extend nearly down to the bottom of the same.

*Claim*.—A rotary cylinder *C*, arranged with double wire nettings *d*, in combination with a vat *A*, provided with a tube *F*, substantially in the manner and for the purpose specified.

No. 25,107.—ALEXANDER FOROT, of Paris, France.—*Improvement in Fabrics*.—Patent dated August 16, 1859.—The claim explains the nature of this invention.

*Claim*.—The manufacture of a new kind of fabric without weaving, composed simply of threads glued upon a base of paper or any other suitable kind of material, such fabric being left plain or ornamental, by embossing, or any other process, substantially as described.

No. 25,108.—BENJAMIN FULGHUM, of Richmond, Ind.—*Improved Sawing Machine*.—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination and arrangement of the two frames *B C*, placed one within the other, and arranged substantially as described, so as to admit of the saws being adjusted vertically, and also moved horizontally, forward and back, for the purpose set forth.

Second. The arrangement of the shafts *g*<sup>1</sup> and *F*, with their respective gearing *f*<sup>1</sup> *p*, and the pulley *J*, in connection with the two reciprocating frames *B C*, whereby the saws are rotated, and at the same time have a reciprocating motion communicated to them.

Third. In combination with two circular saws *d*<sup>1</sup> *w*, the inclined ways *e e*<sup>1</sup>, of the log carriage *I*, for the purpose set forth.

No. 25,109.—H. P. GENGEMBRE, of Allegheny, Pa.—*Improvement in the Manufacture of Coal Oils*.—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The continual progressive and gradual destructive distillation of coal, or other bituminiferous substance, for the purpose of obtaining therefrom the different products of distillation by means and with the use of the apparatus described or other equivalent.

No. 25,110.—CHARLES GOODYEAR, of New Haven, Conn.—*Improvement in the Manufacture of Porous Rubber Cloth*.—Patent dated August 16, 1859.—The claim explains the nature of this invention.

*Claim*.—As a new porous manufacture, pervious to air and water repellant, composed of a woven or equivalent fabric, and a thin porous coating of India rubber or allied gum, substantially as described.

No. 25,111.—CHARLES GOODYEAR, of New Haven, Conn.—*Improvement in India Rubber Fabrics*.—Patent dated August 16, 1859.—The claim explains the nature of the invention.

*Claim*.—The porous and water repellant manufacture, composed of a bat or fleece of cotton or other fibre and India rubber, or allied gum, united and rendered porous, substantially as specified.

No. 25,112.—JOSEPH GRUNWALD, of New York, N. Y.—*Improvement in Clasps for Skeleton Skirts*.—Patent dated August 16, 1859.—*A* is a plain clasp or buckle through which the tape is drawn, so as to form a loop through which the steel springs are passed and held tight by the friction as soon as the tape is pulled tight. *B* is similar to *A*, only provided with a small projection or nose *o*, which enters the tape when pulled tight to give an addi-



tional security and prevent the tape from moving when the same should become a little loose.

*Claim.*—The combination of the hoops or springs with the tape, by means of clasps, constructed substantially as described and represented by Figs. 3, 4, and 5, and for the purpose specified.

No. 25,113.—JAMES HAMILTON, of New York, N. Y.—*Improved Cross Cut Sawing Machine.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the manner herein described of arranging the shaft *d*, and its gear wheel *f*, and bevel gear *r*, in connection with the bevel gear *s*<sup>1</sup>, and gear *s*, on the shaft *l*, so that said shaft *d* can be changed to stand horizontally and give motion to the saw, whether the said saw and the gearing thereof be in a horizontal or vertical position, substantially as specified, thereby adapting one machine to be moved by hand in felling trees or sawing up logs, as set forth.

I also claim, in combination with the aforesaid machine for sawing logs, the detachable frame *v*, buck *w*, and variable lever *x*, for holding smaller logs while being sawed for firewood, substantially as specified.

No. 25,114.—A. HAMMOND, of Jacksonville, Ill.—*Improvement in Mole Ploughs.*—Patent dated August 16, 1859.—This invention consists in extending a portion of the tooth out behind the standard and forming a furrow or groove in the upper surface of the same diminishing as it reaches the extreme end, for the purpose of closing up the opening left by the standard to prevent the ditch from filling up again; it also consists in forming, or affixing in any suitable way, a fin or angular shaped knife to the sole of the shoe, to open a place along the bottom of the ditch for allowing the water to pass up into the same and be drained off from below the ditch.

*Claim.*—The shoe *E*, provided with a knife *N*, and projection *L*, when the same are arranged and operate in the manner and for the purposes herein set forth.

No. 25,115.—B. S. HEALEY, of Cohocton, N. Y.—*Improvement in Self Acting Wagon Brakes.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of a forked pole, arranged substantially as described, with the hounds, whereby the pole is free to slide in its forks and operate the brakes without moving the forks backward in the hounds.

In combination with brakes pivoted to a fixed bar, as described, I claim the brake blocks, arranged and connected with the brakes as set forth, whereby the friction of the wheels on the blocks draws the brakes toward and causes them to press with greater force against the wheels.

No. 25,116.—WILLIAM M. HENDERSON, of Baltimore, Md.—*Improvement in Car Seats.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the construction of a railway reclining chair or couch securely attached to the floor of the car, with the whole chair reversible, so as to face either end of the car, substantially as described.

Second. The mode of varying the height of the back of the chair, by making it in two pieces and suspending the lower portion, substantially as described.

Third. In combination with a chair, reversible as aforesaid, I claim the double acting foot board, single reversing leg rest, and means for extending it by the action of the arms of the chair, substantially as herein described.

No. 25,117.—ROBERT HENEAGE, of Buffalo, N. Y.—*Improved Hose Coupling.*—Patent dated August 16, 1859.—The male part of the coupling has a conical part *A*, on which two screw segments *B* and *C* are formed; a shoulder *D* is also formed at the base of the conical part; the hose is attached in the usual manner to the cylindrical extension *E*; upon the cone extension, and beyond the screw sections, is placed a packing of rubber or leather, as shown at *K*.

*Claim.*—The arrangement of the screw sections *B* and *C*, and packing *K*, upon the cone extension *A*, as set forth.

No. 25,118.—H. C. HUNT, of Ottumwa, Iowa.—*Improved Vise.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Constructing a vise in such a manner that it will self retain itself upon a table or bench, substantially in the manner set forth.

No. 25,119.—JOHN W. HUNTLEY, of Lanes Creek, N. C.—*Improvement in Cotton Seed Planters.*—Patent dated August 16, 1859.—This invention consists in the employment of a



vertical rotating arbor shaft placed centrally within a conical hopper or seed box armed with teeth and used in connection with a follower and gatherer.

*Claim.*—The vertical rotating toothed shaft H, in connection with the follower or gatherer J, placed within the hopper G, and arranged for joint operation, substantially as and for the purpose set forth

No. 25,120.—LEVI S. IVES, of Brooklyn, N. Y.—*Improvement in Millstone Bushes.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the placing, substantially as set forth, of a cylinder D, which contains the spindle collar B, blocks F, and the adjusting wedges G, within a cylinder M, secured within the centre of the bedstone, the cylinder D being allowed a vertical movement or play within the cylinder M, to permit of the vertical adjustment of the spindle, and consequently the runner or upper millstone, with but little friction, and keeping all the parts in position so as to prevent their derangement.

Second. The arrangement of the plates J K L, with the washer I and ring H, or their equivalent, in connection with the projection *d*, on the inner side of the cylinder D, substantially as described, to prevent the casual turning of the blocks with the spindle.

Third. The plate N, provided with the flanch O, and the dome shaped cap P, provided with the flanch Q, in connection with the cap T and plate *g*, the above parts being attached respectively to the cylinder D, spindle collar B, and driver R, to form an air and a dust chamber, substantially as and for the purposes set forth.

No. 25,121.—H. R. JEROME, of Monroeville, Ohio.—*Improvement in Mole Ploughs.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of a beam, carrying a mole plough, with the front and rear standards of the front and rear propelling wheels, and with the adjusting device, substantially as and for the purposes set forth.

Second. Providing the coulter with a series of notches and arranging the draft chain in one or other of said notches, and thus having the draft applied directly to the coulter, substantially as and for the purposes set forth.

Third. The combination of a coulter which is elliptical in form, in its transverse section, with a mould which is conical at its front and rear ends, substantially as and for the purposes set forth.

No. 25,122.—WILLIAM B. JOHNS, of the United States Army.—*Improvement in Apparatus for Lighting Gas Burners.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Giving the wrench staff the jointed sections E and F, so that a match inserted in the extreme section may illuminate the burner key while the gas is being turned on, and also serve as a torch to ignite the gas.

No. 25,123.—THOMAS J. JOLLY, of Olean, Ind.—*Improved Washing Machine.*—Patent dated August 16, 1859.—This invention consists in an arrangement of a sliding table operated by a treadle in combination with a revolving rubber.

*Claim.*—The described arrangement and combination of the treadle I, sliding table C, and rotary rubber D, the whole being constructed and operating in the manner and for the purpose set forth.

No. 25,124.—MORRIS L. KEEN, of Rogers' Ford, Pa.—*Improved Machinery for Manufacturing Artificial Fuel.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination and arrangement of the mills, conveyors, mixing and heating cylinders, moulding and conveying apparatus, substantially in the manner and for the purpose described.

Second. I also claim the combined use of the moulding apparatus, and of the tank or reservoir of water, for the purpose of receiving and moulding the heated and plastic material in said tank of water, for cooling the machinery and fuel, and for preventing the material from adhering to the machine, substantially as described.

Third. I also claim the combination of the endless apron with the moulding apparatus, operating in a tank or reservoir of water, substantially in the manner and for the purposes described.

No. 25,125.—HAZARD KNOWLES, of New York, N. Y.—*Improvement in Clasps for Fastening Bands on Cotton Bales, &c.*—Patent dated August 16, 1859.—The leading objects of this invention are so to couple the ends of the straps that but little time and skill will be required in making the application, and to effect the coupling by simply inserting the end in the coupling or clasp, and so, without punching holes, or bending, or otherwise weakening the strap or hoop, the ends thereof shall be firmly griped to resist any force applied to draw them out.



*Claim.*—The method of securing straps by means of a roller, substantially such as described, in combination with the wedge formed mortise of the sleeve, which receives the strap, substantially as described.

No. 25,126.—S. S. LANGDON, of Cleveland, Ohio.—*Improved Churn.*—Patent dated August 16, 1859.—This invention consists in an improved construction and arrangement of rotary churns.

*Claim.*—The described construction and arrangement of rotary churns, when the same are provided with the dash frame K and chambers E, and the whole constructed, arranged, and operated substantially as set forth.

No. 25,127.—JOEL LEE, of Galesburgh, Ill.—*Improvement in Mole Ploughs.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the two swords fitting closely together, the front one attached to the mole near the forward point, the rear sword pivoted near the rear point of mould.

Second. The lever, in combination with the swords, for operating or adjusting the front sword and the mould.

No. 25,128.—JOHN MAGEE, of Lawrence, Mass.—*Improvement in Stoves.*—Patent dated August 16, 1859.—This invention consists in an arrangement of a pot, grate, hot air chamber, ring, ash grate and register and ash pit together, and with direct and descending and base flues.

*Claim.*—The arrangement of the pot grate A, the hot air chamber F, the ring grate B, the register G, and the ash chamber H, together and with direct, descending, and base flues, substantially as specified.

No. 25,129.—JOSEPH P. MARKHAM, of Penfield, Mich.—*Improved Tuyere.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the use of the indented valve K, in combination with the outlet passages H, constructed and arranged substantially as herein described, in such manner that, by moving said valve back and forth underneath the outlet, it will admit the wind to or shut it off from said outlet, equally and gradually, on each side of the central tube I.

Second. I claim the mode of making the loose nozzle J, independent of the masonry for support, by the use of the tube I and its socket, in combination with the ribs G G G G and corresponding rebates, substantially as set forth.

No. 25,130.—RUFUS MAXWELL, of Tucker county, Va.—*Improved Towel Rack.*—Patent dated August 16, 1859.—The inventor says: I make an opening at *c* of a fourth of an inch, through which the towel is passed into the slot. The screws 1 and 2 are to fasten the rack to the wall or ceiling, or it may be suspended from the wall or ceiling by cords.

*Claim.*—The construction of racks for endless towels, with a slot *a b* and opening *c*, substantially as and for the purpose described.

No. 25,131.—CHARLES H. McALEER, of Chambersburg, Pa.—*Improvement in Binding Apparatus for Harvesters.*—Patent dated August 16, 1859.—In operating this machine the raker, who rides upon the machine, by a sweep of his rake deposits the cut grain upon the curved arms *b b* of the apparatus, when one of the binders placing his foot upon the treadle *f* elevates the gavel and compresses it between the curved arms *b b* and the posts of frame D D, and grasps the band which he had previously thrown longitudinally across the shaft *e* and tie *t*, when he transfers the sheaf to the tables or seats C C, where it is bound and discharged.

*Claim.*—The apparatus or elevator for raising and compressing the gavel, constructed and operating in the manner substantially as described.

No. 25,132.—WILLIAM HOWARD MITCHELL, of San Francisco, Cal.—*Improvement in Rotary Movement.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, two or more reversed, self-detaching pawls or catches, working on opposite sides of the periphery of the ratchet wheel, by being attached to arms working in parallel lines and in the same direction, constructed and operating substantially as and for the purposes specified.

I also claim the combination of the ratchet wheel R, with the pawls or catches P and P<sup>1</sup>, and flanges E, and the cross beam B with parallel arms G, substantially for the uses and purposes set forth.

I also claim the combination of the ratchet wheel with the flanged casing or flanges.

No. 25,133.—GEORGE I. MONTJOY and JOEL B. SAWYER, of Houston, Texas.—*Improved Rotary Steam Engine.*—Patent dated August 16, 1859.—This invention consists of a rotary engine with a new arrangement of passages and a reversing cock or valve, in combination



with the passages in a stationary hollow shaft and abutment, and with a suitable system of pistons.

*Claim.*—The arrangement of the passages in the double elbow piece  $E E^1$  and the reversing cock or valve  $F$ , in combination with the passages in the stationary hollow shaft  $D$  and its abutment  $H$ , the whole applied in connection with the cylinder and its sliding pistons, to operate substantially as described.

No. 25,134.—WILLIS G. MURPHY, of Seguin, Texas.—*Improvement in Seed Planters.*—Patent dated August 16, 1859.—This invention consists of certain devices for dropping corn and cotton seed at the same time, or in dropping one kind of seed alone.

*Claim.*—The arrangement of the beam  $A$ , hopper  $C$ , wheels  $D J H$  and  $E$ , seeding wheel  $R$  and  $B$ , helve  $14$ , plough  $T$ , covers  $Q$ , and conductor  $V$ , as described, and for the purposes set forth.

No. 25,135.—RUDOLPH A. NATHURST and JOHN L. STEWART, of Nashville, Tenn.—*Improved Safety Rein for Bridles.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the connection of the choke strap with the common or ordinary driving reins, so as to act and serve for both purposes of driving and safety rein, substantially as described, and this we *claim*, whether it be temporarily or permanently affixed to the bridle or halter, whether a bit is used or not.

No. 25,136.—CÆSAR NEUMANN, of New York, N. Y.—*Improved Skeleton Skirt.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the jointed or hinged hoop supporters, and a series of horizontal hoops, when arranged and operated in the manner described and for the purpose set forth.

No. 25,137.—J. J. PARKER, of Marietta, Ohio.—*Improvement in Steam Slide Valves.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Placing the valves loosely on the hollow arms of the side pipe and contracting the supply openings from the valves, substantially in the manner described, for the purpose of employing the pressure of the steam to keep the valves in contact with their seats, as specified.

No. 25,138.—JOHN C. PEDRICK, of Washington, D. C.—*Improved Ball Furniture Casters.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Inserting into a metal cup containing the ball of a caster a separate anti-friction bearing  $f$ , against which the ball revolves, thereby lessening the friction of the ball in the metal cup or socket, as described.

No. 25,139.—THOMAS E. ROBERTS, of Alamance, N. C.—*Improvement in Trucks for Railroad Cars, &c.*—Patent dated August 16, 1859.—This invention consists in the construction of two cast-iron concave chilled plates, and securing one upon the bottom sill of the car, and the other upon the bolster of the car truck, with a double sided cast-iron chilled convex plate between; and in connecting and combining this centre bearing with self-oiling friction rollers at the ends of the bolster, to impart to the car body an easy motion, while the truck yields to all inequalities of the road.

*Claim.*—The construction and arrangement of the concave chilled plates  $B$  and convex chilled plates  $C$  with each other, in the manner described, and their combination with the self-oiling friction rollers  $G O H$ , for the purposes fully set forth.

No. 25,140.—JAMES H. ROOME, of New York, N. Y.—*Improvement in Shears.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Combining one limb  $C D$  of a pair of shears, or other similarly operating hand cutting instrument, with its handle  $E$  forming part of a separate lever  $E G$ , and combining the said limb and handle with the other limb of the shears by means of an arm  $f$  attached to the said lever  $E G$ , and operating on the rear portion  $D$  of the first mentioned limb, a link  $F$  connecting the said limb with the said lever, and a movable fulcrum connection  $g h$  between the said lever and the other limb, the whole operating substantially as described, to cause the power of the said lever to increase as the shears close.

No. 25,141.—WILLIAM N. ROWE, of Sharpsburg, Md.—*Improvement in Carriage and Wagon Jacks.*—Patent dated August 16, 1859.—This invention consists in combining a grease box with a carriage or wagon jack, in such a manner that the act of jacking the vehicle will open the grease box.

*Claim.*—The adjustable sliding catch plate  $B$ , operating as described, in combination with the grease box  $F$  and jack, as set forth and described.



No. 25,142.—JACOB RUPERTUS, of Philadelphia, Pa.—*Improvement in Percussion Pellets for Fire-Arms.*—Patent dated August 16, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The employment, for enclosing the detonating compound, of a metal capsule of spherical form, substantially as described.

No. 25,143.—JOHN SCHEEPER, of New York, N. Y.—*Improvement in Stoves.*—Patent dated August 16, 1859.—This invention consists in a peculiar arrangement of a fire chamber with ovens and flues whereby the radiation of heat from the stove is in a great measure prevented and retained to heat the several ovens, effecting a saving of fuel.

*Claim.*—The arrangement and combination of the fire chamber A, ovens B C D, and flues *k l l q q n n*, substantially as and for the purpose shown and described.

No. 25,144.—HENRY W. SHIPLEY and ZOHART BLAIR, of Mount Vernon, Ohio.—*Improvement in Grist Mills.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the husk A and cup A<sup>1</sup>, composed of lower and upper sections, the same being turned and fitted together as described, and supported upon a frame C for the purpose of making the whole portable and complete in itself.

We claim cementing the stone to the interior of the cup A, which also forms the upper husk, as specified.

We claim the cup M, constructed and fitted substantially as described, and cementing the stone thereto, so that both will revolve together.

We claim the bridge trees D and G, in combination with the husk A, cup A<sup>1</sup>, and frame C, when arranged and operating substantially as set forth.

No. 25,145.—HENRY SOGGS, of Columbus, Pa.—*Improved Butter Worker.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The tray *d*, with convex bottom and ends, set on an inclined plane of rollers, working in combination with the cylinder *a* and ribs *b*, for the purpose of working the milk and superfluous matter from the butter, at the same time leaving channels in said butter, through which the milk, &c., may escape.

No. 25,146.—DAVID STODDART, of San Francisco, Cal.—*Improvement in Slide Valves of Steam Engines.*—Patent dated August 16, 1859.—A is the steam chest, *a a* the valve seat, which is raised above the bottom of the steam chest, and B the slide valve; C is the balance frame, faced to fit the back of the valve, which is parallel with the face thereof, and D the flexible plate securing the balance frame to the cover E of the steam chest.

The inventor says: I *claim*, first, the employment of the elastic plate D, in combination with a cavity B and a balance frame C, substantially as and for the purpose shown and described.

Second. The combination of an adjusting spring *m* and screw *n*, with the elastic plate D, substantially as and for the purpose shown and described.

No. 25,147.—WILLIAM MONT STORM, of New York, N. Y.—*Improved Steam Generator.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the plan or method of conveying water from a closed tank or reservoir to the heating surfaces of a steam generator by capillary attraction, for the objects described.

Second. I claim so constructing and locating the said supply tank that the influence of the heat upon the water contained therein for feed, while elevating its temperature, shall in no case bring it up to the steam generating or boiling point under the given pressure.

No. 25,148.—FRANCIS M. STRONG and THOMAS ROSS, of Brandon, Vt.—*Improvement in Weighing Scales.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the arrangement of the bars C D, of the larger platform B, as shown, to wit: one lever crossing the other at about right angles, so that the knife edged bearings *b* of the foot pieces *a* of one lever will be at right angles to those of the other, and the lateral movement of the foot pieces on the bearings prevented.

We further claim attaching the arms E E of the levers C D, either separately or when connected direct to the beam G, and having the bar I of the scoop or smaller platform H rest on knife edged bearings *k k* on the beam, substantially as and for the purpose set forth.

No. 25,149.—B. F. STURTEVANT, of Boston, Mass.—*Improved Blank for Shoe Pegging Machines.*—Patent dated August 16, 1859.—This invention consists in the production of a ribbon, or blank of shoe pegs, cut from the circumference of the log of wood by revolving the log in contact with suitable cutters, by which the operator is enabled to make a blank of shoe pegs of uniform width and thickness, with smooth surfaces.



*Claim.*—As a new article of manufacture, a blank or strip of shoe pegs cut around the log, substantially as described.

No. 25,150.—N. G. THOM, of Cincinnati, Ohio.—*Improved Machine for Nicking and Trimming Heads of Screws.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a revolving or rotating head, which revolves around a series of spindles or blank holders, with an intermittent or interrupted motion, carrying upon it the necessary apparatus and tools for shaving, nicking, and trimming, or otherwise finishing the heads of screw blanks.

Second. In combination with the spindles or blank holders, I claim the annular cam *m*, having internal and external inclined surfaces, for the purpose of raising the spindle in the nicking process and operating the grippers by acting upon the one rod *b*.

Third. In combination with the spindles or blank holders, I claim the rod *d* and spring *e*, or its equivalent, when such a spring or equivalent is made to act upon the rod at required intervals, to discharge the blank, by being attached to some rotating or reciprocating portion of the machine.

Fourth. I claim the lever *r* and spring *n* and catch *l*, or other mechanical equivalent, which acts upon the machine, for the purpose of arresting one part while it releases another, substantially as described and for the purposes set forth.

Fifth. I claim the arrangement of the spindles and driving shaft in such a manner that, while the spindles containing the blanks to be shaved and trimmed are acted upon by the driving belt, the spindle containing the blank to be nicked is not acted upon, and the necessary tension is given the belt at all points in the revolution of the head without the use of a binder, substantially as described.

Sixth. In combination with the worm wheel *w*, or its equivalent, for giving motion to the cams, I claim the cam *Y* and tool cam *x*, when acted upon, in such manner that the said cams remain stationary while the head revolves, or nearly so, and the cams revolve while the head is stationary, substantially for the purposes set forth.

Seventh. I claim finishing the heads of screw blanks, by an apparatus, by which the necessary tools for finishing the head are revolved around the spindles or blank holders, whether such blank holders are stationary or otherwise.

No. 25,151.—ANDREW TURNEY, JR., of Fairfield, Conn.—*Improvement in Laying Submarine Telegraph Cables.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction and use of an apparatus consisting of two hollow cylinders A and B, with longitudinal joints or hinges, and two disks or flanges E and F, set obliquely to the cylinders, and a guide or regulating disk G, to be attached to a telegraph cable, while the cable is being submerged, to check the rapidity of the sinking and to afford a constant strain on it in the direction of the vessel which is paying out the cable, to avoid kinks or festoons, when the whole is constructed, arranged, and made to produce the result substantially as described.

No. 25,152.—JOHN WAGONER and ABRAM SEVERSON, JR., of Guilderland Centre, N. Y.—*Improved Washing Machine.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Mounting the revolving platform K and the pulleys and gearing P Q R, or their equivalents, on the hinged platform M, and so arranging the whole that, when M is turned up, the driving belt O<sup>1</sup> is slackened, and the whole lies within or by the side of the main frame; and when M is turned down the gravity of the tub, or equivalent vessel, tightens O and causes the several parts to operate without any labor in adjusting.

No. 25,153.—SAMUEL WETHERED, of Baltimore, Md.—*Improvement in Carding Engines.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a card clothed main cylinder for carding engines, which performs a lateral vibrating movement simultaneously with its revolution, substantially as and for the purposes set forth.

Second. A card clothed "fancy" or upper cylinder, which is capable of performing a lateral vibration as it revolves, in combination with a laterally vibrating card clothed main cylinder, substantially as and for the purposes set forth.

No. 25,154.—JULIUS WEHLE, of New York, N. Y.—*Improvement in Hat Measurers.*—Patent dated August 16, 1859.—This invention consists in making a hat measure with internal double handles, and a scale parallel with the circumference of the said hat measure, and fastened to the handles.

The inventor says: I *claim*, first, the dividing handle, in combination with the elastic oval strip A, for the purpose of contracting the said oval strip, substantially as described.



Second. The scale D secured to one of the handles, and passing through an incision of the other handle, in combination with the screw N, substantially as described, for the purpose set forth.

No. 25,155.—F. B. WILLIAMS, of Freeport, Ill.—*Improvement in Horse Power Machines*.—Patent dated August 16, 1859.—This invention consists in arranging a series of bevel wheels, toothed rings, shafts, and pulleys, in such a manner that the greatest velocity is obtained with the least amount of power, and that power may be transmitted from different places according to the required velocity.

*Claim*.—The arrangement and combination of the circular standard B, toothed rim B, ring C, pinions D, wheels E, pinion *e*, toothed ring G, and pinion H, to operate substantially as and for the purpose specified.

No. 25,156.—WILLIAM L. WILLIAMS, of New York, N. Y.—*Improved Machine for Bundling Kindling Wood*.—Patent dated August 16, 1859.—This invention consists in a machine that takes fire wood, as split up by a competent machine, and bundles the same by passing a wire, or its equivalent, around it, so as to secure the said kindling wood in such bundles of a convenient size for sale or handling.

The inventor says: I *claim*, first, the feeding clamps *f* and slides *d*<sup>1</sup>, arranged and actuated in substantially the manner and for the purposes set forth.

Second. I claim the combination of the separating and dividing knife *h*, with the concave wood carrier *h*<sup>2</sup>, to convey the wood to the bundling apparatus, as specified.

Third. I claim the sliding support *g*<sup>1</sup>, arranged and acting as set forth, to sustain the kindling wood as fed into the machine, and keep it in place, as described and shown.

Fourth. I claim the curved gatherers *i*<sup>1</sup>, fitted and acting as set forth, to deliver the bundle of wood and gather the next loose wood into a bundle, as specified.

Fifth. I claim the conical gathers *l* and *m*<sup>1</sup> to concentrate and compress the bundle of wood, as described and shown.

Sixth. I claim the stationary plate *k* and segments 15, in combination with the conical gatherer *l*, to sustain the wood while acted upon, as specified.

Seventh. I claim the plunger or press block *m*, acting to bring the ends of the bundle of wood level, as set forth.

Eighth. I claim the vertical moving frame *o*, forming the receptacle for the wire, and the guide for the apparatus that wraps said wire around the bundle of wood, as set forth.

Ninth. In combination with the frame *o*, I claim the chain 28 to wrap the wire around the bundle of wood, and the clamp *s*<sup>1</sup> to hold the wire near the middle part thereof, as described and shown.

Tenth. I claim the circular twisting jaws 30, moving in dovetails, and acting, when revolved by competent means, to twist the ends of the wires together, in the manner and for the purposes specified.

Eleventh. I claim the arrangement of the sliding and revolving shaft *t*, in combination with the twisting jaws 30, for the purposes set forth.

Twelfth. I claim the spring guides 25, to keep the wire straight while passed into the machine, in combination with the travelling jaw or clamp *p*, and with the shear 26, as described and shown.

No. 25,157.—JOHN ALEXANDER, of Brooklyn, N. Y., assignor to Himself and JAMES RICHIE, of said Brooklyn.—*Improvement in Patterns for Moulding*.—Patent dated August 16, 1859.—This invention consists in employing a "former," which may be made of wood, plaster of Paris, or other suitable substance, the exterior of the "former" corresponding in shape to the work to be cast, and equal in dimensions to its interior.

*Claim*.—The employment or use of a "former" C, with the pattern D, constructed of a plastic substance, and formed on or over the "former" C, substantially as described, to produce moulds in sand for the casting of hollow ware and other castings of the exact thickness required.

No. 25,158.—CHARLES BRADFIELD, of Philadelphia, Pa., assignor to C. STEWART BRADFIELD, of said Philadelphia.—*Improvement in Hanging the Bodies of Wheeled Vehicles*.—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, attaching the wheels C to the body A by means of the arms *e*, secured to the traverse bars *d* of the shafts or arbors *b b*, which are fitted on the flanches *a* and bearings *c c* of the plates B of the body A, and have springs D placed between their flanches *a*, and traverse bars *d*, substantially as and for the purpose set forth.

Second. Attaching the thills E to the body A, by means of the bars G fitted in the eyes *g*, and secured thereon at the desired height by set screws *h*, substantially as described.

No. 25,159.—CALVIN FLETCHER, of Cincinnati, Ohio, assignor to ADDISON C. FLETCHER, of said Cincinnati.—*Improved Apparatus for Supplying Furnaces with Hot Air*.—Patent dated August 16, 1859.—This invention consists in the employment or use of a series of metallic



steam chambers communicating at each end with chambers, one to receive the escape steam from an engine, and the other to receive the water of condensation; the above parts being used in connection with a fan, and the whole arranged so that the boiler or furnace may be supplied with a requisite amount of hot air.

*Claim.*—The specific arrangement, as hereinbefore described, of the fan I, and the steam chambers A, communicating with the chambers B C, together with the inlet steam pipe E, the cold air passages *a*, hot air pipes G I I, and the pipes F, for the discharge of the water of condensation, for the purposes set forth.

No. 25,160.—HIRAM L. HALL, of Beverly, Mass., assignor to the BEVERLY RUBBER COMPANY, of said Beverly.—*Improvement in Restoring Waste Vulcanized Rubber.*—Patent dated August 16, 1859.

The inventor says: In restoring rubber by this new process I first grind the rubber and reduce it to a finely divided state, and then place it in a close steam boiler, or other suitable vessel, into which steam is conducted through a steam pipe.

*Claim.*—The restoring of waste vulcanized rubber or gutta percha by the use of superheated steam, substantially in the manner and for the purpose described.

No. 25,161.—MILES B. HAND, of Handsboro', Miss., assignor to Himself and SHELDON B. HAND, of said Handsboro'.—*Improvement in Cotton Presses.*—Patent dated August 16, 1859.

This invention consists in operating the follower of the press by a combination of toggles and screws, arranged so that the same are rendered capable of a general application to all forms of presses, whether designed for animal or other power.

*Claim.*—The combination of the toggles C C, and screws E E, when the latter are connected to the driving or power shaft, or to a shaft connected therewith, by means of universal joints H H, substantially as and for the purpose set forth.

No. 25,162.—JOHN J. LAHAYE, of Reading, Pa., assignor to Himself and JOHN TUCKER, of Philadelphia, Pa.—*Improved Churn.*—Patent dated August 16, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The vessel B, cylinder C, and reciprocating plunger E, adapted to and arranged in respect to each other, substantially as set forth, in combination with the devices described, or their equivalents, for enlarging or contracting at pleasure the communication between the said cylinder and vessel, for the purpose specified.

No. 25,163.—CÆSAR NEUMANN, of New York, N. Y., assignor to ABRAHAM PRINCE, of Boston, Mass.—*Improved Machine for Making Hooped Skirts.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of a series of twisting apparatus, with guide rods, for the purpose of forming a hoop skirt, substantially in the manner and for the purposes set forth.

I also claim, in combination with the twisting apparatus, the elevating screw and its appendages, and the mode of operating the same, as described.

I also claim collapsing the guides to form different sized skirts and to deliver the same, as specified.

No. 25,164.—ROBERT POOLE, of Baltimore, Md., assignor to Himself and GERMAN H. HUNT, of said Baltimore.—*Improvement in the Fifth Wheel of Fire Engines and other Vehicles.*—Patent dated August 16, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Hanging the pivoted fifth wheel of a steam fire engine, or other heavy carriage, to a bolster when the latter plays within or over the axle of a vehicle, and is suspended to springs which have their bearings or seats on said axle, substantially in the manner and for the purposes described.

No. 25,165.—E. L. PRATT, of Philadelphia, Pa., assignor to Himself and R. B. FITTS, of said Philadelphia.—*Improved Meat Safe.*—Patent dated August 16, 1859.—This invention consists in the combined arrangement of a close cover perforated with numerous small holes at or near its upper part, and a stand or horizontal platform likewise perforated with numerous small holes, and supported at a short distance above the ground or floor in such a manner as to subject its contents to a free circulation of the lowest and coldest portion of the air of the said apartment.

*Claim.*—A new article of manufacture, being a combined arrangement of a cover A, perforated with small holes at the upper part *d*, and a stand B, also perforated with small holes *f*, substantially as and for the purpose specified.

No. 25,166.—JOHN B. WICKERSHAM and HENRY JENKINS, of Brooklyn, N. Y., assignor to the NEW YORK WIRE RAILING COMPANY.—*Improvement in Iron Fences.*—Patent dated August 16, 1859.—The claim and engraving explain the nature of this invention.



*Claim.*—Constructing railways, fences, and other articles by metallic bars intersecting each other, and united by a cast-iron ornament or connection, when one or more bars running parallel, or in one direction, pass through between two or more bars running in another direction, substantially as specified.

No. 25,167.—*ARCHELAUS WILSON*, of New York, N. Y., assignor to *D. A. HEALD*, A. L. *WILMARTH*, C. T. *MARTIN*, and *H. A. HURLBURT*, of said New York.—*Improved Mode of Lighting Gas by Electricity.*—Patent dated August 16, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* combining, with a gas or other burner, metallic points approaching but not coming in contact with each other, substantially as described; but this I only claim in combination with the inductive apparatus, substantially as described, for the purpose of effecting ignition by means of the electric discharge or spark, as specified.

I also claim combining with a galvanic battery, an inductive apparatus or coil, metallic points, and an electro-magnet, for the purposes specified and substantially as described.

No. 25,168.—*PETER ARNESON*, of Newark, N. J.—*Improvement in Machinery for Forming Hat Bodies.*—Patent dated August 23, 1859.—The inventor says: By this invention hat bodies may be formed in a very rapid and perfect manner, and as the plates *K K* are adjustable, the thickness of the layers of fur may be modified as required. By having the former, or cone *S*, placed relatively to the picker *O* and rollers *L L* no deflector or guide spout is required, the fur being drawn on the former or cone direct from the rollers *L L* and below the picker *O* by means of the suction blast, the picker serving to throw out the heavier mass of fur, so that it may be drawn on the “former” at a point opposite to the lighter portion.

*Claim.*—The arrangement and combination of the adjustable plates *K K*, perforated apron *C*, case *M*, feed rollers *L L*, and pickers *D O*, substantially as and for the purposes shown and described.

No. 25,169.—*ALFRED BETTELEY*, of Boston, Mass.—*Improvement in Shipper Gear for Pulleys.*—Patent dated August 23, 1859.—This invention consists in making the brake independent from the brake lever or bar operating it, and hanging upon a spring or its equivalent, which shall tend to keep it away from the surface of the pulley, excepting when borne and pressed against the same by a friction roller applied to the end of the brake lever.

*Claim.*—The combination of a brake lever, a friction roller, and an independent brake, applied and operating together and with shipping apparatus, substantially in the manner and for the purpose set forth.

No. 25,170.—*R. F. BILLINGS*, of Portland, Me.—*Improved Bed Bottom.*—Patent dated August 23, 1859.—This invention consists in having the bed bottom formed of a series of longitudinal slats, the ends of which are attached by straps to the hinged lids of boxes in which spiral springs are placed, and on which the lids rest, the ends of the boxes being fitted in slots on the ends of side rails, and retained therein by the slats and tension of the springs.

*Claim.*—The arrangement and combination of the side rails *A A*, boxes *B B*, provided with the springs *C* and hinged lids *d d*, and the slats *D* attached to the lids *d* by the straps *g*, substantially as and for the purpose set forth.

No. 25,171.—*A. BINGHAM*, of Talladega, Fla.—*Improved Bed Bottom.*—Patent dated August 23, 1859.—This invention consists in having the bed bottom formed of a series of longitudinal inclined slats, placed at suitable distances apart, their lower ends attached to a foot rail, which is pivoted to the side rails, and their upper ends attached to a head rail, the ends of which are fitted in curved guides attached to the side rails, each slat resting on a spiral spring, and the whole so arranged as to form an elastic bed bottom.

*Claim.*—The arrangement and combination of the longitudinal slots *C*, rocking foot rail *B*, rising and falling head rail *F*, and segment guides *G*, as and for the purpose shown and described.

No. 25,172.—*SEBA BOGERT*, of New York, N. Y.—*Improvement in Finger Rings.*—Patent dated August 23, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—An extension or divided finger ring, having its ends provided with a catch or fastening, substantially as and for the purpose set forth.

No. 25,173.—*CHARLES W. BROWN*, of Boston, Mass.—*Improvement in Grinding Mills.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, regulating the adjustable stone of a grinding mill that the stone may have a vertical adjustment, so as to grind finer or coarser at the same time; and that the pressure of the runner with respect to the stationary stone will be automatically equalized and be raised and lowered to free itself of any foreign substance getting between the two stones, by means of levers *I J* and vertical rod *N*, toggles *n n*, sliding collar *m*, and



weighted arms T T acting upon the movable bearing plate S, or the equivalents thereof, when the same are arranged and operated in the manner essentially as specified.

Second. I claim the method set forth for regulating the flow of the grain from the hopper M by adjusting the same vertically in the manner set forth.

Third. I claim the dead eye L, arranged with the eye in the upper stone A, and capable of being depressed or raised with the spindle G, for the purposes and in the manner specified.

No. 25,174.—C. P. BUCKINGHAM, of Mount Vernon, Ohio.—*Improvement in Cut Off Gear for Steam Engines.*—Patent dated August 23, 1859.—In this invention, when the stems E are raised by the action of the lifter L, the arms K, which extend near to the centre of the framing H, strike against the tripper N, adjusted in the top plate G of the framing H, so that the arms K strike sooner or later.

*Claim.*—The employment of the tripper N, when constructed and arranged as shown, so as to be adjusted and to trip both valves in combination with drops J, arms K, and lifters L, as set forth.

No. 25,175.—WILLIAM BURNET, of New York, N. Y.—*Improved Inkstand.*—Patent dated August 23, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The construction of an adjustable apparatus, made substantially as described, connected with the cover and a flexible bottom of an inkstand, so that at whatever height above the lower orifice of the funnel the ink in the main reservoir may be there shall always be a sufficiency and never an overflow in the funnel on opening the inkstand cover.

No. 25,176.—J. CARL, of Grenada, Miss.—*Improvement in Grinding Mills.*—Patent dated August 23, 1859.—The object of securing the upper stone to the shaft B by means of the hinged lever *a* is threefold: In the first place, the upper bearings of the shaft are thereby brought in such a position that it can be oiled, and that the dust and the flour from the stone cannot get to it so easily; secondly, by attaching the stone to the lever, which is pivoted to the shaft, its grinding surface can always adapt itself to the surface of the lower stone; and, thirdly, when the lower stone is raised by the action of the rod *f* and nut *h*, a direct pressure is exerted on the substance between the grinding surfaces of the stones independent of the weight of the upper stone which is secured to the shaft.

The inventor says: I *claim*, first, the arrangement and combination of the pivoted lever *a*, shaft B, stone C, and screws *d*, substantially as and for the purpose herein shown and described.

Second. The employment of a hinged top bar *g*, in combination with shaft B and stones C D, as and for the purpose shown and described.

No. 25,177.—H. M. COOMBS and L. W. NELSON, of Portland, Oregon.—*Improved Washing Machine.*—Patent dated August 23, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The construction of the clothes cylinder A, surrounded with air tubes having orifices for discharging air into the water, in the manner substantially set forth, in combination with the drying and washing cylinder D and fire chamber I, all arranged and combined in the manner and for the purposes specified.

No. 25,178.—CYPRIAN U. CRANDALL, JAMES H. CRANDALL, and HOZA A. HAWKINS, of Cameron, Ill.—*Improvement in Mole Ploughs.*—Patent dated August 23, 1859.—This plough is intended for cutting and forming subterranean ditches for the purpose of draining, &c. The two principal parts of which it is composed are the ditching or opening piece A G and the follower or former piece C D E H I. The ditching or opening piece is attached to the lower end of the standard F, to the upper part of which the team is hitched.

*Claim.*—The combination of the opening or ditching piece A G with the standard F and the peculiarly formed hinged follower or former, constructed and operating in the manner as and for the purposes set forth.

No. 25,179.—ELLIOTT H. CRANE, of Burr Oak, Mich.—*Improved Rat Trap.*—Patent dated August 23, 1859.—A represents a box trap; D is the door of the trap, said door being hinged at its upper end at *s*, near the top of the box, so that it hangs and swings backward and forward when required.

*Claim.*—The arrangement of platform *a*, spring C, strap *x*, spring *i*, and check *p*, with arms B B, provided with projections *n n*, spring H, and box A, provided with hanging door D, when the several parts are combined and operated substantially as and for the purpose specified.

No. 25,180.—HORACE H. DAY, of New York, N. Y.—*Improvement in the Manufacture of Ribbed Elastic Cloth.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the method substantially set forth of manufacturing ribbed



elastic cloth; that is to say, elastic cloth containing strands of rubber, by forming the strands of rubber upon the covering cloth to which they are to be permanently attached, in contradistinction to forming the strands separately and afterwards attaching the covering material to them.

I also claim the method substantially as set forth of spreading the gum upon the covering cloth and dividing into strands at one process, so that two operations are effected simultaneously, at different parts of the same apparatus.

No. 25,181.—LUCIUS DIMOCK, of Hebron, Conn.—*Improvement in Machines for Winding Thread*.—Patent dated August 23, 1859.—This invention consists in a method of cutting the grooves by which the operator substitutes for the single series of parallel grooves in each guide, two separate and distinct series of grooves, arranged obliquely, in opposite directions to the planes of revolution of the spools; the direction of one series corresponding with the direction which the thread has in one of its spiral layers, and the direction of the other series corresponding with the direction which the thread has in the next layer, and the two series being so arranged that neither interferes with the operations of the other.

*Claim*.—The arrangement and combination with the guide A of two separate and distinct series of grooves *b c*, having their channels cut on opposite angles, as and for the purpose shown and described.

No. 25,182.—JOSEPH DITTO and HENRY VAN BERGEN, of New York, N. Y.—*Improvement in Composition for Cement Roofing*.—Patent dated August 23, 1859.—This invention consists in the use of the residuum in the manufacture of kerosine oil with other waterproof glutinous materials, such as coal tar oil, turpentine, varnish, &c., all, or either of them, to be compounded and spread on the object to be covered, with a stiff brush, and then covered with fine dry mica; the residuum being the product of cannel coal in the manufacture of kerosine oil.

*Claim*.—The composition prepared and composed of the materials described, and in the proportions set forth, for the purpose of forming cement for roofing purposes.

No. 25,183.—DANIEL DODGE, of Keesville, N. Y.—*Improvement in Nail Machines*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a griper having a reciprocating movement towards and from forging or pointing machinery, and opening automatically at the outer extremity of its stroke, so as to allow the introduction, feeding forward, or removal of the rod, while it is in this position, but holding the rod fast at every other stage of its operation, and while in any other position, substantially as described.

And in combination with a so operating griper, I claim the employment of a gauge and a cutter, or cutters, operating in the described order of succession with respect to each other and the griper.

No. 25,184.—SETH W. EELLS, of Mansfield, Ohio.—*Improvement in Writing Fluids*.—Patent dated August 23, 1859.—The nature of this invention or discovery is in combining the following articles, viz: indigo, fuming (Nordhausen) sulphuric acid, iron, tannin, oil of cloves, creosote, and water.

*Claim*.—The manner of combining the above materials so as to prevent the oxidation of the indigo and other coloring ingredients, as specified.

No. 25,185.—EDGAR S. ELLS, of Troy, N. Y., assignor to C. G. KEENEY, of Manchester, Conn.—*Improvement in Knitting Machines*.—Patent dated August 23, 1859.—The inventor says: In the application of my improvement the needles may be of either the "spring hook" kind or of the "latch" variety, and arranged in the form of a cylinder, disk, or truncated cone; the sinker or device for feeding the yarn into the needles, and all other knitting appliances, excepting the devices for casting the loops of yarn off from the needles, remain as in any of the well known machines, and so does the position of the casting off device when in action.

*Claim*.—The combination and arrangement of the lever *e*, arm *h*, pin *j*, and slot *k* with the lever *l*, detent *n*, and springs *o* and *p*, substantially as and for the purposes described.

No. 25,186.—JAMES J. ESSEX, of Newport, R. I.—*Improvement in Elastic Bulb Syringes*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* so combining and arranging the bulb, air chamber, and delivery valve with each other and with the flexible section and delivery tubes, that the air chamber shall be above the delivery valve, and shall be, and shall remain while in use, upright, or nearly so, and under the control of the hand, which grasps and operates the bulb.

No. 25,187.—ALBERT FICKETT, of Rochester, N. Y.—*Improved Belt Fastening*.—Patent dated August 23, 1859.—This invention consists in inserting small loops or links made of



any suitable material into the ends of straps, and fixing them there by means of rivets *r*, as shown, where A B are two sections of a leather belt, one end of the links *l* being inserted and riveted into the end of the strap A and the other ends of the same links being attached to the end of the section B in a similar manner.

*Claim.*—The combination of the links *l l l* with the rivets *r r r*, said links being inserted in the ends of the belt, in the manner and for the purpose substantially as described.

No. 25,188.—ELBRIDGE FOSTER, of Hartford, Conn.—*Improved Easy Chair.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the application and insertion of the quadrant slide into the centre of each of the arms or scroll of the side rail, so as to be unseen when the back is up, in the manner as described.

Also, the application of the spring adjustable and extension back centre leg, in the manner and for the purpose described, the whole constituting a new article of manufacture for household use.

No. 25,189.—JAMES F. GAMBLE, of Concord, Pa.—*Improved Method of Feeding the Saw to the Stuff in Sawing Machines.*—Patent dated August 23, 1859.—This invention consists in moving the saw forward to the lumber, and not the lumber towards the saw.

*Claim.*—Moving the saw forward when cutting whilst the lumber is held stationary, substantially as set forth.

No. 25,190.—STACY A. GARRISON, of Union, N. Y.—*Improved Hub Reamer.*—Patent dated August 23, 1859.—A represents an arbor or shaft, on one end of which a screw thread *a* is formed; at the opposite end a square *b* is formed to receive a crank, with which to turn the arbor or shaft. In the arbor A two cutters *c d* are secured.

*Claim.*—The arrangement and combination of cutters *c d* and arbor A, as and for the purposes set forth.

No. 25,191.—WILLIAM GOODALE, of Clinton, Mass.—*Improved Machine for Making Paper Bags.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the pasting apparatus, consisting of the roller G, fitted to work in an opening in the bottom of a paste box, the spring H, or its equivalent, and the adjustable stopper *a*, all combined to operate substantially as described.

Second. The combination of the continuously revolving measuring rollers I I<sup>1</sup>, and the intermittently revolving feed rollers J J<sup>1</sup>, operating substantially as and for the purpose described.

Third. The drop N, operating in combination with the cutter B and the feed rollers, substantially as and for the purpose specified.

Fourth. Folding the paper around a plate Q, or flat piece of any material narrower than the bag itself, or of the same width but shorter than the bag itself, substantially as specified.

Fifth. The folders R R<sup>1</sup>, applied and operating in combination with the inclined planes *l l*, at the sides of the folding table C, substantially as and for the purpose set forth.

Sixth. The combination with the folding table and with a plate Q narrower than the bag to fold the bag upon, of one or more movable inclined planes *l*<sup>1</sup>, and creasing blades U, operating substantially as described.

Seventh. The drop Z, applied and operating substantially as and for the purpose described.

Eighth. The bar 21, applied to the vibrating roller frame, and operating in combination with the knock off *n*, substantially as and for the purpose set forth.

No. 25,192.—CHARLES GOODYEAR, of New Haven, Conn.—*Improvement in Porous Napped Rubber Fabrics.*—Patent dated August 23, 1859.—The claim explains the nature of this invention.

*Claim.*—A new porous manufacture or fabric, composed of a woven or other cloth, or equivalent therefor, and India rubber, or allied gum, rendered pervious to air and impervious to water, substantially as described, and with a face of flocks, clippings, or shearings of woolen or other fibres, or equivalents therefor, substantially as and for the purpose described.

No. 25,193.—RENSSELAER D. GRANGER, of Philadelphia, Pa.—*Improvement in Cooking Stoves.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Placing across the upper flue of a cooking stove a hollow box formed partition communicating with the external air, the said partition having two openings arranged in respect to the boiler holes in the top of the plate, as herein set forth, and the said openings having their inner surfaces perforated, as and for the purpose specified.

No. 25,194.—JOHN S. HAWKINS and REZIN HAWKINS, of Greenfield, Ind.—*Improvement in Harvesters.*—Patent dated August 23, 1859.—This invention consists in the construction of a mower and harvester, with a peculiar arrangement of the main frame and team shaft, in



combination with an adjustable frame for elevating and depressing the grain table, cutter, and reel; and also in an improved flexible shoe for grinding the points of the cutters in order to cut the grass close and yet prevent the cutters from being thrust into the ground, and also to avoid the heavy dragging of the front of the machine.

*Claim.*—The arrangement of the main frame and the team shaft in combination with the adjustable frame L, and hinged shoe or cutting apparatus T, constructed and operated in the manner substantially as described and for the purpose specified.

No. 25,195.—THOMAS R. HOPKINS, of Petersburg, Va., assignor to Himself and R. E. ROBINSON, of said Petersburg.—*Improvement in Screw Presses.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The use, in combination with the power screw of a press, or other machine, of two revolving nuts F F which are fitted to gear into the thread of said screw, and so arranged and operated upon, in order to give motion to the screw, that the upper one remains stationary while the lower one revolves, and *vice versa*, substantially as and for the purposes set forth.

No. 25,196.—ROBERT W. HILL, of Naugatuck, Conn.—*Improvement in Cooking Apparatus.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The portable cooking or heating apparatus described, composed of the hot air chamber A and fire pot B, when provided with ports C furnished with registers, with the partition c and draft apertures a, the whole being constructed and arranged as specified.

No. 25,197.—HERMANN HIRSCH, of Berlin, Prussia.—*Improved Marine Propeller.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The peculiar form and construction, substantially as described, of a propeller, whereby the centrifugal force obtained is made to cooperate with and increase the effect of the screw.

No. 25,198.—HERMANN HIRSCH, of Berlin, Prussia.—*Improvement in the Construction of Ships.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The form and construction, substantially as set forth, of the hull of ships, or vessels, whereby the possibility of the breakage of the keel is removed, and a normal form giving the maximum of steadiness, without retardation of velocity, is imparted to the bottom.

No. 25,199.—RICHARD M. HOE, of New York, N. Y.—*Improvement in Feeding Paper to Printing Presses.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the feeding mechanism, cutting apparatus, and the printing machine, or their equivalents, in the said combination for feeding the paper from a roll to a printing machine, and cutting or partially cutting it into sheets, as it passes along to be printed, as set forth.

I also claim making the cutter so as to leave the several sheets united in certain places, substantially as described, in combination with the conducting tapes, as described, or the equivalents thereof, so that the conducting tapes may pass around the cutter cylinder, as set forth.

And I also claim, in combination with the cutter cylinder and the grooved cylinders, substantially as specified, or the equivalents thereof, the employment of the two pressure rollers, or their equivalents, as described, for keeping the sheet distended.

No. 25,200.—CHARLES H. HUNTER, of Shelbyville, Ind.—*Improvement in Machines for Weighing Grain.*—Patent dated August 23, 1859.—This invention consists in the arrangement of parts by which the mouth of the sack is stretched open while the grain is put in and weighed by the scale to which the sack holder is attached.

*Claim.*—The combination of the scale beam or lever g, with bag holder H, secured to one end, and the standard C E, with rack and pinion for elevating and depressing the scale beam, when the whole is constructed and arranged substantially as described, for the purpose set forth.

No. 25,201.—OBED HUSSEY, of Baltimore, Md.—*Improvement in Harvesters.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the main ground wheel, seat, and platform when hinged to the main frame, substantially as described.

I also claim the raising and lowering of the entire frame, finger bar, and outside divider upon the two ground supports in a horizontal position, by means of a lever and its connections therewith, operated by the driver from his seat substantially as described and for the purpose set forth.



No. 25,202.—JACOB JENKINS, of Lynn, Mass.—*Improved Mechanism for Protecting the Upper of a Boot or Shoe while Applying the Sole.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the described arrangement of a shoe jack, (or the mechanism for supporting the toe and heel parts of a boot or shoe,) a guard or protector constructed essentially as set forth, (the same to be made to encompass the upper of a boot or shoe, or as much of it as extends above the bottom surface of the last,) and a clamping contrivance for adjusting the protector to the contour of the shoe, the whole being made to operate together, as and for the purpose set forth.

I also claim the above described application and arrangement of an adjustable guard to the protector, whereby the fitting of the outer sole to the insole and upper is not only greatly facilitated, but is rendered certain of being fixed in its true and proper position.

No. 25,203.—WALTER W. KELLY, of Reedtown, Ohio.—*Improvement in Scales.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The adjustable rack G, and platform H, constructed and arranged as described, in combination with the centre piece I upon which the rack and platform are placed, so that either one can be used at pleasure in the manner as specified.

No. 25,204.—W. R. LANDFEAR, of Hartford, Conn.—*Improved Pegging Machine.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in combination with the bar A, of the vertically and laterally moving box C, having a plate D, awl *h*, punch *i*, and inclined face *j*, arranged substantially as described and shown, so that on the descent of the plate D, the awl will enter the sole, and the inclined face *j*, will, while the awl remains in the leather, shove the bar A along laterally, thus insuring certainty and regularity of feed; and on the elevation of the plate D, the box C will be moved laterally by the spring *l*, the awl will be carried over the point where a new hole is to be made, and the punch brought over the previously made peg hole in readiness to drive home the peg on the next descent of the plate D.

Second. The combination with the vertically and horizontally moving box C, of the spring *l*, for giving a lateral movement to said box, and the adjusting screw *m*, for regulating the space between the peg holes, as shown and described.

Third. The arrangement and combination with the bar A, of the adjustable elastic plate E, against which the peg block is pressed, said plate being adjusted by means of the screw *p*, to suit any size of pegs, as herein shown and described.

No. 25,205.—D. L. LONG, of Dayton, Ohio.—*Improvement in Sleeping Berths for Railroad Cars.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement and combination of the jointed supporter *i i i<sup>2</sup> i<sup>2</sup> m n r*, and hinged seat and back A with folding berth *g g<sup>1</sup>*, screen *k*, and rest *l*, all constructed and operating so as to form two sleeping berths, substantially as described.

No. 25,206.—EUGENE MARTIN, of Waterbury, Conn.—*Improvement in Alloys.*—Patent dated August 23, 1859.—The inventor says: In my process I employ the following ingredients, and for the production of an alloy resembling jeweller's gold of from fourteen to sixteen carats. I employ them in the following proportion:

First, Lake Superior copper, 100 pounds; second, pure silver, (20 dwts to the ounce,) 16 ounces; third, quick lime, well pulverized, 1 pound 14 ounces; fourth, tartar, non-purified and pulverized, 12 pounds; fifth, zinc, 18 pounds 12 ounces: sixth, pulverized glass, 4 pounds 10 ounces.

*Claim.*—The process or mode or procedure, substantially such as described as applied with the ingredients such as described, and for the purpose specified.

No. 25,207.—JOHN M. MAY, of Janesville, Wis.—*Improvement in Pumps.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* cylinder B, in combination with part A, when constructed, arranged, and operated with piston C and pipe E, substantially as described, and for the purpose set forth.

I also claim the screw D, when used for the purposes of fastening and unfastening the stationary part of the pump in the well, or reservoir, to any suitable substance, substantially as and for the purposes described.

I also claim set screw N, in combination with the notch O, or projection P, or their equivalents, to form a catch or wrench for turning the screw D, and pump nearly in the path of a horizontal circle, in fastening and unfastening the stationary part of the pump in the well, or reservoir, substantially as described; the set screw N also serving to gage the descent of the piston and to protect the valves from injury, as set forth.

I also claim the devices consisting of springs G G, segment J, and lever H, when connected together substantially as described, and for the purposes set forth.



No. 25,208.—JOHN M. MAY, Janesville, Wis.—*Improvement in Pumps*.—Patent dated August 23, 1859.—This invention consists in using two cylinders in the construction of a pump, one working inside the other, and kept together by a set screw passing through the outside cylinder and the joint passing into a channel, or longitudinal groove in the inside cylinder, for the double purpose of gauging the stroke of the pump and keeping the two cylinders together while lowering the pump to its place for operating and removing it when necessary for repairs, the inside cylinder being attached to and moving with the pipe that conducts the water.

The inventor says: I *claim* the device for connecting together the cylinders and regulating the stroke of the pump in combination with the point or spike I, or its equivalent, when used in open wells; and I claim said device in connection and combination with the rod H, when used in drilled wells, substantially as and for the purpose set forth.

I also claim the collar F and springs *g g g g*, *g g g g*, when used in combination with the pump, or with the eduction pipe, and arranged substantially as shown.

No. 25,209.—HIPPOLYTE MONIER, of Paris, France.—*Improvement in Argand Gas Burners*.—Patent dated August 23, 1859.—This invention consists in a certain mode of combining metal with burnt clay, porcelain, or other incorrodible refractory non-conductor in an argand gas burner, whereby the manufacturer is enabled to use such incorrodible substance for those parts of the burner for which it is desirable, and to use metal for those other parts which it serves better.

*Claim*.—The construction of the argand burner, with its grate *a* and external tube *b*, of clay, porcelain, or other incorrodible refractory non-conducting material, and with its inner tube or stem of metal; the several parts being combined substantially as described.

No. 25,210.—RICHARD MONTGOMERY, of New York, N. Y.—*Improvement in Corrugated Iron Bridges*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the corrugated arch A B with the corrugated arch M N, constructed and arranged in relation to each other substantially as described and shown.

Second. The combination of the peculiarly formed blocks C and bed plates F with the abutment ends of the arches A B and M N, substantially as and for the purposes set forth.

Third. The combination of the blocks D and the bottom plates G with the rails K L and arches A B and M N, substantially as and for the purposes set forth.

No. 25,211.—BENJAMIN F. MOORE, of New York, N. Y.—*Improvement in Ladies' Bustles*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—An inflated bustle for ladies' dresses, formed with the projecting points, or scallops *d d*, in the manner and for the purpose specified.

No. 25,212.—DANIEL MURRAY, of Fairfield, N. C.—*Improvement in the Mode of Measuring Grain*.—Patent dated August 23, 1859.—This invention consists in the movable slides for cutting off the grain.

*Claim*.—The arrangement of the arms *a* and *h* in combination with the slides *b* and *f*, constructed and operating as described for the purpose set forth.

No. 25,213.—WILLIAM MURRAY, of Baltimore, Md.—*Improvement in Stamping Machines for Crushing Ore, &c.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of two or more stampers arranged on the same radial line, with two or more semi-circular inclined revolving lifting and dropping cams, which move together, and with a central driving shaft, substantially as and for the purposes set forth.

Second. Providing the semi-circular lifting and dropping cams, with a vertical joint about midway between their terminating ends and an oblong vertical slot at their rear, or highest ends, and attaching said ends by means of a set screw, or its equivalent, to the frame of the cams, so that the inclination of said cams may be adjusted to lift the stampers to a greater or less height, according to the force required to perform the operation of stamping, substantially as and for the purposes set forth.

No. 25,214.—RICHARD H. OSGOOD, of Columbus, Ohio.—*Improved Reciprocating Saw*.—Patent dated August 23, 1859.—This invention consists in providing square notches on the upper corner or top front of those of the teeth which do not pass through the whole of the log or timber, for the purpose of more easily raising the sawdust from the kerf.

*Claim*.—Providing the upper edges of saw teeth with notches *ff*, Fig. 1, substantially as described and represented, for the purpose of assisting to clear the kerf of sawdust.

No. 25,215.—JOHN L. POTT, of Pottsville, Pa.—*Improvement in Hoisting Apparatus*.—Patent dated August 23, 1859.—This improvement consists in placing the drum at such an



angle that it shall revolve in a plane parallel, or nearly so, to the two lines of rope, when the latter have traversed half their distance in combination with certain devices for guiding the lines of hoisting rope to their proper position on the drum.

*Claim.*—The inclined drum M, revolving in a plane parallel, or nearly so, to the lines of hoisting rope, in combination with the guide pulleys Q Q on the cross head R, the latter being operated from the shaft of the drum, through the medium of the screw K, or its equivalent, substantially as and for the purpose set forth.

No. 25,216.—JOHN B. QUIGLEY, of Trenton, N. J.—*Improvement in Tapping Water Mains.* Patent dated August 23, 1859.—When the hole is so far bored out as to leave only a thin shell, it is ready for the introduction of the female drill K, which is previously attached in the usual way to a service pipe; the female drill is then introduced and the piece E placed upon its head and held thereon by a pressure upon the end of the beam D, and by one or two blows it is driven through the pipe.

*Claim.*—The employment of the pivoted standards B, jaws C, adjustable beam D, adjustable swivel F, chain G, vertical sliding piece E, and female K, when the above parts are arranged and combined as shown and described.

No. 25,217.—THOMAS ROBJOHN, of New York, N. Y.—*Improved Inkstand.*—Patent dated August 23, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and combination of the ring D, cover D<sup>1</sup>, arm e, slotted projection E, and diaphragm G, so that by pressing down the ring D, the cover will open and the ink rise, and by releasing the ring the ink will fall and the cover D<sup>1</sup> will close, as and for the purpose shown and described.

No. 25,218.—CHARLES W. RUSSELL, of Philadelphia, Pa.—*Improved Method of Shaping Bonnets.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The described method of shaping bonnets, &c., by means of a cord, or its equivalent, which is wound over the several parts of the bonnet, and which is retained in its position by hooks a and d, or their equivalents, substantially as specified.

No. 25,219.—CHARLES W. RUSSELL, of Philadelphia, Pa.—*Improved Machine for Pressing Bonnets.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the adjustable roller l, or its equivalent, in such relation to the chain or rope which connects the treadle with the press lever D, that the direction in which the pressing iron acts can be controlled, substantially in the manner and for the purpose described.

No. 25,220.—AUGUSTIN P. SAMUEL, of New York, N. Y.—*Improvement in Rotary Engines.* Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the method of governing and working the pistons C D, by connecting their piston rods K K, through the roller holders L L and rollers M M, directly with the eccentric curve F, substantially as and for the purposes set forth.

I also claim the combination and arrangement, substantially as described, of the valves a and b, with and within the movable pistons C D, whereby such valves a and b are opened by the first motion of the piston rods K K, and before any motion is given the pistons C D, so that a passage is given to the steam within such pistons, and the steam admitted on both sides thereof, for the purpose of producing an equilibrium of pressure on each side of such pistons before they are put in motion.

I claim, also, the construction and arrangement, as above described, of the packing rings r s, acting against each other by inclined surfaces, the outer ring s being conical or tapering on both sides, and the inner ring r being tapering on one side only, towards the ring s, and the inner ring acting against the other by means of the spring z, or its equivalent, expanding it outward against the cylinder, and inward against the piston, for the purposes specified.

No. 25,221.—HEZEKIAH B. SMITH, of Lowell, Mass.—*Improved Mortising Machine.*—Patent dated August 23, 1859.—This invention consists in the arrangement of the adjustable fulcrum, lever, table, and extension rod with each other when they are combined with power mortising machines, for the purpose of giving in all cases only the necessary movement of the foot, and so that the foot may always, when operating the machine, be as near the floor as possible.

*Claim.*—The relative arrangement of the fulcrum D, lever E, connecting rod G, and table B with each other in the manner described, when combined with power mortising machines, for the purposes set forth.

No. 25,222.—GEORGE S. G. SPENCE, of Boston, Mass.—*Improvement in Stoves.*—Patent dated August 23, 1859.—The object of this invention is the better or more perfect combustion



of the smoke and gaseous or volatile products that may escape from the fuel while it may be in a state of ignition.

The inventor says: I *claim* the use of the conical inverted cup B, combined with the chain *f*, or its equivalent, in the manner and for the purpose set forth.

I also claim the combination of the air deflector in the fire place door register, and so as to operate therewith and deflect the entering currents of air upon or towards the ignited surface of the fuel as described.

No. 25,223.—ORANGE N. STODDARD, of Oxford, Ohio.—*Improvement in Sewing Machines*.—Patent dated August 23, 1859.—The subject of this invention is a yielding metallic loop check, which enters a channel or groove in a portion of the periphery of the hook.

*Claim*.—The yielding metallic loop check B *b*, operating in combination with a grooved hook A *a*, or its described equivalent, in the manner and for the purpose set forth.

No. 25,224.—ZURIEL SWOPE, of Lancaster, Pa.—*Improved Animal Trap*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the sinking bottom N, constructed as described, for closing the trap when acting in combination with the spring *g* and bait lever M, substantially as specified.

Second. I claim the counterbalance chamber H, constructed as described, and operating for the purpose of resetting the trap, as set forth.

No. 25,225.—H. K. SYMMES, of Newton, Mass.—*Improvement in Gas Retorts*.—Patent dated August 23, 1859.—The inventor says: In this invention, I close the openings of the flues by valves, which can be operated from the outside, and I charge the two ends of the retort at different times, so that one end is hot while the other is charged; and that, by closing the flue on this end, the gas arising from the fresh charge can be forced to pass through the whole length of the retort to the flue on the opposite end.

*Claim*.—The arrangement of the movable flues D with valves E in combination with retorts of double length, substantially as and for the purpose described.

No. 25,226.—CHARLES TAYLOR, of Little Falls, N. Y.—*Improved Ticket Holder for Railroads, &c.*—Patent dated August 23, 1859.—This invention consists in providing a ticket holder for railroads and other purposes with a spring clasp and an eye on the end of the spring clasp, and a spring hook and a link to connect them together.

*Claim*.—The eye E, spring clasp *c*, and spring hook B, in combination with the link D, or its equivalent, for the purpose described.

No. 25,227.—STEPHEN R. WEEDEN, of Providence, R. I.—*Improvement in Preparation of Candle-Wicks*.—Patent dated August 23, 1859.—This invention consists in the use of a plaited cotton wick, saturated with acetate of lead and then coated with silicate of soda or silica combined with any suitable alkali, whereby the wick is stiffened so that it will not bend too readily.

*Claim*.—A plaited or braided candlewick *c*, saturated with a solution of acetate of lead, or other substance, to aid combustion, and coated with a silicate, as and for the purpose set forth.

No. 25,228.—J. W. WETMORE, of Erie, Pa.—*Improvement in Railroad Chairs*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The T lip or jaw, as at *k l m* or *k<sup>3</sup> l<sup>3</sup> m<sup>3</sup>*; notching the web of the rail as at *e e*, and through these notches having the bottom of the jaw pass down and riveted or keyed under the base *g h*.

No. 25,229.—IRA WISEL, of Newbury, Min.—*Improvement in Water Wheels*.—Patent dated August 23, 1859.—This invention consists in making any wheel longer than the scroll or inlet or gate of water, with concave hooking brackets, and heads to support said brackets.

*Claim*.—The peculiar form of the buckets in combination with the rest of the wheel.

No. 25,230.—F. L. BUEL, of Manchester, Conn., assignor to C. G. KEENEY, of said Manchester.—*Improvement in Knitting Machines*.—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* attaching the mechanical device set forth to a knitting machine, namely, the thread guide *b*, lever *c e*, and arm *i*, substantially in the manner and for the purpose set forth.

Second. The arrangement of the lever *k*, connections *m n*, frame *h*, and arm I, substantially as described, and for the purpose set forth.

No. 25,231.—JONAS HINKLEY, of Clarksfield, Ohio, assignor to Himself and FREDERICK A.



WILDMAN, of said Clarksfield.—*Improvement in Sewing Machines.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the looper H and receiving spring hook J, when arranged so as to operate in the manner and for the purpose set forth.

Second. The combination of the deflecting hook G, the looper H, and the receiving hook J, essentially as specified.

Third. The lifting finger K, or its equivalent, operating substantially as set forth.

Fourth. The combination of the lifting finger K with the looper H and receiving hook J, substantially as described.

Fifth. The combination of the lifting finger, the deflecting hook G, the looper, and the receiving hook, arranged and operating substantially as described.

Sixth. the combination of the arm D<sup>5</sup>, link D<sup>6</sup>, and lifting bar D<sup>3</sup>, with the vibrating bar D<sup>4</sup>, and feeding hand D<sup>7</sup>, for the purpose described.

No. 25,232.—THOMAS R. HOPKINS, of Petersburg, Va., assignor to Himself and R. E. ROBINSON, of said Petersburg.—*Improvement in Cam Presses.*—Patent dated August 23, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Operating a press follower, or other part of the machine, which is calculated to give a gradual pressure by means of the combined agency of two differently toothed disks D D<sup>1</sup>, which revolve at unequal speeds, two sets of reverse acting cams *h g*, and intermediate friction rollers E, or their equivalents, substantially as described.

No. 25,233.—WILLIAM LINTON, of Baltimore, Md., assignor to JOHN JONES, of said Baltimore.—*Improvement in Machines for Making Clay Pipes.*—Patent dated August 23, 1859.—The plate A has an opening H, over which the two jaws C D move towards each other by means of levers or otherwise, and meet at the centre. The core mandrel E has two sizes, the larger F corresponding to the opening B in the plate A, and the smaller size E corresponding with opening G.

*Claim.*—The two sized permanent core or mandrel, in combination with the fixed die A and adjustable jaws C D, are constructed, arranged, and operated in the manner described.

No. 25,234.—EDWARD P. STEEN, of San Francisco, Cal., assignor to Himself and B. S. NICHOLS, of Sacramento, Cal.—*Improvement in Quartz Mills.*—Patent dated August 23, 1859.—This invention consists in arranging two stampers in a double cylinder, in such a manner that, by the action of the upper ends of the stems of the stampers (which at the same time form the pistons) as they strike against two valve pistons, the steam is changed and conducted to the two cylinders by means of cross passages, arranged in such a manner that when steam is admitted to one cylinder on the top it is exhausted from the bottom.

*Claim.*—The employment of stampers E E<sup>1</sup> when the same are operated by means of steam cylinders H H<sup>1</sup>, which communicate by the cross passages *e e*<sup>1</sup>; the change of steam being effected by the valve pistons J J<sup>1</sup> operating on the working beam L, and operated by the pistons G G<sup>1</sup>; the whole being arranged and combined substantially in the manner described.

No. 25,235.—BERNARD LAUTH, of Pittsburg, Pa., assignor to JONES & LAUTH, of same place.—*Improvement in the Manufacture of Iron.*—Patent dated August 23, 1859.—The claim explains the nature of this invention.

*Claim.*—A new article of manufacture made by rolling iron or steel in a cold state, for hardening and adding strength to it, without injury to its fibre, and at the same time reducing it in size, as set forth.

No. 25,236.—EDMUND BELLING, of New York, N. Y.—*Improvement in Lozenge Machines.*—Patent dated August 30, 1859.—This invention consists in the combination of a revolving or reciprocating knife with a power press, in such a manner that, after the lozenge dough is pressed through the perforated bottom in said press in a continued string, the lozenge will be cut off by the action of the said knife the required thickness.

*Claim.*—The combination of a revolving reciprocating knife with the lower part of a press, and operated simultaneously with the same, in the manner and for the purpose substantially as described.

No. 25,237.—ABRAHAM ANDREWS and HARRISON HALBACH, of Bernville, Pa.—*Improved Horizontal Wheel.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The curved concave buckets, having curved or eccentrically formed tops and bottoms, in combination with a spiral waterway or chamber underneath, and arranged within a box A, substantially as described and represented.

No. 25,238.—DOUGLAS BLY, of Rochester, N. Y.—*Improvement in Artificial Legs.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.



The inventor says: I *claim*, first, the combination of the segment of rubber B, or its equivalent, with the foot F and leg A, in the manner and for the purpose substantially as described. Second. I claim connecting the foot to the leg, by means of the cord C, or its equivalent, thereby dispensing with all joints, bolts, hinges, and metal straps, and the friction and noise to which they give rise.

No. 25,239.—JOHN C. BOYD, of Boston, Mass.—*Improvement in Elastic Hose Tubing*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, the hose made of flexible tubes, the same consisting of a woven fabric of cotton, hemp, or other fibrous materials, lined with or fastened to a layer or sheet of India rubber, or gutta percha, or any other waterproof composition, and the whole secured by rivets, substantially as described.

No. 25,240.—WILLIAM BOYD, of New Orleans, La.—*Improvement in Iron Ties for Cotton Bales*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—In combination with the splits, the use of a key having wings at each end to form the lock to the tie, when made and arranged as and for the purpose set forth.

No. 25,241.—JENN BRAINERD and W. H. BURRIDGE, of Cleveland, Ohio.—*Improvement in Tanning*.—Patent dated August 30, 1859.—The claim explains the nature of this invention.

*Claim*.—The improvement in tanning set forth, consisting in the immersion of the skins and hides in a tan liquor made from the digestion of the beforementioned plants, and the accompanying treatment of the skins and hides, by their immersion in the preparing liquid; the whole process being conducted in the manner set forth, whereby the valuable properties of the plants may be preserved for use; and this we claim, whether the above described tan liquor be used separately, or in connection with other substances containing tannin.

No. 25,242.—HENRY BREVOORT, of San Francisco, Cal.—*Improvement in Gold Amalgamators*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the drag, having upon its lower surface or shoe the combination of the blocks of rubbing surfaces *o* and channels *i*, the two being arranged reciprocally in the manner described.

I also claim combining with a revolving drag F a pan A, whose bottom is inclined and has the form of a circular trough, as represented in the drawing, so as to collect the mercury in mass.

I also claim combining an amalgamating pan and revolving drag with a galvanic battery, arranged in such manner that its poles are extended into the mass of material in the pan, and that the parts of the material are subjected in succession to the action of the galvanic current.

I also claim the employment of a solution of the nitrate of mercury, in connection with a galvanic battery and a friction amalgamator containing mercury, substantially as set forth.

No. 25,243.—HENRY BREVOORT, of San Francisco, Cal.—*Improvement in Quartz Crushing Machines*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the relative arrangement and combination of the curved grinding shoes E<sup>1</sup> E<sup>1</sup>, having their front edges beveled and inclined backwards from their outer corners, and caused to revolve, as described, so as to gather in and return the coarser fragments towards the centre of the series, substantially as set forth.

I also claim the arrangement and combination of a series of grinding shoes E<sup>1</sup>, with their front edges curved or inclined backwards, as described, with a corresponding inner series of reducing shoes E, so that the coarser fragments are redelivered in an inward direction to the reducing shoes, while the grinding and outward movement of the fine particles proceed continuously, substantially as set forth.

No. 25,244.—WILLIAM BRIGGS, of Norristown, Pa.—*Improvement in Gunlocks*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Constructing the stock A, and breech of barrel D, so as to be susceptible of and united to each other by the tang or breech pin C, and tapering screw pin E, and the spring hammer guard H, and trigger P, arranged and combined with stock A, essentially in the manner and for the purposes fully set forth.

No. 25,245.—R. S. CHURCH, of Manhattanville, N. Y.—*Improved Water Meter*.—Patent dated August 30, 1859.—This invention consists in arranging in an air tight vessel, or air chamber, a series of buckets of known capacity and of a peculiar form, in such relation to a hollow rotary chamber, which communicates with the supply pipe, that the water as it enters from the chamber into the buckets causes the same to rotate and to discharge their contents;



and it also consists in arranging in the above named air tight vessel a trough and discharge pipe which terminates in a separate chamber communicating with the air tight vessel by a passage closed by a valve in such a manner that the pressure of the air chamber regulates itself according to the head of water entering through the supply pipe.

The inventor says: I *claim*, first, the arrangement of a drum A, with the chamber B, and buckets C, as described, in combination with the trough G and the air chamber D, and operating substantially as and for the purpose set forth.

Second. The arrangement and combination of the trough G, the pipe H, the chamber I, the air chamber D, and the drum A, to operate substantially as and for the purpose specified.

No. 25,246.—H. S. CLARK, of Wyalusing, Pa.—*Improvement in Carriage Springs*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement and combination of the U shaped leaves B B, with the elliptical springs A A, as shown and described, so that the extremities of the leaves B B will approach each other, and will be secured to the centres of the springs A A, as specified.

No. 25,247.—F. J. CRISSEY, of Leesburg, Va.—*Improvement in Washing Machines*.—Patent dated August 30, 1859.—This machine is operated as follows: The frame E being removed from the shaft D, a sufficient quantity of water is put in the tub, and the articles to be washed are put around the shaft D and the frame E is again replaced; then by pressing on the handles equally on both sides, and revolving the rollers to and fro, the articles will be thoroughly washed.

*Claim*.—The arrangement of frame E, supports *i i*, upright shaft D, rollers B, supports *c c c*, and collar G, in combination with the bottom of the tub, when the parts shall be constructed and arranged in relation to each other, as substantially set forth.

No. 25,248.—ADDISON CROSLY, of Fredonia, N. Y.—*Improved Valve for Steam Engines*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The employment, as an induction or eduction valve in a steam engine, of a rolling or oscillating valve, composed of two segments, having their faces *a a* eccentric to its axis of oscillation, and with an opening *d* between the segments, substantially as described.

No. 25,249.—HORACE H. DAY, of New York, N. Y.—*Improvement in Elastic Cloth*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The new elastic cloth described, consisting of stockinet cloth, elastic gum, and flock combined, substantially as set forth, so that the elastic gum is covered on one side by the stockinet, and on the other by the flock, the said elastic cloth being a new manufacture.

No. 25,250.—SAMUEL DE VAUGHAN, of Washington, D. C.—*Improved Scroll Sawing Machine*.—Patent dated August 30, 1859.—This invention consists in the use of compound guides for regulating the motion of the saw, and the manner of applying a driving belt to a pulley wheel and improvement in swivel bearings.

The inventor says: I *claim* the vertical plates *g* and guide blocks *h*, plates *m* and *m*<sup>1</sup>, and guide arm *i*, for the purpose of a compound guide, as set forth.

I claim the manner of operating link *k* on bearing *u*, in combination with block *h*, and guide arm *i*, for the purpose set forth.

No. 25,251.—JOHN A. FALK, ANDREW JOHNSON, and G. A. ERICKSON, of Alton, Ill.—*Improvement in Harvesters*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the wheel H, which is provided with the pin *a* near its periphery, with the bar *i* and pulley *s*, the same being constructed in the manner set forth, for the purpose of operating the bands which drive the endless belt K, substantially as described.

No. 25,252.—THEODORE F. FRANK, of Ischua, N. Y.—*Improvement in Ophthalmic Vapor Apparatus*.—Patent dated August 30, 1859.—This invention consists in the construction of an apparatus called the ophthalmological vapor bath, to be used in the process of disengaging the medical properties from drugs by steam, and bringing the medicated vapor produced therefrom in an applicable condition to the eyes.

*Claim*.—The ophthalmological vapor bath, constructed and operating as before described, for producing medicated vapor.

No. 25,253.—ALBERT FULLER, of Cincinnati, Ohio.—*Improvement in Faucets*.—Patent dated August 30, 1859.—The inventor says: The body of my faucet is cast in two pieces A and B, which are screwed together. The cap C is also screwed to the piece A. By a common handle L the cam shaft K is turned, giving motion to the valve stem D, thus opening and closing the valve. The valve is elastic, and may consist of a body E of India rub-



ber encased in a metallic shield made in two parts, a thimble F and a head G, the head being movable in a thimble.

*Claim.*—Encasing an elastic plug valve in the above described metallic shield, for the purpose set forth.

No. 25,254.—QUINCY A. GILMORE, of New York, N. Y.—*Improved Machine for Cutting and Screening Bituminous Limestone or Asphalte.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the rotary cylinder or drum *a* carrying knives or cutters *b b*, substantially of the form described, arranged in rows, either with or without the raised bands, substantially as shown, or in rows parallel or oblique to the axis of the cylinder, for cutting asphalte, sometimes known under the name of bituminous limestone, substantially as described.

Second. I also claim the application of the machine as a whole, substantially as described, to the purpose of cutting and screening asphalte or bituminous limestone.

No. 25,255.—A. GOLARY, of Mobile, Ala.—*Improvement in Cord Guides for Sewing Machines.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and combination with the adjustable plate D of the groove *f* and guides *c d e*, substantially as shown and described, so that the cord may be guided and conducted between two or more thicknesses of cloth, as set forth.

No. 25,256.—ELIAS GRAHAM and ISAAC N. PATTON, of Elizabethtown, Ky.—*Improvement in Flour Bolts.*—Patent dated August 30, 1859.—This invention consists of an arrangement whereby the radial arms of the reel, over which the cloth is stretched, can be extended, thereby increasing the diameter of the bolting reel, and stretching the bolting cloth tight thereon and keeping it stretched.

*Claim.*—The combination of the wedged sliding ribs C with the rods and screws for adjusting the same, in the manner and for the purposes set forth.

No. 25,257.—JONATHAN H. GREEN, of Christianburg, Iowa.—*Improved Billiard Cue Tip.* Patent dated August 30, 1859.—The inventor says: In this improvement I make a composition of gutta percha or India rubber (vulcanized) with pulverized chalk, or any calcareous substance; (the shape of the tip thus prepared is made like those in common use;) I then attach the tip with glue, either to the ferrule to be screwed to the end of the cue, or to the end of the cue itself.

*Claim.*—A tip or point for billiard or bagatelle cues, made of any compound described so as to dispense with the external application of chalk or other substance to the point of the cue.

No. 25,258.—BENJAMIN L. GRIFFITH, of Reading, Pa.—*Improved Hollow Grate Bar for Steam Boilers.*—Patent dated August 30, 1859.—This improvement consists of two or more tubes connected at each end to the hollow boxes which are attached to the fire box of the boiler by means of hollow screw plugs, so that the water in the boiler can have a free circulation through the bars, and so that the latter can be readily removed and replaced in sections.

*Claim.*—Two or more tubes C attached to hollow boxes D, connected to the fire box by means of hollow perforated screw plugs G, and arranged in sets to complete the grate, as and for the purpose set forth.

No. 25,259.—HENRY GROSS, of Tiffin, Ohio.—*Improvement in Breech Loading Fire-Arms.* Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, giving the chamber its longitudinal motion upon a bed piece which remains fixed during such motion, and in revolving carries with it the chamber, substantially as specified.

Second. The roller *r*, or its equivalent, upon the check piece, and its combination with the groove *g d*, substantially as and for the purpose set forth.

Third. The double eccentric head of the lever L, when connected with the chamber and bed piece, substantially as described.

Fourth. The adjustable bearing piece for the eccentric *g* of the lever L.

No. 25,260.—ALBERT W. HALE, of New York, N. Y.—*Improved Fastening for Hooped Skirts.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The method of connecting and fastening the ends of the hoops B, by means of the cap A, one part of such cap, with the end of the hoop, forming a point or extension *b*, to enter a recess *a* in the cap on the other end of the hoop; and such cap also furnishing the



recess to receive the said points or extension of the other end of the hoop, when the cap and hook are bent in the manner and for the purpose described.

No. 25,261.—WILLIAM H. HAMMOND, of New York, N. Y.—*Improved Escapement for Chronometers.*—Patent dated August 30, 1859.—This invention relates to improvements in watches and chronometers, with the view to render the escapement more sure and guard against irregularity of movement.

The inventor says: I *claim* the employment of the hollow semi-cylinders on the vibrating lever, substantially as described, in combination with the escapement wheel, and the balance and verge, as set forth.

I also claim, in combination with the escapement, substantially such as described, or any equivalent therefor, the employment of the holding spring, substantially as and for the purpose specified.

No. 25,262.—JAMES HARRISON, Jr., of New York, N. Y.—*Improvement in Sewing Machines.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the frame or feeding lever *j*, bar *m*, spring *o*, and regulating screw *p*, all constructed and operated as described, with the needle and needle frame *i*, for carrying the mechanism for rotating the needle, as described.

Second. I claim the adjustable bar or band *z*, affixed to the lever or frame *J*, in combination with the frame *i*, for controlling the upward movement of the feed lever, as described.

Third. I claim the bar or band *z*<sup>1</sup>, in combination with the bar *m*, screw *p*, spring *o*, and lever *j*, as and for the purposes set forth.

No. 25,263.—ROYAL HATCH, of Strafford, Vt.—*Improved Bed Bottom.*—Patent dated August 30, 1859.—This invention relates to an improvement on a spring for bedsteads, patented December 30, 1857. Its object is to render the bottom more durable, and also to render the sacking capable of being taken up or tightened, if necessary, to compensate for the stretching of the same.

*Claim.*—The arrangement of a central supporting bar *F*, with a sacking *E*, both provided with double loops *d*, and attached respectively to the bedstead, as and for the purpose set forth.

No. 25,264.—ALEXANDER HAY, of Philadelphia, Pa.—*Improvement in Springs for Railroad Cars, &c.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, as a new article of manufacture, the construction of vulcanized India rubber springs, in which the threads or warp or fabric, out of which they are formed, is made non-elastic before it is woven or knit, substantially as described.

Second. In combination with India rubber springs, to be acted on by tension or stretching, I claim the tubes *A A*, with their flanges, substantially as described and for the purpose set forth.

Third. In combination with the springs acting as described, I claim the supporter *P*, with the opening *F* in each end, and holes *B B B* for tightening the spring, when constructed and operated substantially as set forth.

No. 25,265.—MILO A. HOLCOMB, of Granby, Conn.—*Improved Metallic Razor Strop.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—A razor strop made of polished steel, of the requisite degree of hardness, when possessing a sufficient degree of flexibility to enable the angle which its surface forms with the edge of the razor to be lessened to the desired extent, in the manner and for the purpose as herein specified.

No. 25,266.—DANIEL HUSSEY, of Nashua, N. H.—*Improvement in Machinery for Winding Warps Upon the Beam.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The peculiar combination for maintaining uniformity of wind, or surface speed of wind, on the yarn beam, the same consisting of the friction wheels *G F*, the lifter rack *K*, the pinion *l*, and the compound motion mechanism, or their mechanical equivalents; the whole being applied to the yarn guide rollers, and the mechanism for adjusting the yarn beam, substantially in the manner, and so as to operate, as specified.

No. 25,267.—JOSEPH HALBASH and ISAAC HALBASH, of Bernsville, Pa.—*Improvement in Furnaces for Smelting Zinc Ores.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Constructing the crucible with a detachable bottom, and attaching it to the arch of the cylinder or collar and to the bed plate, by the rings or annular plates, whereby we are enabled to empty the crucible at its bottom, and to remove the entire crucible through the



bottom or the arch of the heat chamber, as may be required; the whole being arranged and susceptible of being used as herein set forth.

No. 25,268.—ELEAZER B. KNIGHT, of Malden, N. Y.—*Improvement in Machines for Holding Stones.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Providing the stone holding machine with the suspending arms *c c*, plates *j* and *n*, rod *i*, and adjusting bolts *k k*, or their equivalents, whereby said machine may readily be adjusted, vertically and also horizontally, in the arc of a circle, substantially as described and for the purposes specified.

No. 25,269.—CHARLES LIVINGSTON, of Redwood City, Cal.—*Improved Wind Mill.*—Patent dated August 30, 1859.—This invention consists in the employment of a rotating cowl, wind tube, and wheel, arranged so that the wind may be conducted from elevated points down into valleys, and made to actuate wheels placed near the machinery to be driven.

*Claim.*—The cowl *D*, with tubes *j g* and wheel *B*, combined and arranged for joint operation, substantially as and for the purpose set forth.

No. 25,270.—ISAAC MALLERY, of Etna, New York.—*Improved Chute for Horizontal Water Wheels.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Constructing and arranging the scroll within the penstock, so that it can be turned, so as to partially close the orifice for the admission of water upon the buckets, and to thereby regulate the flow of water for any head, or for any quantity of water, essentially as above specified.

No. 25,271.—E. E. MARCY, of New York, N. Y.—*Improvement in Curing and Treating Caoutchouc.*—Patent dated August 30, 1859.—The claim explains the nature of this invention.

*Claim.*—The improved process of curing India rubber by combining India rubber with the sulphuret of lead and carbonate of lead, or the protoxide of lead, in the manner hereinbefore described, and without the use of free sulphur in combination with the rubber, or with said compound, and the exposure of these compounds to steam or water, at the temperature hereinbefore stated, and in the mode pointed out.

No. 25,272.—E. E. MARCY, of New York, N. Y.—*Improvement in Curing and Treating Caoutchouc.*—Patent dated August 30, 1859.—The claim explains the nature of this invention.

*Claim.*—The improved process of curing India rubber by combining it with the sulphuret of zinc and the hyposulphite of zinc, in the manner hereinbefore described, and subjecting the compound to steam and water, at the temperature stated, without the use of free sulphur, in combination with said compound, substantially as set forth.

No. 25,273.—E. E. MARCY, of New York, N. Y.—*Improvement in Curing and Treating Caoutchouc.*—Patent dated August 30, 1859.—The claim explains the nature of this invention.

*Claim.*—The improved process of curing India rubber, and producing an improved article of India rubber, by combining India rubber with the hyposulphite of zinc, in the manner hereinbefore described, and without the use of free sulphur in combination with the rubber, or with said compound, and the exposure of this compound to steam or water, at the temperature hereinbefore stated and in the mode pointed out.

No. 25,274.—R. D. NESMITH, of Franklin, N. H.—*Improvement in Machines for Picking Mill Stones.*—Patent dated August 30, 1859.—This invention relates to an improved machine for picking mill stones, and of that class which are operated automatically by the rotation of the spindle of the stone, or by the rotation of any shaft, or arbor placed concentrically therewith.

*Claim.*—The spring *Q* upon rod *P* provided with head *I*, for limiting the extent of its action upon the picks, as arranged with the inclined plane *T* and cam *F*, and the operating parts with which they are connected, in the manner and for the purpose specified.

No. 25,275.—SAMUEL NOLAN, of New York, N. Y.—*Improvement in Apparatus for Manufacturing Illuminating Gas.*—Patent dated August 30, 1859.—This improvement has for its object the drawing off, in a novel and advantageous manner, the gas from the retort at a comparatively low temperature and pressure, and as fast as evolved, and by the same means expelling the gas so drawn off or exhausted, and urging it with all the necessary force to and through the condenser and other intermediate apparatus into the gasometer.

*Claim.*—The gas exhaust and expelling wheel, interposed between the retort and the condenser, constructed and arranged so to operate substantially in the manner and for the purposes set forth.



No. 25,276.—JOHN H. PEIN, of Hoboken, N. J.—*Improvement in Apparatus to Photograph Uneven Surfaces.*—Patent dated August 30, 1859.—This invention consists in obtaining the focus on the uneven surface of a solid direct, by a device for moving the said solid in the camera without moving the camera, and for placing the said solid in any desired position, sideways, backward, or forward.

*Claim.*—Photographing on vases, or other uneven solids, by means of an apparatus substantially as herein described, and in the manner substantially as set forth.

No. 25,277.—EDMUND QUERN, of New York, N. Y.—*Improvement in Gelatinizing Oils.*—Patent dated August 30, 1859.—The inventor says: I take of white refined sugar one pound and three quarters, and boil the same with water until it becomes a concentrated or thick syrup. I take of isinglass three ounces and a half, which I put in a warm water bath with five ounces of water; when well dissolved I pour in the syrup very warm, and stir the whole constantly until it is thoroughly mixed. I then take one pound of this mixture and put it in a clean warm water bath, and place the same on the fire; when the water is nearly boiling I add, by small quantities at a time, three pounds and a half of fine castor oil, constantly stirring the same with the spatula until thoroughly mixed together.

*Claim.*—The jellification of castor oil by means of the process hereinbefore described.

No. 25,278.—CHARLES H. RAYMOND, of Southington, Conn.—*Improvement in Tinman's Machines.*—Patent dated August 30, 1859.—This invention consists in the construction, arrangement, and combination of the cap plate E and movable stand M attached thereto, carrying its revolving box L and the shaft I therein, and the screw J relatively.

*Claim.*—The movable and adjustable stand M and its revolving box L, when combined with shaft I, cap plate E, and screw J, in the manner described and for the purposes fully set forth.

No. 25,279.—CHARLES B. SAWYER, of Fitchburg, Mass.—*Improved Furnace and Ventilator.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Providing the fire pot with a series of small holes or openings, substantially as and for the purposes set forth.

No. 25,280.—EDWARD L. SEYMOUR, of New York, N. Y.—*Improved Ore Concentrator.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the rotating sieve in combination with the bellows, or their equivalents, operated by the act of rotation of the former, substantially as described.

Second. The application of two or more rotary sieves, combined with such an arrangement of "waste tubes" *e* that the refuse of the upper sieve shall be led to constitute the supply or feed of the sieve next below it, as described.

Third. I claim rendering the receiving mouths of the "waste tubes" *e*  $c^1$   $e^2$  adjustable, as described, and for the reasons given.

Fourth. I claim the use of the closed chambers or "traps" *y*  $y^1$   $y^2$  below the sieves, as described and for the purposes explained.

No. 25,281.—PHILO B. SHELDON, of Prattsburg, N. Y.—*Improved Composition for Destroying Insects Injurious to Fruit Trees.*—Patent dated August 30, 1859.—This invention consists of the following ingredients: Potash, 4 ounces; common salt, 16 ounces; copperas, 4 ounces; blue vitrol, 2 ounces; saltpetre, 1 ounce.

*Claim.*—Combining and employing the ingredients herein described in substantially the mode and proportions set forth, for the purpose of destroying borers, and other insects on fruit trees.

No. 25,282.—J. H. SHIPMAN, of Yorkville, N. Y.—*Improved Letter File.*—Patent dated August 30, 1859.—This invention consists in arranging opposite to the points which serve to retain the letters sliding hinged guards, that are turned up over the points when the letters are on, for the purpose of preventing the letters coming off when the letter file is handled.

*Claim.*—The arrangement of the movable hinged guards B in combination with the metal back A and points *b*, substantially as and for the purpose described.

No. 25,283.—WILLIAM H. SMITH, of Newport, R. I.—*Improvement in Hose Couplings.*—Patent dated August 30, 1859.—This invention consists in the combination of a set screw with an open spiral flange, so constructed as to connect the parts somewhat on the principle of the bayonet catch; the parts being so constructed and arranged that the set screw may perform the two-fold duty of a lug to support one of the outwardly projecting flanges upon the inner portion of the coupling, and at the same time also to act as a set screw to secure the parts in position.



*Claim.*—The new article of manufacture, or hose coupling described, made by combining the open spiral flange *a* with a screw *D*, as set forth.

No. 25,284.—JAMES SPEAR, of Philadelphia, Pa.—*Improvement in Stove Urns.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement of the register in the base of the urn, with the ornamental receptacle for the cup, constructed in the manner and for the purpose described.

No. 25,285.—A. L. SPERRY, of Auburn, Ind.—*Improvement in Churns.*—Patent dated August 30, 1859.—This invention consists in a particular arrangement of a hook, which serves to connect or disconnect the breaker frame with the shaft, and the arrangement of a spring hook and button, whereby the breaker frame can be arrested, so that the dasher can be operated independent of the breakers, both the hook and the spring hook being operated from the top of the churn.

*Claim.*—The arrangement of the hook *i* and button *k*, to operate in combination with the dasher *D* and breaker frame *E*, in the manner and for the purpose herein specified.

No. 25,286.—HENRY D. STOVER and J. W. BICKNELL, of Boston, Mass.—*Improved Rotary Planing Cutter.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The adjustable revolving guard *J*, as constructed and connected adjustably to the cutter head, carried by and having all its movements to effectually protect the operator from mutilation, and to hold down the material receiving shape, essentially in the manner fully set forth.

No. 25,287.—PETER SWEENEY, of Buffalo, N. Y.—*Improvement in Stone Saws.*—Patent dated August 30, 1859.—Between the plates *A A*, a series of circular plates are placed. These cutters may be of steel, or chilled cast iron, and project beyond the peripheries of the plates *A A*. Any proper number of cutters may be used, and their peripheries serrated, or cut like a saw or rasp.

*Claim.*—The employment of two plates *A A*, in combination with the dish formed cutter *C*, arranged substantially as and for the purpose herein shown and described.

No. 25,288.—JOSEPH SWEOTSER, of Biddeford, Maine.—*Improvement in Shingles.*—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Fluting shingles.

No. 25,289.—GEORGE TAYLOR and GEORGE H. BURGER, of Worthington, Ohio.—*Improved Auger for Cutting Round Tenons.*—Patent dated August 30, 1859.—Fitted into the inside of the tube *A* is a cylindrical plug *C*, which is provided with a central point *b*, and the upper end of which is turned down, so as to form a shank *D*, extending up into the tube, where it serves as a guide for a spiral spring *E*, the lower end of which is secured in a groove *c*.

*Claim.*—The arrangement and combination of the spring *E* with the shank *D* and tube *A*, substantially as herein shown and described, whereby the plug *C* is rendered self acting, as set forth.

No. 25,290.—JOSEPH B. THOMPSON, of Warrenton, Ga.—*Improved Feed Water Apparatus for Steam Boilers.*—Patent dated August 30, 1859.—This invention has for its object regulating the feeding of the water into the steam boiler, and consists in a certain combination of devices for that purpose.

*Claim.*—The exterior water chamber *G*, communicating with the supply tank *B* by pipe *a*, and with the boiler *A* by force pump *P* and pipe *b*, and provided with a valve *J*, as set forth, in combination with the peculiarly constructed float *C*, rods *E*, and lever *F*, operating as and for the purpose specified.

No. 25,291.—WILLIAM H. THOSS, of San Francisco, Cal.—*Improvement in Fire Plating Iron.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Preparing the iron after it has been cleansed with dilute acid, by immersion in a solution of borax, and after being dried passing it through the molten copper, maintained at the required heat in a furnace constructed substantially as herein described, with a roof to concentrate the heat over the basin of molten copper, and with an aperture at one side to insert the iron to be plated, and a corresponding one on the opposite side, to receive the iron as it is drawn from the copper plate, substantially as described and for the purpose specified.

No. 25,292.—WILLIAM A. VERTREES, of Winchester, Mo.—*Improvement in Hemp Brakes.*—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Constructing the rocking breaker frame of hemp or flax breakers in the manner



described, and operating it by means of a slotted pitman in such manner as that while the vibratory motion is communicated from the prime motor to the breakers by machinery, yet they fall on the hemp or flax with a free stroke or flail motion, substantially as hereinbefore described.

No. 25,293.—NATHANIEL WATERBURY, of Fond-du-Lac, Wis.—*Improved Shingle Machine*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—First, the reciprocating bolt carriage D, tilting beds J J, circular saw I, and sliding jaws G G, arranged relatively with each other, as shown and operated respectively by the cam C, cam ratchets K K, and pendants *o o*, belt *t*, and levers and weights J<sup>1</sup> J<sup>2</sup>, substantially as and for the purpose set forth.

Second. In connection with the reciprocating belt carriage D, saw I, and tilting beds J J, the bars L L, provided with inclined slots *p q*, and connected with the frames *d*<sup>1</sup> *d*<sup>2</sup> of the jaws G G, by means of the pins *r*, fitting in said slots for the purpose of elevating the bolts during their return movement, as described.

Third. The employment or use of the cam ratchets K K attached to the framing A, in connection with the pendants *o o* attached to the reciprocating bolt frame D, arranged substantially as shown for automatically tilting the beds J.

No. 25,294.—PETER L. WEIMER, of Lebanon, Pa.—*Improved Machine for Coiling Metal Pipe*.—Patent dated August 30, 1859.—This invention consists of a suitable spiral grooved cylinder and two guide wheels so arranged that a piece of metal pipe can be coiled on the grooved cylinder without altering its cross section by bending; also, in the peculiar arrangement of the coiling cylinder, whereby the cylinder and finished coil may be removed from the shaft of the machine and the cylinder removed from the coil without injury to the coil or cylinder.

The inventor says: I *claim*, first, the coiling cylinder E, with the peculiar shaped groove, constructed and arranged as herein fully described and specified.

Second. I claim the arrangement of the two guide wheels M, triangular piece K, and shaft L, when used in combination with the coiling cylinder, and for the purpose as herein fully described and specified.

Third. I also claim the movable plate F and jack screws G, for the purpose of adjusting the guide wheel shaft L, to any angle required.

No. 25,295.—ASA WHEELER, of Brattleboro', Vt.—*Improvement in Skates*.—Patent dated August 30, 1859.—This invention is an improvement in fastening the skate to the boot or shoe and tightening the same thereto after the skate has been strapped to the foot.

*Claim*.—The arrangement and combination of the adjustable heel piece F, heel case D, stock E, screw H, and front straps C, as and for the purpose herein shown and described.

No. 25,296.—JOHN M. WHITE, of New York, N. Y.—*Improvement in Heating the Feed Water of Steam Engines*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the division chamber C, supply and discharge pipes F and G, and heating pipes *b b*<sup>1</sup>, placed within the exhaust side pipe B, as described, in combination with the relief pipe H, by which, when necessary, the water may be passed directly to the boiler without being passed through the heating pipes *b b*<sup>1</sup>.

No. 25,297.—ABNER WHITELY, of Springfield, Ohio.—*Improvement in Harvesters*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, so arranging the mechanism of the automatically operating door or shutter for preventing scattering and admitting the gavels to be discharged at regular intervals as to permit the attendant to increase the intervals of time for the discharge of the gavels where the grain is thin upon the ground, substantially as described.

Second. The combination of the rake *q* with the door or shutter R for discharging the gavel at the time the door or shutter is opened for the purpose, whether it is at regular intervals or less frequently, substantially as described.

No. 25,298.—JEPHTHA AVERY WILKINSON, of Brooklyn, N. Y.—*Improved Shears for Separating Paper*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, separating paper or other material by the joint operation of a revolving shear and a stationary surface, when said stationary surface is so formed and placed as gradually to approach the path described by the shear in its revolution, and compress the said paper or other material on to the edge of said revolving shear, in the manner and substantially as specified.

Second. I claim the elastic roller or rollers *e e*, in combination with the stationary surface E and revolving shear *c* on the cylinder D, whereby the paper is passed through and separated progressively as at two operations, as set forth.



Third. I claim the arrangement of the shaft carrying the rollers *e e*, the springs 12, and cams 10 for elevating the rollers and preventing traction on the paper, as set forth.

No. 25,299.—FRANK BROWN, of Philadelphia, Pa., assignor to WILLIAM BROWN, of the same place.—*Improvement in Turnouts for Railways*.—Patent dated August 30, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The addition of grooves on the circumference of car wheels, as now constructed, with a single flange and tread, and the placing of curved bars at turnouts on the track of the road, to enter and operate on such grooves for the purpose of changing the direction of cars, substantially as and for the purpose set forth.

No. 25,300.—SETH BOYDEN, of Newark, N. J., assignor to Himself and H. H. JACQUES, of the same place.—*Improvement in Machinery for Hardening Hat Bodies*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of a cloth M, or its equivalent, in combination with a cone E, in the manner and for the purpose substantially as shown and described.

Second. The arrangement and combination of the frame I, shaft J, eccentrics *h*<sup>1</sup>, rods *i* tubes *j*, arms *l*, shaft K, eccentrics *p*, rods *q*, bars L, and cloth M, substantially as shown and described, so that the cloth M will be operated with a compound movement, as set forth.

No. 25,301.—WILLIAM P. GOOLMAN, of Dublin, Ind., assignor to Himself, S. B. MORRIS, and WILLIAM HOLLINGSWORTH, of the same place.—*Improvement in Rotary Harrows*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the described application of friction rollers between rotary concentric harrows, to elevate opposite sides of the respective harrows, in the manner and for the purposes set forth.

Second. The reversible arm F, arranged between concentric harrows A and B, to change the direction of the rotation of the said harrows, as explained.

Third. The reversible bent spindle C, adapted in the manner set forth, to correspond with the relative obliquity of two concentric harrows.

Fourth. The described arrangement of the friction rollers *e e*<sup>1</sup> and adjustable washers *g* on the arm F, operating in the manner set forth, to vary the relative obliquity of the harrows.

No. 25,302.—DANIEL G. GREENE, of North Bridgewater, Mass., assignor to Himself and WILLIAM NASH, of South Weymouth, Mass.—*Improvement in Wrenches*.—Patent dated August 30, 1859.—This invention consists of a stationary jaw A and a movable jaw B, provided with a hole through which the shank D of the stationary jaw A passes, so as to allow the jaw B to be moved back and forth on the shank D.

*Claim*.—The combination of the movable jaw B, inclined shoulders U, with the pawl H, and inclined shoulders V, and enlarged hole J, and ratchet teeth H, said parts being constructed and arranged to operate in relation to each other in the manner and for the purposes set forth.

No. 25,303.—MICHAEL IRION, of Utica, N. Y., assignor to Himself and JACOB HEIDEL, of Oneida county, N. Y.—*Improvement in Shears*.—Patent dated August 30, 1859.—This invention consists in the combination and arrangement of parts consisting of a punch and hollow cylinder and a pair of cutting edges attached to two handles or levers at or near their extremities, the said handles, or levers, being fixed together so as to operate like a pair of common shears.

*Claim*.—The combination of the cutting plates C C<sup>1</sup>, the circular punch D, and the circular die E, to receive the punch, and surrounded by a cutting edge, as described, in connection with a pair of movable jointed arms, the whole so combined and arranged to operate in the manner as before more fully set forth.

No. 25,304.—GEORGE MARLOW and MICHAEL RALPHE, of Cincinnati, Ohio, assignors to A. D. BROWN, W. C. VALLETTE, and GEORGE MARLOW, of the same place.—*Improvement in Lamps*.—Patent dated August 30, 1859.—The first part of this invention consists in a peculiar arrangement of divided reflector to facilitate giving access to the lamp without removing it from the lanterns.

The second part relates to a manner of applying and arranging glazed doors of different colors, to adapt the lantern to purposes of signaling.

The inventors say: We *claim*, first, the described arrangement of the separate cup formed back reflector J, upon the inside of the door K, in the described combination, with an open backed parabolic or conical reflector I, constructed as set forth.

Second. The described arrangement of glazed doors M and M<sup>1</sup>, hinged vertically to the front angles of the lantern, and adapted in the manner set forth, to be fixed either in front of the lantern or against one or other of its sides, for the purpose explained.



No. 25,305.—THEODORE MARSCHALL, of New York, N. Y., assignor to LIGHTE and BRADBURY, of the same place.—*Improvement in Piano Forte Actions*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The spring supporting post K M N O, when used in the described combination with a stud L, separate and distinct from the moving parts, to detain the hammer at any determined height, while the jack descends sufficiently to reëngage beneath the hammer but.

No. 25,306.—E. L. PRATT, of Philadelphia, Pa., assignor to Himself and R. B. FITTS, of the same place.—*Improvement in Churns*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, in combination with the rotary case or body A of a churn, a diaphragm, or piston C, adapted both to move upon and be moved by a screw shaft D, or its equivalent, placed horizontally in the said case, as described, the said diaphragm C and shaft D being constructed and combined together as set forth.

Second. I also claim the series of perforations *o o*, through the diaphragm or piston C, in combination with the movable perforated adjusting disk or plate *n*, or their equivalent, the same operating together in the case A, substantially as and for the purpose set forth and described.

No. 25,307.—WILLIAM F. PRATT, of East Bridgewater, Mass., assignor to the E. CARVER COMPANY, of the same place.—*Improvement in Cotton Gins*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The use of a naked or unshielded augur or cleaver, operating in the end of a ginning roll of a cotton gin at or near the centre thereof, substantially in the manner and for the purpose described.

No. 25,308.—ALLEN SHERWOOD, of Auburn, N. Y., assignor to E. P. SENTER, A. H. GOSS, WILLIAM HILLS, and AMRETTA SHERWOOD, of the same place.—*Improvement in Grain Binding Mechanism*.—Patent dated August 30, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the shield F and lever L, both removable and located at one side of the delivery portion of the platform, so that the shield shall protect the lever from the cut material, and from one side of an open ended grain receiver (the fence E forming the other side thereof) where the grain is deposited previous to being bound up as described.

I also claim, in combination with the raker's stand B, and binders seat C, the shield F, and lever L, so arranged that the raker from his stand may sweep the cut grain into the receiver, and the binder, from his seat, reaches beyond the receiver to catch the lever L, as set forth.

I also claim, in combination with the grain receiver, the inclined ledges G H, under which the wire is passed, so as not to catch or interfere with the entrance of the grain therein, as set forth.

I also claim the slot and flanges in the shield I, said flanges serving as a guide for properly bringing down the foot of the lever to insert the wire in the twisting wheel, as set forth.

I also claim, in combination with the lever L, the clamp *s*, located in close proximity to the handle *v*, so that the binder, as he draws up the gavel, may check the paying out of the wire, and thus bring it tightly around the bundle, as set forth.

I also claim, the combination of a removable shield and lever F L on the platform, with a removable twisting mechanism on the fence or side of the platform G, for the purpose of adapting an ordinary hand delivery mowing machine into a self binder, or *vice versa*, without in any manner altering the parts which enables it to be so exchanged, except to attach or detach them, as set forth.

No. 25,309.—DANIEL DODGE, of Keeseville, N. Y.—*Improvement in Nail Machines*.—Patent dated August 30, 1859.—This invention consists in the combination of a fixed anvil, a fixed die, having its face forming a right angle with the face of the anvil, a roller revolving opposite to the face of the anvil, a hammer having a reciprocating motion towards and from the face of the die, and a vibrating carrier, or guide, for placing the nail, rod, or other article to be operated upon, against the face of the anvil and the face of the die alternately, the whole operating together to effect the reduction of metal to the required form.

The inventor says: I *claim* the combination of an anvil B and fixed die C, or other equivalent fixed surfaces a roller E, hammers F G, and a vibrating guide I, the whole operating substantially as described.

And I also claim the operation of a hammer, in combination with the roller E and anvil B, by means of an eccentric on the roller shaft, and a universal joint at the connection of the hammer with the connecting rod of the eccentric, substantially as described.

No. 25,310.—HENRY W. ADAMS, of Brooklyn, N. Y.—*Improvement in Lamps*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—Constructing the upper end of the wick tube B, with the elevated ends *a a*, so as to inclose the ends of the wick C, and prevent said ends from burning too high, when the central part is sufficiently elevated above the central part *b* of the wick tube to be allowed to burn, substantially as and for the purpose set forth.

No. 25,311.—WILLIAM ADAMSON, of Philadelphia, Pa.—*Improved Apparatus for Making Decoctions.*—Patent dated September 6, 1859; antedated April 6, 1859.—This invention consists in placing within a circular tank, or boiler, a conical roller, made either solid or open, and in revolving the same during the process of boiling, for the purpose of thoroughly intermixing the ingredients to be extracted by the water or other fluid, by keeping them always agitated and stirring.

*Claim.*—The conical roller arranged within the caldron A, when the same is used for the purpose of thoroughly intermixing the ingredients to be extracted during the process of boiling, as set forth.

No. 25,312.—THOMAS D. AYLESWORTH, of Ilion, N. Y.—*Improvement in the Cutting Apparatus of Harvesters.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A cutting apparatus for harvesting machines, composed substantially of the cutters *c* and guards *b*, when constructed and operating together without any motion except that of being advanced or drawn over a field, substantially as described.

No. 25,313.—H. H. BAKER, of New Market, N. J.—*Improved Tonguing and Grooving Machine.*—Patent dated September 6, 1859.—This invention consists in passing the boards to be tongued and grooved under rollers which serve as feed and pressure rollers, having flanges cast on their outer edges, which press the faced edge of the board, as it is fed to the cutters, firmly against a ring keyed to the roller shaft by helical or other suitable springs, which permit the rollers to be laterally adjusted and set to suit the various thicknesses of the same board.

*Claim.*—The employment of flanged feed rollers, having a lateral play, and acted upon by suitable springs, in combination with the fixed intermediate rings or flanges P P<sup>1</sup>, or their equivalents, when arranged and operating essentially in the manner and for the purpose specified.

No. 25,314.—E. O. BAXTER, of Foreston, Ill.—*Improvement in Railroad Excavators.*—Patent dated September 6, 1859.—This invention is an improvement in machinery for removing the earth which washes down from embankments and fills up the drains on either side of the railway where it passes through deep cuts, and consists in the employment of ploughs or excavators of a peculiar construction, which are connected to suitable arms extending out from the sides of a car by strong chains, so that as the car progresses the earth can be taken up and removed.

*Claim.*—The arrangement and combination of adjustable timbers or arms B C, plough and excavator, as above described, when the same are employed in the manner above shown, for the purpose of loosening and removing the earth and keeping the ditch free from the wash of the slopes on railroads.

No. 25,315.—JEHU BRAINERD and WILLIAM H. BURRIDGE, of Cleveland, Ohio.—*Improvement in Tanning.*—Patent dated September 6, 1859.—The claim explains the nature of this invention.

*Claim.*—The use of the described compound for tanning consisting of a solution of the named mineral salts, in mixture with a solution of tannin, either with or without the addition of aloes.

No. 25,316.—LEOPOLD RICHARD BREISACH, of New York, N. Y.—*Improvement in Making Gas from Wood.*—Patent dated September 6, 1859.—The claim explains the nature of this invention.

*Claim.*—The process of manufacturing illuminating gas from wood, by distilling the same in two retorts of varying temperatures, as set forth; one of which retorts is charged with charcoal, varying in amount according to the conditions indicated, the whole process being conducted as set forth.

No. 25,317.—ARCHIBALD CAMERON, of Charleston, S. C., and DAVID MATTHEW, of Philadelphia, Pa.—*Improvement in Railroad Wheels.*—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The peculiar construction of car wheels, having elastic curved arms B with chilled cast tread A and cast hub C, forming one combined wheel, substantially as set forth.

No. 25,318.—CHARLES W. CLEWLEY, of Providence, R. I.—*Improvement in Machines for Making Watch Rims, &c.*—Patent dated September 6, 1859.—The nature of this invention consists in the combination of the male plunger A with the female plunger B.



*Claim.*—The combination of the male and female plungers, substantially as described and for the purposes set forth.

No. 25,319.—R. W. DAVIS and DANIEL DAVIS, of Yellow Springs, Ohio.—*Improved Machine for Printing the Addresses on Newspapers, &c.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We claim, first, the arrangement of wooden blocks *r*, of suitable size for a single address, with indented letters in their faces, and attached, by means of small tacks or equivalent, to a flexible band or belt, in close compact columns, and operated substantially as described.

Second. The use of the triangular stationary bed piece *l*, over which the belt slides, by means of belt pulley *p*, and regulated and adjusted by means of lever *n*, substantially in the manner and for the purpose set forth.

No. 25,320.—JEAN JUSTIN ALBERT DE BRONAC and AUGUSTIN JOSEPH MARTIAL DEHERRY-PON, of Paris, France.—*Improvement in Treating Metallic Ores with Spongy Iron.*—Patent dated September 6, 1859.—The claim explains the nature of this invention.

The inventors say: We claim the treatment of metallic sulphurets, or other ores or metallic bodies, with a spongy iron, for purposes substantially as set forth, by the combination of the several processes specified in the order stated, viz:

First. Pulverizing the ore and the spongy iron separately.

Second. Mixing the two powders in definite proportions.

Third. Compressing the mixed powders into the form of cakes or small bricks.

Fourth. Treating the thus prepared ores in suitable furnaces, as described.

No. 25,321.—R. DENSMORE, of South Haven, Mich.—*Improved Machine for Sawing Staves.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, surrounding the stationary drum B with a series of saws, all hung in one gate and having the same movement, in combination with the rotating table *c*, for the purposes and in the manner represented and specified.

Second. I claim, in combination with the rotary table and drum B, the sliding carriages, when the same are arranged radially around said drum, and operated automatically to feed the bolts up against the drum B, for the purposes and in the manner specified.

Third. I claim the rolling spring guides P, in combination with the drum B, for discharging the staves from the machine after they have been sawed, as set forth.

No. 25,322.—CHARLES A. DESOBRY, of Plaquemine, La.—*Improvement in Bagasse Furnaces.*—Patent dated September 6, 1859.—This invention consists in a novel system of air ducts, combined with an air chamber, for supplying the fire chamber with the air necessary for combustion, and for tempering the heat of the furnace.

*Claim.*—The combination of the upright air chamber D, having a vertical partition wall *a*, and the system of ducts E E F G and H, and the damper or shutter I, the whole applied in connection with the fire chamber and the flue C, or its equivalent, substantially as herein described.

No. 25,323.—HUGH T. DOUGLAS, of Zanesville, Ohio, and JOHN COOPER, of Mount Vernon, Ohio.—*Improvement in Portable Evaporating Apparatus.*—Patent dated September 6, 1859.—The apparatus consists of two parts: the evaporating pan proper A<sup>1</sup>, Fig. 1, and the furnace L, Figs. 1 and 2, with the several flues.

*Claim.*—The combination of the diving flue H I, the valves E<sup>1</sup> F<sup>1</sup> and *i*, and the damper J, when the several parts are arranged in relation to the evaporating pan, and operating in the manner substantially as set forth.

No. 25,324.—M. D. DUBOIS, of Newburg, N. Y.—*Improved Roofing Cement.*—Patent dated September 6, 1859.—The inventor says: My composition is composed of the following ingredients: 18 gallons coal tar, 2 gallons India rubber solution, 1 gallon gum shellac varnish, 2½ gallons asphaltum solution, and 2 gallons linseed oil.

The India rubber is dissolved in turpentine, the gum shellac is dissolved in alcohol, and asphaltum is dissolved in turpentine, to form the solutions above specified.

*Claim.*—A composition formed of the ingredients or substances compounded in the proportions and in the manner as herein specified, for the purpose set forth.

No. 25,325.—LEWIS DUVALL, of Big Spring, Ky.—*Improvement in Boots.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The within described method of cutting the piece of leather or other suitable material A, and uniting the same with the gore B, so that when it is folded in the lines *b b*<sup>1</sup> and *ff*<sup>1</sup>, and if the gore is brought in the proper position, said piece A, together with the gore, assumes the required shape of the upper of a boot, substantially as specified.



No. 25,326.—WILLIAM F. EDSON, of Philadelphia, Pa.—*Improved Machine for Cutting and Finishing Shoe Heels*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the movable post F, the former H, (on the upper of the shoe,) the guide K, and the cutter wheel D, or an emery or burnishing wheel, with the hand lever G, bow guide O, springs N N, and radius bar J, acting substantially as set forth, for cutting or shaping, smoothing and burnishing the heels of shoes, either before or after they are fastened to the shoe.

No. 25,327.—BENJAMIN G. FITZHUGH and McCLINTOCK YOUNG, Jr., of Frederick, Md.—*Improvement in Automatic Rakes for Reaping Machines*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The locating of an automatic sweep rake at the rear left hand or outside corner of the platform, when said rake has a rising and falling motion that will admit of its passing over the outside division board or fence, and then drop into or on to the extreme outer end of the platform, and sweep it of the cut grain, substantially as described.

No. 25,328.—THOMAS G. GARDNER, of Mount Pulaski, Ill.—*Improved Foam Collector for Steam Boilers*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Fitting a boiler with one or more plates, so applied as to present inclined surfaces above the surface of the water, with one or more outlets *b b* for steam and foam at the highest parts of said plate or plates, and as to provide a receptacle for foam above the said plate or plates, substantially as described, and to operate substantially as set forth.

No. 25,329.—EDWARD HAECKEL, of Cincinnati, Ohio, assignor to HAECKEL & Co., of said Cincinnati.—*Improved Apparatus for Mashing*.—Patent dated September 6, 1859.—This invention consists in the attachment to the common central beater shaft in malt mashing tubs of satellite beater shafts, for the purpose of effecting a more uniform, speedy, and complete mashing, stirring, or mixing of the material in which they operate.

*Claim*.—The described combination and arrangement of the central shaft C and satellite shafts N, the whole being armed with beaters Q, and rotated simultaneously, substantially in the manner and for the purpose set forth.

No. 25,330.—E. H. HANCOCK, of Augusta, Ga.—*Improvement in Flood Gates*.—Patent dated September 6, 1859.—This invention consists of a flood or dam gate, which is so arranged that as long as the water of the dam exerts a uniform pressure and flows regularly over the top of the structure to which the gate is attached, it will have a tendency to remain firmly closed; but as soon as the water of the dam rises and flows over said structure with such a rapidity as to cause an overflowing and consequent washing down of the embankment, it will suddenly open and allow a free escape of the water.

*Claim*.—The combination of the flood or dam gate C, tilting trough D, and the draining structure A B, or its equivalent, substantially as and for the purpose set forth.

No. 25,331.—JASON W. HARDIE, of New York, N. Y.—*Improvement in Sewing Machines*. Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the method of making the "knot stitch" as described, namely: by taking the needle thread back of the needle, or at the side opposite to the position of the bobbin, and first doubling it upon itself around the needle and then looping it over the bobbin thread, substantially as specified.

Second. I claim the employment of two hooks *h h*, acting in opposite directions, when they take the thread at the back of the needle, or at the side opposite to the position of the bobbin, for the purpose of forming either the knot stitch or the ordinary shuttle stitch, by simply reversing the motion of the driving shaft, as set forth.

Third. I claim making the feed eccentric *i* self-adjusting by means of the loose sleeve *u*, slot *v*, and pin or stop *i*<sup>4</sup>, so that the feeding shall take place during the descent of the needle, whichever way the driving shaft may be turned, as described.

No. 25,332.—HIRAM H. HERRICK, of East Boston, Mass.—*Improved Carpet Sweeper*.—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, providing the end of the box with a groove, as from *x* to *x*, when the same is used in connection with the flaring brush on the end of the shaft F, substantially as and for the purpose specified.

Second. Dividing the box into two parts, and providing each with a partition dividing the bottom of the box into two parts, through which the brushes protrude, and providing these parts of said bottom with flanges which hold the dirt; the several parts being connected and arranged together substantially in the manner set forth.



No. 25,333.—KELSEY HAZEN, of Brooklyn, N. Y.—*Improved Amalgamator*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* compelling the water having the particles of gold in suspension to flow within a certain small distance of the heated mercury, under conditions substantially as set forth.

I also claim, in connection with the above, the employment of a series of vibrating agitators and scrapers P, acting in the space under E and of an adjustable gate G, for regulating the facility of egress of the least suspended particles, when combined and arranged substantially as and for the purpose set forth.

No. 25,334.—IRIS HOBSON, of Stout's Grove, Ill.—*Improvement in Mole Ploughs*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of a ditching plough beam, having a horizontal joint forward of the mole and coulter, with a rod arranged over the top of said joint, and with a horizontal adjusting and stop plate, substantially as set forth.

No. 25,335.—LEWIS G. HOFFMAN, of Waterford, N. Y.—*Improved Door Bolt*.—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of a common door bolt with a barrel containing a wheel, with an arm acting on a slot in the bolt, so that when operated by a key the door may be fastened or unfastened on the outside; the whole being so constructed and arranged as not to interfere with the ordinary mode of using the bolt on the inside.

No. 25,336.—LORENZO HOLTSLANDER, of Oberlin, Ohio.—*Improvement in Propellers*.—Patent dated September 6, 1859.—This invention consists of a device to change the location of the valves and valve seats of a water propeller, or pump used for water propulsion, and thus reverse the motion of a vessel; and the combination forward, or in the bows, of a reservoir and several small pipes, through which a supply of water is obtained for the propellers.

The inventor says: I *claim* the device described for changing valve seats, as applied to water propellers, to reverse the motion of vessels or boats.

And also the combination of the small forward pipes *p p p p s*, with the reservoir R *v*, substantially as described.

No. 25,337.—GEORGE HUTCHISON, of Allegheny, Pa.—*Improved Apparatus for Printing the Addresses on Newspapers, &c.*—Patent dated September 6, 1859.—This invention consists in the combination and arrangement of a metallic belt, furnished with a series of conveyors, pulleys, press roll, inking roller, type or address frame and hopper, the whole being combined, arranged, and constructed for printing names or addresses on newspapers, cards, &c.

The inventor says: I *claim*, first, the inclined hopper *j*, with the slides or guides *m* and *n*, in combination with the ways *k* and conveyors *g* on the belt *f*, as described and for the purpose set forth.

Second. The use of a metallic belt, furnished with the conveyors *g* and *h*, as described and for the purpose set forth.

Third. The arrangement of the pulleys *d* and *e*, the belt *f*, press roller *p* and inking roller 4, as described and represented.

Fourth. The use of the lug *y* on the end of the type frame, when used in connection with the notch *o* in the conveyor *h*, as described and for the purpose set forth.

No. 25,338.—DAMASE LAMOUREUX, of New York, N. Y.—*Improvement in Parlor Grates*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, so constructing the grate that the fuel box and the ash pit are distinct from and independent of the bars, and capable of being removed, while the bars remain undisturbed, thereby enabling me to effect the removal of the ashes and cinders with much less trouble than by the ordinary mode, and thereby keep the apartment free from the dust and dirt which are inseparable from the common method of removal, as fully described.

Second. The combination of the crank L, the rod I, and the movable bottom E of the fuel box, constructed and arranged as described, by which an easy and convenient means of giving a reciprocating horizontal circular motion of the grate bottom is secured without the necessity of cutting an opening in front for the passage of an arm by which to vibrate the grate, substantially as described and for the purpose set forth.

Third. The arrangement, in a parlor grate, of the bottom grate upon which the fuel is supported, in the manner described, by which it is made capable of being vibrated through the back of the fuel box, upon a fixed axis placed entirely back of the space devoted to fuel, the wings of said bottom grate being so extended as to cover or compensate for the necessary vibration which is made into open space back of the fire box, as set forth.

No. 25,339.—PIERSON LEFFEL and J. H. MULHOLLAND, of Springfield, Ohio.—*Improved*



*Method of Centring in Watchmakers' Lathes.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, a vibrating mandrel, arranged within a socket or hollow spindle in such a manner that its inserted end may fit closely within said socket, and its outer end allowed to vibrate, substantially as described for the purposes set forth.

Second. In combination with the vibrating mandrel D, we claim the rocking collar *f*, spring *e*, key *k*, and nut *j*, all constructed and arranged to operate substantially as described for the purposes set forth.

No. 25,340.—HOSEA LINDSEY, of Ashville, N. C.—*Improved Submerged Pump.*—Patent dated September 6, 1859.—This improvement consists in arranging two valved pistons on the ends of a short reciprocating piston rod, which is supported and guided centrally within the stationary double chambered cylinder by means of the central diaphragm, or division plate of said cylinder, the piston rod with its pistons having a parallel reciprocating motion imparted to it by means of chains, pulleys, and a vibrating brake or lever, and its pistons acting together at the same time, the right one to admit water at the right end of the cylinder and the left one to expel the water at the left side of the central division or diaphragm of the cylinder, and *vice versa*.

*Claim.*—The arrangement of the short reciprocating piston rod E, open pistons F F, sliding ring valves G G, cylinder B B<sup>1</sup>, having a conducting pipe D, with the chain H and brake I, in the manner and for the purpose set forth.

No. 25,341.—GEORGE M. LONGACRE, of New Orleans, La.—*Improvement in Steam Pans for Clarifying Sugar.*—Patent dated September 6, 1859.—The pipes *m* are made the same length as the inside width of the pan. There is on the outside of the pans, and on a line with the pipes *m*, chocks for the purpose of making a packed joint from *m* to the parts attached thereto, through which the steam passes in and out of the pans; these chocks being designated by letter *c*, and the parts to be joined by X and P, both being pipes, and valves V; through these joints are pipes *o* for the purpose of supporting the joints and allowing the pipes *m* to turn, so that the pipes *r* can be turned up to clean them.

*Claim.*—In combination with the pans, the relief valve V and the check valve *t*, when arranged and operated as, or substantially as, and for the purpose set forth.

No. 25,342.—JUSTUS R. LOOMIS, of Winsted, Conn.—*Improvement in Lamps.*—Patent dated September 6, 1859.—I I<sup>1</sup> are metallic heating radiating wires, tubes, or rods, formed into the desirable shape, so as to allow the pointed ends to be inserted through the wick, while the others, the looped ends, pass up between the tubes G.

*Claim.*—The arrangement of the cylindrical corrugated skirting J, perforated tubes G, adjustable radiating wires I I<sup>1</sup>, in the manner as and for the purpose described.

No. 25,343.—EDWARD M. MANIGLE, of Philadelphia, Pa.—*Improvement in Stoves.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the series of distinct or uncommunicative hollow open air chambers *ff*, or their equivalents, in combination with the cross piece of the top plate B of a cooking stove, substantially in the manner and for the purpose set forth and described; and this I claim, whether the said cross piece A be either movable or stationary in the said top plate.

No. 25,344.—ALVIN C. MASON, of Springfield, Vt.—*Improved Machine for Wiring the Joints of Clothes Pins.*—Patent dated September 6, 1859.—This invention consists in the use of a clamping device, pliers, adjusting forks and shears, arranged to operate, whereby the wire joints or hinges of jointed clothes pins may be secured in the pins in an expeditious manner.

The inventor says: I *claim*, first, the intermittingly rotating pliers E E, in connection with a clamping device formed of the jaws *l*, recess *a*\*, and lever R, or their equivalents, and shears L L, arranged to operate substantially as and for the purpose set forth.

Second. In combination with the pliers E, and shears L, and clamping device, the sliding forks *g*, arranged for joint operation, as set forth.

Third. The particular manner of opening and closing the pliers E E, and operating the arbors D, to wit: by means of the sliding cones F, in connection with the springs *f* and permanent bosses *g* on the arbors D, whereby the jaws of the pliers are opened and closed, and the arbors D shifted by a very simple mechanism.

No. 25,345.—THOMAS J. MEAD, of Port Byron, N. Y.—*Improvement in Brakes for Railroad Cars.*—Patent dated September 6, 1859.—The inventor says: My invention consists in the manner in which I combine the pairs of short brake blocks with a bent or U shaped piece of iron and a single lever, so that the brakes are applied with certainty, with uniformity of pressure, quickly and efficiently.

*Claim.*—The combined use of the U shaped yoke, the brake bars, and the short brake



blocks, for the purpose of adapting the brake to a simple lever that acts directly upon it, as stated.

No. 25,346.—WILLIAM MOSHER and ISAAC H. MOSHER, of Green, N. Y.—*Improved Machine for Bending Wagon Tires.*—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The clutch or clasp to hold the end of the bar, in combination with the former being made three fourths of the circle, and the arrangement of the lever for operating as specified and for the purpose set forth.

No. 25,347.—JACOB PARKER, of St. Louis, Mo.—*Improvement in Trunks.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the forming the lid of the trunk in the shape of a semi-cylinder as specified, for the purposes set forth.

Second. The impervious box *g*, or sponge carrier, arranged in the tray as described.

Third. The peculiar formation of the division boards *n n* in such manner that they will come down on to the rim of a gentleman's hat placed in the middle hat box, as specified.

No. 25,348.—HENRY PENNIE, of Buffalo, N. Y.—*Improvement in Bits for Cutting Washers.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the cutters *D* and *D* upon the ends of the sliding bars *C* and *C*, and at right angles thereto, the said sliding bars passing through a mortise in the shank *A*, and lying parallel with each other, and one above the other, so that the cutters will work upon the same side of the centre point *B*, substantially as described.

Second. I claim the recess *g*, made in the lower end of the shank *A*, so as to allow the inner cutter to slide close up to the point *B*, and thereby adapt the instrument to cutting very small washers, as set forth.

No. 25,349.—JAMES POWELL, of Cincinnati, Ohio.—*Improved Faucet.*—Patent dated September 6, 1859.—This invention relates to the class known as valve cocks, and consists in a peculiar combination of a guarded elastic valve seat, with a plug of metal or other hard material.

*Claim.*—The elastic annular valve seat *S*, and sliding collar *O*, in the described combination, with an adjustable plug valve *L* of hard metal.

No. 25,350.—ISAAC C. SHULER, of Amsterdam, N. Y.—*Improvement in the Construction of Sheet Metal Coffins.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the construction of a sheet metal coffin in two sections, stiffened with frames or straps; and, in dividing the coffin into two sections, I do not confine myself to any particular locality on the sides for making the joints, but claim forming the joint on the side of the wall at any convenient point between the flange *o* and the rim *b*, and concealing the same with an adjustable moulding.

Second. I claim the frames *c d e f g h* and *i*, for stiffening the coffin, substantially as described; and also the scrolled rim or joint *b*, substantially as described.

No. 25,351.—DAVID G. STAFFORD, of Syracuse, N. Y.—*Improvement in Stoves.*—Patent dated September 6, 1859.—This invention consists in combining a self regulating valve applied to the smoke flue, or pipe, of a coal stove, with an air flue surrounding the fire box and open to the room at the bottom of the stove.

*Claim.*—The combination of a self regulating valve applied to the smoke pipe of coal stoves, and operating substantially as set forth, with an air flue surrounding the fire box, constructed as described, the whole arranged substantially as stated.

No. 25,352.—JOSEPH TIBERI, of St. Louis, Mo.—*Improvement in Grates.*—Patent dated September 6, 1859.—The object of this invention is to provide a better method of throwing the heat of the furnace either in or out of the room, or up the chimney at pleasure, and also in providing an escape for the dust and ashes from the grate behind the furnace, so that the dust and ashes shall pass up the chimney instead of coming out into the room.

*Claim.*—Arranging the adjustable furnace back *B* in the furnace place, and constructing and operating the same substantially as set forth.

No. 25,353.—WILLIAM S. TODD, of Mechanicsville, Iowa.—*Improved Joiner's Clamp.*—Patent dated September 6, 1859.—This invention consists in arranging, upon a slotted frame, a sliding head block provided with rack teeth, and in operating the head block by means of a pawl and lever, the latter being made adjustable to the frame so that a greater purchase can be maintained in clamping very wide or very narrow boards.



*Claim.*—The combination of the adjustable lever F, with the frame A and sliding block C, when the same are arranged and operate in the manner and for the purposes set forth.

No. 25,354.—LOUIS TREGRE, of Parish of St. John the Baptist, La.—*Improvement in the Construction of Cane Juice Boxes.*—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The method of separating the pure from the impure parts of the juice when the latter have settled to the bottom of the box, so that the pure parts can be drawn off without disturbing the impure, by dividing the one from the other by means of a movable partition valve, or its equivalent, arranged within the box substantially as described.

No. 25,355.—EDWARD A. TUTTLE, of Brooklyn, N. Y.—*Improved Hot Air Register.*—Patent dated September 6, 1859.—The inventor says it will be observed that the axis of the roller F moves upon the shelf G, and in consequence of this movement I am enabled to use a very small roller with success.

*Claim.*—The arrangement and combination with the leaves C of the roller F, having its axis movable and travelling on a shelf G, with or without springs *b*, as and for the purpose shown and described.

No. 25,356.—STEPHEN D. TUCKER, of New York, N. Y., assignor to R. M. HOE, R. HOE, and P. S. HOE, of said New York.—*Mode of Operating the Fingers of Printing Presses.* Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Operating the finger shaft C by means of a grooved disk E attached thereto, and the roller  $j^1$  attached to a plate or proper support, so as to be respectively within and without the path of rotation of the finger shaft, substantially as and for the purpose set forth.

No. 25,357.—LEMUEL T. WELLS, of Cincinnati, Ohio.—*Improvement in Printing Presses.* Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: In the described combination with stationary butments C on the ways, I claim the attachment to the bed of a closed cylinder D, its piston E F having a stroke relatively less than that of the bed, and acting to simultaneously condense and rarify the air at alternately opposite ends of the cylinder, as set forth.

No. 25,358.—S. H. WILDER, of Grinnell, Iowa.—*Improved Method of Opening Valves to Extinguish Fire.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim the arrangement, essentially as described, of a reservoir or other means of producing pressure, combined with a system of tubes, cross tubes, and valve shafts, with valves and stop-cocks, arranged as described, when used as a means of operating upon a cylinder and piston, or a water wheel, for the purpose of starting and afterwards stopping the wheel or engine without the intervention of any person than the one who discovers the fire.

I also claim the use of gear wheel *i*, rack bar *h*, and blank wheel H, or their equivalents, arranged to move the gate of a water wheel out and in alternately by a repetition of the same motion.

No. 25,359.—WILLIAM C. ALLISON, of Philadelphia, Pa., assignor to Himself and JOHN MURPHY, of said Philadelphia.—*Improved Apparatus for Watering and Sweeping Railways.*—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I claim, first, The horizontal perforated pipe T T<sup>1</sup> and the swing pipes W, in combination with a truck having wheels adapted to the rails of a passenger railway, the said truck carrying a tank L, and the said swing pipes being arranged and operated by the devices described, or their equivalents, substantially in the manner and for the purpose set forth.

Second. The combination of the adjustable revolving brushes 19 with the truck, when the brushes are arranged in respect to the rails, substantially as and for the purpose specified.

Third. I claim, in combination with the brushes, any convenient number of projections 20 revolving simultaneously with the said brushes, and so arranged in respect to the rails as to clean the grooves or corners of the treads from all obstructions.

No. 25,360.—WILLIAM BARNES, of Troy, N. Y., assignor to PHILLO P. STEWART, of said Troy.—*Improved Feed Water Apparatus for Steam Boilers.*—Patent dated September 6, 1859. The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, in combination with a steam boiler A and a close chamber B, placed higher than or at the same height as the boiler, and having communication therewith by a steam passage *e* and a water passage *f*, each provided with a stop cock or



valve, substantially as described, a close receiver C, located lower than the boiler, and having a steam passage from the boiler and a water passage into the chamber B, substantially as set forth, for use in raising water from a place lower than, and introducing it into, the boiler while the boiler is charged with steam.

Second. And I also claim, in combination with the matter above claimed, making the receiver O in two parts Y and X, with the steam pipe C from the boiler A, and the cold water supply pipe *b*, both entering one part, and the hot water supply pipe *a* entering, and a water pipe *d* to the chamber B leaving the other part, and with the two parts of the receiver connected together by a passage *h*, substantially as and for the purpose set forth.

No. 25,361.—DELECTUS DURFEY, of Fort Seneca, Ohio, assignor to Himself, L. A. LYON, and H. P. TYLER, of Clarksfield, Ohio.—*Improvement in the Mode of Applying Power to Machinery*.—Patent dated September 6, 1859.—This invention consists in the manner of applying power to machinery by groove wheels, levers, and springs.

*Claim*.—The combination of the treadle levers *g*, arms *g*<sup>2</sup>, and springs *c*, with the grooved wheel B and spring braces *k*, operating as described and for the purposes set forth.

No. 25,362.—N. A. DYER, of Medford, and J. F. AUGUSTUS, of Boston, Mass., assignors to JOSEPH C. TUCKER, of Brookline, N. H.—*Improved Compound Illuminating Fluid*.—Patent dated September 6, 1859.—The inventors say: In making our compound, our practice is to take of resin oil three parts, with one part of fusil oil and one part of alcohol, mixing them thoroughly. This proportion is varied when the resin oil is heavy, using proportionately of the alcohol and fusil oil.

*Claim*.—The combination of ingredients for the purpose set forth, and essentially in the proportions described.

No. 25,363.—GEORGE HENDERSON, of Allegheny, Pa., assignor to Himself and GEORGE HUTCHISON, of said Allegheny.—*Improvement in Printing Presses for Addressing Newspapers, &c.*—Patent dated September 6, 1859.—This invention consists in the arrangement and combination of a guide table and pulley, press wheel, conveying pulley, and inking rollers, with a type frame and open hopper, the whole being combined and arranged for the purpose of printing names and addresses on envelopes, &c.

The inventor says: I *claim*, first, the combination and arrangement of the guide table *g* and pulley *h*, the press wheel *d*, the conveying pulley *c*, and inking rollers *k*, with type frame *j*, and the open hopper, the whole being combined, arranged, and constructed in the manner and for the purpose specified.

Second. The use of the open hopper, when constructed as described and used for the purpose set forth.

Third. The use of the pins *o*, or their equivalent, on the type frame *j*, for the purpose of carrying forward the papers, as set forth.

No. 25,364.—CHARLES E. JACOT, of New York, N. Y., assignor to SALTZMAN, JACOT & Co., of said New York.—*Improvement in Watches*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, constructing the bridge or plate *c*, with the curve *i* and index 8, for the purposes and as specified.

Second. I claim constructing the bridge plate *c*, separately from, but screwed to the three quarter plate *b*, for giving access to the centre, second, and third wheels, without removing said three quarter plate, as described and shown.

Third. I claim attaching the three quarter plate *b* to the dial plate *a*, by riveting the columns 1 to the plate *b*, and inserting the screws 2 at the dial plate *a*, for the purposes and as set forth.

Fourth. I claim constructing the click spring *e*, as specified, for preventing the ratchet teeth being broken, as specified.

No. 25,365.—JOHN MARTINO, of Philadelphia, Pa., assignor to D. STUART and RICHARD PETERSON, of said Philadelphia.—*Improvement in Stoves*.—Patent dated September 6, 1859.—This invention consists of a plate peculiarly arranged within the stove, above the fire pot, so as to divide the interior of the stove into two chambers, and thereby avoid the necessity of employing the extraneous return flue common to this class of stoves.

*Claim*.—The division plate L, with its damper N, the plate *k*, with its openings, and the casing J, with its wings *t t*, where the several parts are arranged in respect to each other and to the outer casing and fire pot, as and for the purpose set forth.

No. 25,366.—ROBERT POOLE, of Baltimore, Md.; assignor to Himself and GERMAN H. HUNT, of said Baltimore.—*Improved Forcing Pump*.—Patent dated September 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Enlarging the areas of the inlet and exit openings, where they connect with the



pump cylinders, by means of the swells O P, substantially in the manner and for the purpose set forth.

No. 25,367.—ROBERT POOLE, of Baltimore, Md., assignor to GERMAN H. HUNT, of Baltimore, aforesaid.—*Improvement in Pistons of Pumps*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a valve made of flexible material, hung loosely upon the piston rod, and having for its bearings the round edged wings of the nut by which it is fastened to the piston, substantially in the manner and for the purposes described.

I also claim, in combination with a flexible valve and winged screw nut, a piston constructed of ribs, which present sharp edges to the water, while they are flat at the end, which constitutes the seat of the flexible valve, substantially in the manner and for the purpose described.

No. 25,368.—JOHN B. POWELL, of Philadelphia, Pa., assignor to Himself and G. B. FRICK, of said Philadelphia.—*Improved Automatic Fan*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The spindle M, with any convenient number of cog wheels of different sizes, in combination with a similar number of cog wheels, also of different sizes, on the crank spindle S, when the said spindle and its wheels are rendered adjustable, and are applied to and combined with the work of the automatic fan, substantially as and for the purpose set forth.

No. 25,369.—CHARLES H. RAYMOND, of Southington, Conn., assignor to THE PECK SMITH MANUFACTURING COMPANY, of said Southington.—*Improvement in Tin Folding Machines*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the clamp E and G with bed piece D and folder N, when combined with revolving gauge R, so that the width of the crimp or fold may be first gauged, and then that portion of the tin contiguous to the part intended to be folded be first firmly clamped and held fast, and then the fold or crimp formed thereon in the manner described, all by one simple movement of folder N and parts in connection, and without marring the tin, all in the manner fully set forth.

No. 25,370.—G. W. RICHARDSON and ROBERT GLOVER, of Grayville, Ill., assignors to Themselves, J. B. WILLIAMS, and W. A. HORREL, of said Grayville.—*Improvement in Harvesting Machines*.—Patent dated September 6, 1859.—This invention consists in the provision of detachable cams of peculiar form, having an acute angular bearing to fit a corresponding projection upon the side of the wheel, and within the tire or band under which the cam is inserted. Cams are attached to the driving wheel by means of suitable bolts and nuts, and they are detachable and removable therefrom.

*Claim*.—The cams *a*, cast in sections of one or more, and secured to the driving wheel by means of a bolt or screw C and flange *b*, in the manner described for the purpose specified.

No. 25,371.—IVES SCOVILLE, of Chicago, Ill., assignor to Himself and W. H. SCOVILLE, of said Chicago.—*Improvement in Machines for Breaking Stone for Turnpike Roads, &c.*—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement, in the manner set forth, of the funnel shaped hopper C, constructed substantially as described, with the two vertical cylinders A A, constructed substantially as described, for the purpose of breaking stones for ballasting railroads and macadamizing streets, turnpikes, &c.

No. 25,372.—DANIEL H. SOLLIDAY, of Philadelphia, Pa., assignor to EDWARD H. ASHCROFT, of Boston, Mass.—*Improvement in Gas Burners*.—Patent dated September 6, 1859.—This invention consists in combining, with an ordinary burner, whether of the batwing or fishtail kind, or one provided with one or more discharging orifices at its upper end, a chambered cap, tube, or thimble, made to fit loosely thereon, and have one or more discharging orifices at its top, and so applied to the main burner as to form a gas expansion chamber between the eduction orifice of said burner and that of the cap or thimble, made to slip on and fit loosely at its lower edge to the main burner, or to be screwed thereto, or be otherwise applied, so as to be capable of being easily detached therefrom as occasion may require.

*Claim*.—The application of the conical or chambered burner A to the main burner B, in the manner and for the purpose substantially as set forth.

No. 25,373.—SILAS B. TERRY, of Terrysville, Conn., assignor to SILAS B. TERRY, JR., of said Terrysville.—*Improved Machine for Making Paper Boxes*.—Patent dated September 6, 1859.—This invention consists in the employment of a rotating clamp, gauge or socket, discharging ring, pressure roller, and guide; these parts being arranged as described,



and used in connection with a folding device, whereby the manufacture of the boxes is expedited.

The inventor says: I *claim*, first, the pressure roller L, in connection with the rotating clamp formed of the head D and disk *f*, arranged substantially as and for the purpose set forth.

Second. In combination with the pressure roller L, head D, and disk *f*, the ring or band E, provided with the pins or stripes *i*, the socket F, provided with the screws or pins *j*, and the guide plate G, arranged for joint operation as and for the purpose described.

Third. The arrangement of the pressure lever H and sliding mandrels B C, for the purpose specified.

Fourth. The employment or use of the folding device formed of the plate N, provided with the ledge *u* and the pivoted bar *v*, when said folding device is used in connection with the pressure roller L, rotating head D, and disk *f*, for the purpose set forth.

No. 25,374.—JOSEPH WESLEY, of Providence, R. I., assignor to JOSEPH B. WESLEY, of said Providence.—*Improvement in Skeleton Skirts*.—Patent dated September 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A new article of manufacture, to wit: a skirt having its hoops supported by tapes or straps, which are rendered adhesive by the application of caoutchouc or gutta percha, in the manner and for the purpose substantially as described.

No. 25,375.—HENRY ADAMS, of New York, N. Y.—*Improvement in Saddle Trees*.—Patent dated September 13, 1859.—This invention consists in connecting the two bars of the tree by a bridge, at a point which corresponds with the hollow, or lowest parts of the back or dorsal vertebræ of the animal, and dispensing with the head which has hitherto connected the front ends of the bars directly over the withers of the animal, the several parts forming the tree being arranged so as to attain the desired object.

*Claim*.—A tree for side or ladies' saddles, constructed by connecting the bars A A by a bridge B, at the point specified, and with an open space *a* between the front ends of the bars, at their junction with the horns C D, for the purpose set forth.

No. 25,376.—GEORGE S. AVERY, of Cross River, N. Y.—*Improvement in Rails for Railroads*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—An improvement in railroad iron bars or rails, by an offset or bend made in one end of the rails, and the lapping on of the other end of the rails, and inserting a key between them at the lap, and riveting or bolting them together, substantially as and for the purposes described.

No. 25,377.—E. S. BARTLETT, of Romulus, N. Y.—*Improvement in Ditching Ploughs*.—Patent dated September 13, 1859.—The principal features of this invention consist in the peculiar mode of securing the shares firmly and strongly beneath the beam A, and of adjusting them so as to cut ditches of different widths.

The inventor says: I *claim* the combination of the arms D D D, brace H, rods *d d*, and blocks F F, substantially as and for the purpose set forth.

I also claim the mode of attaching and adjusting the shares E E E, by means of the packing blocks *l l l*, in combination with the bolts *b b* and arms D D, substantially in the manner specified.

No. 25,378.—ANDREW F. BLUNK, of Indianapolis, Ind.—*Improvement in Straw Cutters*.—Patent dated September 13, 1859.—In using this machine, the straw is placed upon the endless belt I I, when, by turning the wheel E, which carries the knives upon its arms, the endless belt is set in motion and carries the straw up to the knives between the rollers; the straw being thus compressed by passing between the rollers, is cut; the knives having an elbow shape on their backs, and an angular concavity on their edges, and so adjusted that when they sweep past the face of the box, they cut with a drawing motion, in close imitation of the motion of the common hand cutting box having but a single knife.

*Claim*.—A straw cutter, constructed as shown and specified, that is to say, with angular knives T, arms K, wheel E, feed rollers B C and D, slides P S, springs O, band N, pulleys J J, and endless belt I, when these several parts are constructed and arranged to operate conjointly, as and for the purposes described.

No. 25,379.—ELIAS K. BRECKENRIDGE, of West Meriden, Ct.—*Improvement in Window Sash Fasteners*.—Patent dated September 13, 1859.—This invention consists in placing two cams on a common arbor, and connecting both by a single spring, the parts being placed in the stile of a window casing, and in such relation to the sash as to bear against its edge.

*Claim*.—The employment or use of two cams B B<sup>1</sup>, placed on a common arbor *b*, with a spring E F applied to them, and a lever C, the whole being fitted within a frame A, and arranged to operate substantially as and for the purpose set forth:



No. 25,380.—ZERAH B. BROWN and MELVIN C. GODARD, of Granby, Conn.—*Improvement in Seed Planters*.—Patent dated September 13, 1859.—This invention consists in planting corn and other seeds in two rows at a time, by means of a suitable framework mounted on wheels, and so arranging and combining the several parts of the machine that the furrow is opened for the reception of the seed; the seed dropped in required quantities, and at a required distance, and covered or stamped by the joint action of the shares and wheels.

*Claim*.—The arrangement and combination of the carrier and stamping wheels F F, cams and marker device I I upon the wheel F<sup>1</sup>, the reciprocal levers H H, seed slides or valves D D, hoppers B B, drill formers J J, and covering shares K K, substantially in the manner as and for the purpose described.

No. 25,381.—JONATHAN S. BUELL, of Buffalo, N. Y.—*Improvement in Sewing Machines*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, in combination with the stationary corrugated surface O O, the corrugated foot piece Q, constructed, arranged, and operating therewith, as set forth.

Second. I also claim, in combination with the needle or its thread, the conical spool X, and guide U, for causing the slack in the thread to form the loop, and holding said loop from turning until seized by the looper, as set forth and explained.

No. 25,382.—STEPHEN BURROWS, of Lima, Wis.—*Improvement in Seed Drills*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of a grooved ring B C, fitted on the axle or shaft of a seed drill, in combination with the peculiarly constructed tube D E, leading from the hopper into the groove of the ring, substantially as and for the purposes set forth.

No. 25,383.—WILLIAM CAMPBELL, of Waterloo, Pa.—*Improved Churn*.—Patent dated September 13, 1859.—This invention consists of perforated hinged floats in the dasher head.

*Claim*.—The perforated and hinged floats F, as an improvement in the construction of dasher heads for churns.

No. 25,384.—ROSANNA CARPENTER, of Medford, Mass.—*Improvement in Extracts of Fruits*.—Patent dated September 13, 1859.—In describing this invention or discovery, the inventor says: Take the fruit from which the extract is to be made, (quinces or apples,) and having wiped them clean, either cut them in half or put them whole in a suitable boiler and cover them with water; let them boil until tender, press out the juice, return the juice to the boiler again, and put in it as much fruit as the juice will cover, and let it boil as before; this process must be repeated until the juice is sufficiently strong; return the juice to the boiler, and add thereto the white of eggs, well beaten up, at the rate of about one egg to six quarts of juice; let it boil for a few minutes, and skim it as the impurities rise to the top. The juice is then put hot into bottles and corked while hot.

*Claim*.—As a new article of manufacture, the above described extract of fruit, prepared in the manner substantially as specified.

No. 25,385.—RICHARDSON P. CLARK, of Johnstown, N. Y.—*Improvement in Hand Mills for Grinding Apples, &c.*—Patent dated September 13, 1859.—This invention consists essentially of a rotary cylindrical wheel or drum A, mounted in a suitable frame B, upon a horizontal axis C, provided with a hand crank D, or an equivalent device by which the cylinder can be easily turned by hand, which cylinder has its whole periphery composed of uniform sharp and shallow ratchet like teeth *e*, arranged at equal distances apart with their edges pointed in the direction in which the cylinder turns, and a yielding concave bed in which the cylinder revolves, having teeth similar to those on the cylinder.

*Claim*.—The described improved hand mill for household use, in reducing apples, potatoes, and other fruits and roots to pomace; the teeth *e l* of the combined cylinder, and adjustable yielding concave, being formed and arranged in the particular manner set forth.

No. 25,386.—BARNES CLAYTON, of Philadelphia, Pa.—*Improved Fastening for Shirt Studs*.—Patent dated September 13, 1859.—This invention consists in the combination and arrangement of a hollow sliding case containing a spring, with a tie or post, which rigidly connects the front or ornamental part of the stud to its back or fastening bar in such a manner that the sliding case will yield to pressure so as to admit of a ready and convenient application of the stud, and afterward by the reaction of the spring, when the pressure is removed, so change its relative position as to cause the latter to prevent the stud from being removed from the garment in an irregular manner, or by a direct pull.

*Claim*.—The hollow sliding case A and spring B, in combination with the tie or post E, and the bar D, the same being arranged to operate together, substantially in the manner and for the purpose set forth and described.



No. 25,387.—P. S. CLINGER, of Conestoga Centre, Pa.—*Improvement in Wire Fences.*—Patent dated September 13, 1859.—The inventor says: The advantages obtained by the use of the combined pin and ratchet wheel, in connection with the hooks to the one set of wires passed through and around the pins, does not affect the wires fastened to the hooks passed over or around the pins.

*Claim.*—The combination of the pin S with the ratchet T, in connection with the mortised posts and the hooked wires H W, when these several parts are arranged substantially as described for the purpose set forth.

No. 25,388.—T. T. COLLIER and H. W. S. COLLIER, of Lavernia, Texas.—*Improvement in Cotton Seed Planters.*—Patent dated September 13, 1859.—This invention consists in arranging in the hopper a stirrer consisting of two disks united by horizontal rods, the same revolving over and feeding the seed to the distributor that consists of a roller, the face of which is cut out in the shape of ratchet teeth, forming a series of seed cells, to carry the seed to the discharge tube and in the furrow made by the hollow ploughshare, which serves as a discharge tube; and after the seed has thus been deposited on the ground, it is pressed by a packing wheel with a broad face, which is kept clean by a scraper.

*Claim.*—The arrangement of the distributor E and the stirrer H, constructed as described, to operate in combination with the packing wheel I, substantially as and for the purpose set forth.

No. 25,389.—HENRY W. COLVIN, of Pendleton county, Ky.—*Improvement in Sight for Fire-Arms.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The semi-circular form of the foresight with its range piece or bead and shades, and triangular form of the hind sight, with its needle or rings and shades, substantially as described and for the purpose set forth.

No. 25,390.—GEORGE COOK, of Paris, Ill.—*Improvement in Rotary Harrows.*—Patent dated September 13, 1859.—This invention consists in arranging the teeth of a rotary harrow on triangular frames, which revolve on oblique pins in such a manner that they form hollow segments, said teeth to be set on lines which do not pass through the centres of the frames, so that they clean themselves more readily, and cause the frames to revolve without any extra weight.

*Claim.*—The arrangement of the teeth *d*, placed eccentrically on triangular frames E, which rotate on oblique pivots *c*, substantially as and for the purpose specified.

No. 25,391.—SOLOMON CROWELL, Jr., of Palmyra, N. Y.—*Improvement in Coffee Pests.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the perforated diffusing chamber C, having a tight conical bottom *f*, with the concentric perforated digester D, whereby the coffee is exposed in a thin layer of nearly uniform thickness to the water percolating nearly uniformly through all parts, for the purposes specified.

No. 25,392.—HENRY DAVIS, of Baltimore, Md.—*Improvement in Brakes for Railroad Cars.*—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Increasing the frictional action of the car brakes upon the peripheries of car wheels, by the introduction of sand, or its equivalent, between the frictional surfaces at the time that the brakes are brought in contact with the car wheels, substantially as set forth.

No. 25,393.—DAVID DECKER, of New York, N. Y.—*Improvement in Piano Forte Actions.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, attaching the relieving jacks, regulating screw F<sup>3</sup>, directly to the key, or to some part carried by the key, so that the repeating lever shall govern the action of the relieving jack by or through the said regulating screw, whether constructed in this precise manner, or in an equivalent, for the purpose described.

Second. I claim the groove in combination with the tongue, pin, or equivalent, for the purpose of keeping the lifting jack in its proper position in relation to the repeating lever, and for preventing any binding or sticking of said repeating lever and lifting jack.

Third. I claim so arranging the adjustable piece D, and repeating lever E, both or either of them, so that their regulating screws D<sup>2</sup> and F<sup>3</sup>, both or either of them shall be at or near the end next toward the front of the key, in front of the hammer rail, for the purpose of being thus conveniently placed for regulating.

No. 25,394.—SYLVANUS A. DENIO, of Boston, Mass.—*Improved Prison Lock.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The lock or part *b*, with its parts *c* *i* and *k*, arranged with each other as described,



to move, hold and lock the bolt *k* in door *l*, when combined, positioned, and secured with lock *h*, which in turn locks the shaft *c*, all by turning a single knob; all the parts being constructed and operated in the peculiar manner described and for the purpose set forth.

No. 25,395.—SIMEON DODGE, jr., and BENJAMIN POTTER, jr., of Marblehead, Mass.—*Improved Heel for Boots and Shoes*.—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—As a new article of manufacture, a heel having a concave seat and a flat tread, with its rises united by cement, as set forth.

No. 25,396.—THOMAS DOUGHERTY, of Macon, Ga.—*Improvement in Switch Stands for Railroads*.—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of eccentric *B* with the pin *C* through lever *D* to bar *E*, for the purpose of locking and unlocking the main pin *A* to and from notches *M M M*, substantially as and for the purposes set forth.

No. 25,397.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improved Faucet*.—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement and combination of the oblique slot *G*, handle *F*, stem *C*, and tube *A*, so that on turning the handle *F* the stem *C* will rise and fall with a spiral or screw movement, thus ensuring ease of operation and tightness of packing, as shown and described.

No. 25,398.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improved Filter*.—Patent dated September 13, 1859.—This invention relates to the process of separating liquids from the substances suspended mechanically in them by passing them through materials sufficiently compact to retain the insoluble matter.

*Claim*.—The employment of fine spun glass arranged in the manner and for the purposes set forth, in combination with the reservoir *G*, floating valve *J*, chamber *E*, and pure water chamber *F*, essentially in the manner represented and described.

No. 25,399.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improvement in Boilers for Bleaching Clothes*.—Patent dated September 13, 1859.—This invention relates to the boiling and bleaching of clothes so as to extract grease and dirt therefrom, preparatory to submitting them to a washing operation by rubbing, &c.

*Claim*.—The combination and arrangement with the false bottom *G* and tank *A* of the perforated casing *D*, fire chamber *C*, draft pipe *F*, smoke pipe *H*, as and for the purpose shown and described.

No. 25,400.—JOHN FAZIG, of West Salem, Ohio.—*Improved Mop Head*.—Patent dated September 13, 1859.—This invention consists in such a form of construction that the rod which holds the cloth forms a lever with a series of fulcrum notches that fit into a slot at one end of a cross head of the mop, the opposite or long arm of the lever being supplied with a screw and nut, by means of which the cloth may be firmly secured between the cross head and lever.

*Claim*.—The herein named construction of a mop head, consisting of the piece *B* with the slot *C* and hole *D*, in combination with the rod *E* and notches *a e*, screw and nut *G*, when the several parts are arranged and operated substantially as set forth.

No. 25,401.—JACOB FASSMACHT, of New Milltown, Pa.—*Improvement in Harnesses*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The device of combining the hip strap and breech band in one continuous piece *A* for each half, united at *B B*, to form the breeching, as set forth.

No. 25,402.—WILLIAM R. FEE, of Cincinnati, Ohio.—*Improvement in Hydraulic Oil Presses*.—Patent dated September 13, 1859.—This invention consists, first, in a new construction of follower, composed of peculiarly grooved dies for oil presses.

Second. In an improved construction of truss.

Third. In a hinged box for packing the cake and adjusting it in the press.

The inventor says: I *claim*, first, the peculiar construction of the dies *D<sup>1</sup>* and followers *D*, having the grooves *G* and conduits *G<sup>1</sup>*, and also the oil passages *d* to facilitate the expression of oil, substantially as set forth.

Second. I claim the solid truss *K*, when made a part of the press and worked by means of the rack and pinion, substantially as set forth and for the purposes described.

Third. I claim the hinged hoop *F* for charging the press, substantially as set forth.

No. 25,403.—J. H. FRAMPTON, of Hopewell, Ohio.—*Improvement in Cultivators*.—Patent dated September 13, 1859.—This invention consists in a novel way of attaching the shares to the plough, whereby they may be readily adjusted nearer together, or further apart, or higher, or lower, as the nature of the work may require.



*Claim.*—The adjustable share standards G G attached to the parallel adjustable bars D D, which are secured to the beam A by the bars E E<sup>1</sup>, the whole being combined and arranged substantially as and for the purpose set forth.

No. 25,404.—DANIEL K. FRANCE, of Congress, Ohio.—*Improved Churn Dash.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The metallic strips B attached to the convex surface of the slats, by slots and screws, and operating in the manner and for the purpose substantially as set forth.

No. 25,405.—C. L. GILPATRICK, of Saco, Maine.—*Improved Churn.*—Patent dated September 13, 1859.—This invention consists in the employment of the two slides operated upon by the two dasher staffs.

*Claim.*—The combination of the crank shaft D and staffs B B with the top A<sup>1</sup>, when said top is provided with boxes F in which play slides through which the staffs pass, the same being arranged and operating substantially as and for the purpose specified.

No. 25,406.—ELIAS J. HALE, of Foxcroft, Me.—*Improvement in Lamp Chimneys.*—Patent dated September 13, 1859.—This invention consists in forming in the chimney, at a point above the flame, a contraction which will centralize the ascending current of hot air, and, in connection therewith, admitting, at or near this same point, a current of air which may rise in contact with the inner surface of the chimney and prevent the contact of the smoke with this surface above the throat or contraction, whilst the said throat or contraction will act to draw the smoke away from the surface of the chimney to all points above it.

*Claim.*—Contracting the chimney above the flame, and admitting, at or near the same point, a current of air, in the manner and for the purpose substantially as set forth.

No. 25,407.—ROBERT HALL, of Roxbury, Mass.—*Improved Exhaust Pipe for Steam Engines.*—Patent dated September 13, 1859.—This invention has for its object to lead off a portion of the exhaust steam of locomotives, for the purpose of heating the water within the tank.

*Claim.*—An exhaust pipe, constructed as described, and having an opening B and a steam pipe C, in combination with a lip *f*, operating in the manner set forth, for the purpose specified.

No. 25,408.—WILLIAM HAMILTON, of St. Catherine, Mo.—*Improved Excavator.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: First, in combination with an excavator frame constructed as described, having the side timbers braced in front only, I *claim* four wheels, when arranged in relation to the said frame, substantially as described, so that a common cart may either be backed between the hind wheels, or pushed over said wheels and frame, under the excavator, when the same is hoisted to be discharged, as specified.

Second. The combination of an excavator with a frame having the rear ends of each of the side timbers bifurcated for the reception of the wheel, the same being arranged to turn on a pin or journal, extending transversely through the two forks, as described.

Third. I claim the peculiar arrangement of hanging the excavator to the frame by means of arms, the same being so pivoted at the ends respectively to the excavator and side timbers as that they shall be exposed to a tensile strain in the draft line, or thereabout, during the excavating operation of the machine, substantially as shown and described.

No. 25,409.—STEPHEN P. HART, of Boston, Mass.—*Improvement in Barrel Syringes.*—Patent dated September 13, 1859.—This invention consists in the insertion of a spring within a metallic syringe, so arranged as to raise the piston after it is depressed by hand, by which means it may be operated by one hand.

*Claim.*—The spring *g*, as applied to the syringe, operating in the manner substantially as set forth.

No. 25,410.—MALACHI B. HASSLER, of Columbia City, Ind.—*Improved Churn.*—Patent dated September 13, 1859.—This invention relates to certain improvements in the dashers of churns, by means of which the operator is enabled to gather butter by a reversed motion of the dasher.

*Claim.*—The arrangement of the hinged curved leaf *g*, in combination with the wings *ff*<sup>1</sup>, constructed and arranged to operate substantially as described, for the purposes set forth.

No. 25,411.—R. K. HAWLEY, of Baltimore, Md.—*Improved Construction of Segmental Circular Saws.*—Patent dated September 13, 1859.—This invention consists in attaching the segmental blades of the saw to the central flange or chuck, by means of lug pins, and holding the plates in position by means of a concavo-convex clamp plate placed on the saw shaft, and held against the saw plate by means of a nut working on the saw shaft; and it further consists in making segmental saw blades of an even thickness throughout, and bend-



ing them so that they shall be adapted to the angle of the common bevel on the outer edge of the chuck and clamp plate.

*Claim.*—A segmental veneer saw, the blades of which are formed, hung, and clamped in the manner described.

No. 25,412.—DAVID HINMAN, of Berea, Ohio.—*Improvement in Grinding the Teeth of Mowers and Reapers.*—Patent dated September 13, 1859.—This invention consists of such a form of the stone and other devices connected therewith, that mower and reaper cutters may be ground at a uniform bevel and closely into the angle between the blades, and at the same time the form of the stone may be preserved unimpaired.

*Claim.*—The circular grooves *a a*, on the faces *e e* of the grindstone, in connection with the standards *F F<sup>1</sup> G G<sup>1</sup>* and holder *H*, arranged and operating in the manner specified.

No. 25,413.—W. W. HOLLMAN, of Eddyville, Ky.—*Improved Mangle.*—Patent dated September 13, 1859.—This mangle is arranged in a wardrobe, and consists in two horizontal rolls *C D*, one above the other, the shaft of the upper roll being held in fixed bearings in the side of the wardrobe, and the shaft of the lower roll being supported by the slotted ends of lever arms *K J K<sup>1</sup> J<sup>1</sup>*.

*Claim.*—The combination of the levers *K J K<sup>1</sup> J<sup>1</sup>*, with one of the rolls, and balancing lever *H H<sup>1</sup>*, substantially as and for the purposes set forth.

No. 25,414.—WILLIAM H. HORSTMANN, of Brooklyn, N. Y.—*Improved Mode of Manufacturing Telegraph Cables.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* constructing the cable by the apparatus, substantially as described, consisting of the reservoirs, wrapping apparatus, &c., or their equivalents, as specified.

I also claim the final reservoir *m*, for coating a telegraph cable after it has passed all the other apparatus, and before it has entered the water or ground, constructed and applied substantially as specified.

I also claim the manufacturing of the cable, substantially in the manner described, at the time it is laid, so as to perfect it and at once launch it into the place where it is to remain, whereby I avoid all the chances for injury and imperfections arising herefrom, growing out of stowing and handling the cable after it has been made, as heretofore has been done.

No. 25,415.—A. H. INSKEEP, of Middleburg, Ohio.—*Improvement in Harvesting Machines.* Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the revolving spiral cone-shaped cutter or gatherer with the base of the cone in front, to gather up and draw the grain back to either stationary or reciprocating cutters, substantially as described for the purpose specified.

Second. The combination of the spirally formed gatherer or cutter, arranged as described, with the divider *D*, guards *D<sup>1</sup> D<sup>1</sup>*, and stationary cutters *e*, substantially as described, for the purposes specified.

No. 25,416.—W. D. JOHNSON, of Raleigh, N. C.—*Improvement in Cultivators.*—Patent dated September 13, 1859.—This invention consists in a peculiar mode of constructing the frame of the implement, whereby, in combination with double shares, the same may be readily adapted for the cultivation of various crops.

*Claim.*—The bars *A A*, curved so as to form handles at one end, and having horizontal oblique positions to form the body of the frame, the draft bar *C*, and guide or retaining bar *D*, the front ends of the bars *A A*, being connected or secured together by the collar or loop *B*, in combination with the double scraper *F*, substantially as described and for the purpose set forth.

No. 25,417.—W. D. JOHNSON, of Raleigh, N. C.—*Improvement in Seeding Machines.*—Patent dated September 13, 1859.—The object of this invention is to obtain a seeding machine capable of planting two different kinds of seed in alternate hills, and also drop therewith a fertilizing material in such a manner that a stratum of earth will intervene between the fertilizer and seed, so that the germinating principle of the latter will not be injured by direct contact with the former, and also the ready adjusting of a gauge roller, to vary the depth of the furrow according to the depth the seed may be required to be planted.

*Claim.*—The arrangement of two distributing slides *E F*, with the projections *H H* on the wheels *C C*, and two or more compartments in the hopper *B<sup>1</sup>*, inclined tube *G*, inclined draft bar *B*, and adjustable roller standard *I*, substantially as and for the purpose set forth.

No. 25,418.—MORRIS L. KEEN, of Rogers' Ford, Pa.—*Improvement in Boilers for Making*



*Paper Pulp from Wood.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A boiler for boiling, under pressure, wood and ligneous materials for making paper pulp, constructed with an expansion chamber, stirrers, and discharge valve or cock, arranged for the purposes and in the manner substantially as stated.

No. 25,419.—ASA M. KEITH, of Kosciusko, Miss.—*Improvement in Cultivators.*—Patent dated September 13, 1859.—This cultivator is intended to bar off and scrape both sides of a row, chop out twelve inches and leave four, and to hill and dirt cotton, and to bar off, scrape, and hill or dirt corn all at the same time and by the same movement, thereby saving a great amount of time and labor.

*Claim.*—The arrangement of the double scraper, the hoe drum, and the hillers or coverers in their relation to each other and to the parts of the frame to which they are attached, as and for the purposes set forth.

No. 25,420.—JOHN C. KIMBALL, of New Haven, Conn.—*Improvement in Movable Tops for Carriages.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* so constructing the standards or supports of a standing carriage top, and attaching them by means of screws, that the top and standards or supports may be readily removed, when the whole is constructed and connected substantially as described and for the purposes set forth.

Second. I claim the combination of the standards with the body when the standards are secured by being screwed into the upper ends of the studs, and the whole is constructed, arranged, and made to serve the purpose intended, substantially as described.

No. 25,421.—NELSON J. KNAPP, of Chicago, Ill.—*Improvement in Locomotive Lamps.*—Patent dated September 13, 1859.—This invention consists in combining an ellipsoidal and paraboloidal reflector, whereby the person can obtain a large flame and have the rays of light which issue therefrom projected parallelly within the limited dimensions required in order to receive the full benefit thereof.

*Claim.*—The combination of the ellipsoidal and paraboloidal reflectors E D and burner C, arranged substantially as and for the purpose set forth.

No. 25,422.—JESSE LADD, of Holderness, N. H.—*Improved Machine for Arranging Pegs.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a machine or combination, consisting of the following devices, or their mechanical equivalents, viz:

1. The grooved cylinder D, furnished with a hopper or other proper means of supplying it with pegs.
2. The guiding receivers H.
3. One or more advancers L L, and the operative mechanism thereof.
4. A device or mechanism for discharging from the guiding receiver H the refuse pegs.
5. The springs N N, or devices for preventing the discharge of the pegs from the guiding receiver, when they may be disposed therein with their butts in advance of their points.
6. The receiving spout M.
7. The peg carrier O.
8. Mechanism for advancing the pegs through the said carrier.

I also claim, in combination with the said machine, or its hopper and grooved cylinder, an agitator E, or means of shaking or agitating the mass of pegs in the hopper or its conductor.

I also claim, in combination with said machine, or its receiving spout M, the serrated bar P, operated as described, or mechanism for insuring the descent of the pegs within the receiving spout, as specified.

I also claim, in combination with the said machine, or with the receiving spout and peg carrier thereof, the device or part U, made to operate in manner and by means substantially as specified.

I also claim, in combination with the said machine, or with the receiving spout M thereof, the door R and its operative mechanism, whereby the surplus pegs may be discharged from the spout after it may have become sufficiently supplied with pegs.

I also claim, in combination with the said machine, or its spout M, the finger O<sup>1</sup>, or equivalent, to be operated in manner and by means and for the purpose substantially as described.

No. 25,423.—AUGUSTUS LAFEVER, of Battle Creek, Mich.—*Improved Board Measurer.*—Patent dated September 13, 1859.—The object of this invention is to obtain a portable instrument, by which the aggregate number of square feet in a lot of lumber composed of pieces of various lengths and thicknesses may be ascertained, by simply passing the instrument



transversely over the pieces in the direction of their width, the instrument being capable of adjustment to suit the length and thickness of the pieces.

The inventor says: I *claim*, first, the employment or use of the cone gears E J and sliding pinions F L, in connection with an endless toothed or serrated chain T, fitted within a suitable case, arranged with gearing and indexes, and with or without the arm C and lever D, substantially as and for the purpose set forth.

Second. The arrangement of the yielding frames H K with the pinion F and cone gear J, respectively attached to levers  $b^1 c^1 g^1 h^1$ , and racks  $a^1 f^1$ , substantially as and for the purpose specified.

No. 25,424.—JOHN S. LASH, of Carlisle, Pa.—*Improvement in Dumping Carts*.—Patent dated September 13, 1859.—This invention consists in applying to an ordinary dumping cart a segment rack and pinion, spring, and pressure bar, in such a manner that the cart body may be readily tilted by the attendant, and its load dumped and the body made to right itself, automatically, by the forward movement of the cart.

The inventor says: I *claim* the employment or use of the curved or segment rack F, attached to the rod E, and provided with the ledge  $i$ , the pinion  $g$ , and hooks  $l l^1$ , arranged for joint operation, as and for the purpose set forth.

I further claim the rod H, provided with the spring  $r$ , and connected to the sliding or pressure bar I, provided with the arm  $p$ , the above parts being applied to the cart and arranged relatively with each other, to operate substantially as and for the purpose set forth.

No. 25,425.—WILLIAM LEES, of Germantown, Pa.—*Improvement in Corn Planters*.—Patent dated September 13, 1859.—This invention relates to a device for feeding and dropping the corn, or other seed, which is to be planted.

*Claim*.—The cylinders  $d d^1$ , in combination with the hoppers  $c^1 b$ , with reference to the feed bar D, arranged to operate substantially as described.

No. 25,426.—FERDINAND C. LIGHTE, of New York, N. Y.—*Improvement in Piano Fortes*. Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the crystal reverberator G, of glass or other material, applied below or at the back of the soundboard, in combination with openings  $a a$  therein, substantially as and for the purpose described.

Second. The insulators  $f f$ , applied between the iron frame or plate G and the wrest plank and wooden blocking of the instrument, in such manner that the said frame or plate will bear upon the plank and blocking only at a few points, substantially as and for the purpose described.

No. 25,427.—GEORGE LINDSAY and WILLIAM CAMERON, of Petersburg, Va.—*Improvement in Tobacco Presses*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* a portable hydraulic jack, or other powerful press, so constructed as to be readily applied to an ordinary, or to a series of ordinary screw presses, for the purpose described, and adjustable as to height on the truck on which it rests, in combination with the railroad track E, at right angles with the track B, when said press is used for increasing the pressure of the screw press and converting it into a retaining press, substantially as and for the purpose described.

No. 25,428.—JOHN H. LYON, of New York, N. Y.—*Improved Lock and Detector*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* combining with a padlock, or any lock provided with a shackle, a supplemental shackle, arranged with a lead or soft metal tube E, so as to be temporarily secured thereby to the lock case, and admitting of being released only by the severing of said tube, which thereby serves as a detector, substantially as described.

I further claim forming the lock case A of two parts  $a b$ , with a division plate  $p$  between, whereby the construction of the lock is rendered extremely simple, and the invention enabled to be carried out or produced at a moderate cost.

No. 25,429.—MURDICK LYTLE, of Allegheny, Pa.—*Improved Steering Apparatus for Barges in Rivers*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application of a wheel C to the bow of a barge, so that said wheel shall revolve at right angles to the direction of the barge, in combination with an apparatus for operating said wheel by the power of the propelling boat, substantially as and for the purposes specified.

No. 25,430.—JACOB MAIZE, of Wooster, Ohio.—*Improvement in Seeding Machines*.—Patent dated September 13, 1859.—From the cultivators K extend the arms as seen at  $K^1$ , which



pass up through the guides M, so as to allow the cultivators to rise and fall as the nature of the case may require.

The guides M and arms K act also as braces and supports for the cultivators, to retain them in place and in an inclined or angular position.

*Claim.*—The adjustable cultivators K, provided with the arms K<sup>1</sup>, guides M, and the adjustable jointed harrow Q, when arranged in relation to each other, as described, and acting conjointly with the seeding apparatus, in the manner and for the purpose set forth.

No. 25,431.—W. A. McDONALD, of Mott Haven, N. Y.—*Improved Dovetailing Machine.*—Patent dated September 13, 1859.—This invention consists in the employment of two rotating cutter wheels, the planes of rotation of which have oblique positions relatively to each other, which cutter wheels are provided at their peripheries with spiral saw toothed cutters; and in using in connection with the above an adjustable gauge so arranged as to permit the cut to be commenced at any desired point in the work, and also in using an adjustable platform, whereby the position of the work relatively to the cutters may be regulated as required.

The inventor says: I *claim*, first, the employment or use of spiral saw cutters G G<sup>1</sup> and G<sup>2</sup> G<sup>3</sup>, attached to the rotating heads F, connected by gearing E, for the purpose specified.

Second. In combination with the cutters G G<sup>1</sup> and G<sup>2</sup> G<sup>3</sup>, the adjustable platform L.

Third. The combination of the cutters G G<sup>1</sup> G<sup>2</sup> G<sup>3</sup>, platform L, and gauge M, operated by the screw c, for the purpose set forth.

No. 25,432.—EDMUND MILLER and BENJAMIN MILLER, of Rising Sun, Ind.—*Improvement in Cultivators.*—Patent dated September 13, 1859.—The subject of this improvement is a device by means of which the more friable earth is forwarded to the plants, while clods and larger masses are thrown into the furrow behind the share.

*Claim.*—The combined arrangement of the guard H, elevated wing I, curved horizontally in two directions, adjusting shank G and bracket E F, operating in connection with a shovel plough, in the manner and for the purpose set forth.

No. 25,433.—HENRY MILLER, of Grafton, Va.—*Improved Shingle Machine.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the manner of tilting the bed, as shown, to wit, by means of the adjustable wheel I on shaft J, actuated by the ratchet K also on said shaft, the pawl L on the framing A, spring w attached to the carriage E, and spring t<sup>1</sup> attached to the framing A and acting on the bed F, the whole being arranged substantially as and for the purpose set forth.

I further claim the arrangement of the bed F and rods G H attached to the framing, as shown, to admit of the vertical adjustment of the bed, for the purpose of graduating the thickness of the shingles.

No. 25,434.—JONATHAN H. MITCHELL, of Germantown, Tenn.—*Improvement in Cotton Scrapers.*—Patent dated September 13, 1859.—This invention consists in so arranging the several parts of the scraper as to perfectly clean the ridge up to the standing stalks, and at the same time, like the common scraper, throw the dirt and weeds to the centre of the furrow, and this too while the beam is held parallel to the plane of the ground and in the most favorable line of draft.

The inventor says: I *claim*, first, the combination and arrangement of the beam d, chair c, mouldboard a, and share b, when operating substantially as set forth.

Second. The adjustable and changeable share b, when constructed, arranged, and operating substantially as and for the purpose set forth.

No. 25,435.—WILLIAM MORRISON, of Carlisle, Pa.—*Improvement in Corn Planters.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A corn planter constructed substantially as shown and specified, that is to say, with the mouldboards m m<sup>1</sup>, adjustable cutters or coverers d d, hopper B, slides q q, and clearers N and e, when these several parts are constructed and arranged for joint operation in the manner and for the purposes described.

No. 25,436.—WILLIAM O'NEILL, of Pine Level, Ala.—*Improvement in Ploughs.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The lapping landsides of the ploughs and the bar A, attached to the beam as specified, in combination with the bolts, nuts, and braces described, whereby they may be formed at pleasure into a double or hill-side plough, as set forth.

No. 25,437.—WILLIAM O'NEILL, of Pine Level, Ala.—*Improvement in Ploughs.*—Patent dated September 13, 1859.—This invention consists in attaching to the share of the plough on each side of the stock, by a bolt, a movable section or small mouldboard, for the pur-



pose of throwing more dirt over the corn or rice, or other seed or grain, when required by the continued growth of the article

*Claim.*—The arrangement of the adjustable mouldboards  $M M^1$ , attached to the share by bolts  $a$ , and constructed as described, with braces  $z$  and  $T$ , stock  $S$  and share  $S^1$ , and point  $P$ , substantially as and for the purposes specified.

No. 25,438.—GEORGE T. PARKHURST, of Baltimore, Md.—*Improvement in Lamps.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The flattened air tubes, bent at right or other convenient angles, with a slit or opening at the outer angles, in combination with flat wick tubes, and the combination of the above parts with the cap or dome, made or operating substantially as described.

No. 25,439.—STEPHEN P. PEET, of New York, N. Y.—*Improvement in Carriage Springs.* Patent dated September 13, 1859.—This invention consists in the combination of a volute coil with elliptic leaves in such manner that the two elements when combined constitute a carriage spring suitable for ordinary vehicles.

*Claim.*—A compound spring, composed of a combination of an elliptical leaf or leaves and a volute coil, substantially as set forth.

No. 25,440.—JOHN G. PERRY, of Kingston, R. I.—*Improved Sausage Stuffer.*—Patent dated September 13, 1859.—The distinctive feature of this machine consists mainly in using a cylinder having a spiral cavity in its periphery in combination with a nozzle or nozzles and a follower or leaf cam, fitted into and working in this cavity, so that by their combined action the meat is forced out of the nozzle into the cases.

*Claim.*—Combining the cylinders  $c$ , having a spiral cavity or cavities, with the follower  $D$ , substantially as described, for the purposes set forth.

No. 25,441.—ORRIS PIER, of Ludlow, Vt.—*Improvement in Horse Rakes.*—Patent dated September 13, 1859.—The object of this invention is to obtain a rake that may be readily raised and lowered for the purpose of having its load discharged, and also readily adjusted, so that the ends of the teeth may be at the desired height from the surface of the ground, and the rake may gather the hay without having its teeth run into the ground.

*Claim.*—The arrangement and combination of the adjustable bar  $I$ , lever  $H$ , bar  $E$ , rods  $G$ , rake  $F$ , strap  $J$ , and seat  $I^1$ , as and for the purpose set forth and described.

No. 25,442.—DANIEL R. PRINDLE, of Bethany, N. Y.—*Improvement in Boilers and Steamers.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—So turning or forming the flange of the upper section that it will contain water, to prevent the fire from burning the packing beneath the flanges, substantially as described.

No. 25,443.—S. G. RANDALL, of New Braintree, Mass.—*Improvement in Seeding Machines.*—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and combination of the series of plate wheels  $D D$ , seed boxes  $A$ , and horizontal bar  $B$ , substantially as shown and described, so that, as the bar  $B$  is drawn along, the plate wheels shall assume an oblique position, as set forth.

No. 25,444.—J. A. SAFFORD, of Winchester, Mass., and JOHN W. CHASE, of North Weare, N. H.—*Improvement in Skiving Machines.*—Patent dated September 13, 1859.—In this invention, the gauge is rigidly held by a catch, or rest, while the skiving is performed, and a spring is employed for the purpose of raising it, preparatory to inserting a fresh piece of leather. This invention also consists in passing the edge of the spring apron a short distance beneath the edge of the knife, whereby it is prevented from springing up past the knife and producing an uneven surface.

The inventors say: We *claim*, first, hanging the gauge roll  $K$  in vibrating frames  $I$ , in combination with the spring  $h$ , and retaining spring catch  $N$ , and adjustable stops  $k l$ , the whole arranged and operating as specified, for the purposes set forth.

Second. We claim the overlapping knife  $L$ , in combination with the adjustable spring apron  $M$ , arranged and operating as specified, for the purpose set forth.

No. 25,445.—FRANCIS C. SCHAFFER, of Brooklyn, N. Y.—*Improvement in Carriage Tops.* Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement and combination, with the curtains  $D$ , of the hooks  $l$ , guides  $d$ , and supporters  $c$ , as shown and described, so that the curtains  $D$  may be kept stretched and be readily lowered or raised and secured overhead, within the carriage, at any desired point, as set forth.



No. 25,446.—THADDEUS S. SCOVILLE, of Rochester, N. Y.—*Improved Spirit Level*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Employing a single transparent cell or cistern of spirits, or other fluids, in combination with the scale *c*, and rectangular stock *A*, in such a manner that the surface line of the liquid shall indicate both the horizontal and perpendicular, with the intermediate degrees, substantially in the manner and for the purposes set forth.

No. 25,447.—HERVEY SLOAN, of Franklin, Ind.—*Improvement in Seeding Machines*.—Patent dated September 13, 1859.—In using this machine, the seed slide which distributes small grain is operated by the rollers, or wheels, while the slides for seeding corn are operated by hand power. The operator stands upon the machine and operates the corn slides and the cultivator teeth. *M M* represent peculiar shaped bars attached to the shanks which work behind the teeth and act as coverers for the corn.

The inventor says: I *claim*, first, the arrangement of shanks *I I*<sup>1</sup>, drag bars *K K*<sup>1</sup>, levers *J J*<sup>1</sup>, bar *G*, rest *H*, and support *h*, the same being combined and operating substantially as and for the purpose specified.

Second. In connection with the subject of the first claim, the arrangement of rollers *B B*, seed boxes *C* and *D*, slides *a* and *d d d*, when the same are constructed substantially as and for the purpose specified.

No. 25,448.—C. A. SMITH, of Piermont, N. Y.—*Improvement in Railroad Car Seats*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the back and bottom of a car seat, as described, so that when the seat is adjusted to an inclined position, both parts move together on the same pivot *a* on which the back moves, independent of the bottom, when the seat is reversed, substantially as specified.

Second. I claim the spring catch *e*, notched arc *f*, bottom *A*, and back *D*, when the same are arranged and combined as described.

No. 25,449.—P. M. SMITH and T. T. COLLIER, of Lavernia, Texas.—*Improvement in Cotton Seed Planters*.—Patent dated September 13, 1859.—This invention consists in arranging, over a reciprocating slide, an agitator which serves to facilitate the discharge of the seed from the hopper, through a hollow wrought iron ploughshare, said agitator being operated from a pulley on the same shaft which gives motion to the slide, so that both move simultaneously.

*Claim*.—The arrangement and combination of the wheels *B*, axle *C*, crank *a*, pulley *H*, slide *D*, agitator *F*, fender bar *S*, ploughshare *G*, and scraper *h*, substantially as and for the purpose described.

No. 25,450.—JAMES CHRISTIAN RIST STEIRLY, of Brooklyn, N. Y.—*Improved Thimble*.—Patent dated September 13, 1859.—This improvement consists in a small attachment of brass, steel, or other hard metal, on the side of the thimble near the opening, and containing an edge of fine tempered steel, from one eighth of an inch in length, and about three sixteenths of an inch in width, the whole fixed on the thimble by brazing, as seen in the engravings, in which *a* is the thimble and *b* the cutter.

*Claim*.—The combination of the thimble and cutter in the manner and for the purpose set forth.

No. 25,451.—DAVID STUART, of Philadelphia, Pa.—*Improvement in Cooking Stoves*.—Patent dated September 13, 1859.—This invention is an improvement in gas consuming cooking stoves; and for the purpose of heating the air on its passage to the distributor *a*, it enters aperture *a*<sup>1</sup>, and is passed into and through the middle of the rear part of the hollow cross piece *b*, on the top of the stove, and thence down through the divider *m*.

*Claim*.—Combining with the hollow cross piece *b*, the distributor *a*, constructed and arranged as set forth.

No. 25,452.—J. H. SWAN, of New York, N. Y.—*Improved Folding Chair*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the back *E*, seat *F*, and arms *G G*, substantially as shown, so that the back and seat, when occupied, will be nearly counterpoised, and the arms *G* moved with the seat and back, for the purpose specified.

Second. In combination with the back *E*, seat *F*, and arms *G G*, the curved legs *A A B B*<sup>1</sup>, when the whole are arranged substantially as shown, so as to admit of being completely folded.

No. 25,453.—JAMES TAYLOR, of Rushville, Ill.—*Improved Churn*.—Patent dated September 13, 1859.—This invention consists in a peculiar construction and arrangement of perforated brakes and auxiliary reflectors, in combination with a dasher having its blades flattened gradually from near the shaft to their ends, whereby the cream is powerfully agitated and



moves toward the side of the churn, and there broken and deflected, or thrown back again toward the centre.

*Claim.*—The peculiar construction and arrangement of perforated brakes and auxiliary reflectors, in combination with a dasher, having its blades flattened out gradually from near the shaft to their ends, substantially as and for the purposes set forth.

No. 25,454.—JAMES S. TAYLOR, of Danbury, Conn.—*Improvement in Machinery for forming Hat Bodies.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the two perforated cones and exhaust, with one picker and feed arrangement, so arranged that the current of impelled fur is alternately shifted from the tip of one cone across on to the tip of the other in such a manner as to give the required proportions in forming a perfect hat body.

No. 25,455.—GEORGE W. TOLHURST, of Liverpool, Ohio.—*Improved Washing Machine.*—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The inside bottom box B, constructed air-tight, so that when the pressure of the upper rubber is removed it will float, and expose the clothes to be handled.

No. 25,456.—M. L. TOURTELETT, of Neshonoc, Wis.—*Improvement in Seeding Machines.* Patent dated September 13, 1859.—As the machine is drawn along the cam I gives a reciprocating motion to the slides F F and L through the medium of the levers G H and traverse rod *l*. The stirrers *i* cause the seed to pass out from the hoppers E through the perforated bottoms *a a*, the amount of the discharge being regulated or entirely cut off by adjusting the perforated slides *b b*. The slide L, which works in the hoppers M, distributes the seed from said hoppers in the usual way. The spring K ensures a regular movement of the working parts which actuate the seed distributing device.

*Claim.*—The combination and arrangement of the levers G H, connected by the traverse rod *e*, the cam I, the slides F F and L, for joint operation, for the purpose set forth

No. 25,457.—LOUIS S. ULLMAN, of Nashville, Tenn.—*Improved Hygrometer.*—Patent dated September 13, 1859.—As the spiral portion *d* of the plant winds up, or unwinds itself with the changes in the hygrometric condition of the atmosphere, the capsule *c* having the index attached, is caused to turn back and forth, and if the dial is properly graduated the index will indicate the degree of moisture in the atmosphere, and so foretell the changes in the weather.

*Claim.*—The combination of the capsule and naturally spiral tail like appendage of either of the plants specified, with an index and dial, or their equivalents, substantially as described, to constitute a hygrometer.

No. 25,458.—JOHN VAN HORNE, of Magnolia, Ill.—*Improvement in Machines for Weighing Grain, &c.*—Patent dated September 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Weighing by means of a round ball or self acting weigher O, operating in a concave beam, or balance and blocks, and spiral springs N N, working in the bottom of the beam by means of the grooves P P, so as to weigh different weights or drafts, and board H, combined for the purposes set forth, as above described.

No. 25,459.—THOMAS J. WALLACE, of Cameron, Ill.—*Improvement in Machines for Raking and Loading Hay.*—Patent dated September 13, 1859.—In this invention a sled frame A A<sup>2</sup> is hinged to the part A<sup>1</sup> of the main frame at *b*, by having the two pivots *c* (one projecting from each side of the upper end of the sled frame) arranged in slots *d* in arms *a*, extending from the sides of the lower end of the part A<sup>1</sup> of the main frame.

The inventor says: I *claim*, first, a hay raker and loader, all the parts of which are constructed, arranged, and combined together for joint operation, substantially as described.

Second. The combination of the inclined part A with its pivot *c*, with the part A<sup>1</sup> of the main frame and slot *d*, substantially as and for the purposes set forth.

No. 25,460.—HAMLIN WHITMORE and DAVID M. SMITH, of Springfield, Vt.—*Improved Carpenters' Rule.*—Patent dated September 13, 1859.—This invention consists in having the spiral springs fitted on the pintles of the joints bearing against elastic plates at the central portions of the joints, said plates being notched and provided with projections, so as to form snaps or catches, to effect the desired object.

*Claim.*—The spiral springs *h h* applied to the pintle *e* of the joint, in combination with the elastic bearings *d*<sup>1</sup> of the plates *c c*, provided with notches *f* and projections *g*, as and for the purpose set forth.

No. 25,461.—CHARLES WHITAKER, of Davenport, Iowa.—*Improvement in Corn Planters*



Patent dated September 13, 1859.—This invention consists in a peculiar distributing device arranged in connection with a seed receptacle within each wheel, whereby a very simple and efficient machine is obtained.

*Claim.*—The arrangement of the seed boxes or receptacles *F*, slides *g*, stationary plates *G*<sup>1</sup>, and movable plate *G*, with the arms and weights *m* attached, substantially as and for the purpose set forth.

No. 25,462.—J. S. WILLIAMS, of St. Louis, Mo.—*Improvement in Grates.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the stove grate *A*, having register plates *D D* and valves *H H*, which admit unheated air from the room at all times through the bottom of said plates, but control the flow of heated air into the room, as described, with the ordinary fireplace *C*, when the latter is separated from the flue above by a simple fireboard *b*, in the manner and for the purpose described.

No. 25,463.—WILLIAM B. WILLIAMS, of Warrenton, N. C.—*Improvement in Ploughs.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of screw bolts *S*, nut *n* in beam *B*, standard *A*, cuff *c*, and slotted brace *b*, to regulate the depth of ploughing, substantially as described.

Second. And, in combination with the above, the curved arm *D*, for collecting weeds, substantially as described.

No. 25,464.—WILLIAM B. WILLIAMS, of Warrenton, N. C.—*Improvement in Ploughs.*—Patent dated September 13, 1859.—This invention consists in having a piece set in the front of the standard and held in position by two oblique rings attached on either side of the standard, for the purpose of preventing wear on the standard.

*Claim.*—The combination of standards *S*, plate *P*, and oblique wings *W*, substantially as and for the purpose set forth, with share *C*.

No. 25,465.—ALBERT BROUGHTON, of Malone, N. Y., assignor to Himself and A. LINDSAY, of said Malone.—*Improvement in Converting Rotary into Reciprocating Rectilinear Motion.*—Patent dated September 13, 1859.—This invention consists in combining two opposite toothed racks with a single interposed rotating pinion, for the purpose of converting rotating into reciprocating rectilinear motion, by so applying the shaft of the pinion in combination with a divided journal box having two bearings closed by springs, and applying means of shifting the pinion shaft from one bearing to the other of the journal box, that the pinion is made to gear with the two racks alternately, and so caused, by its revolution, to give the carriage to which the racks are attached a movement back and forth.

*Claim.*—The combination of the divided journal box *F F*<sup>1</sup>, containing two bearings, and closed by springs *G G* and the spring *I*, or toothed plate *I*<sup>1</sup>, with the vibrating pinion shaft *E*; the whole operating substantially as and for the purpose specified.

No. 25,466.—J. H. GOULD, of Alliance, Ohio, assignor to Himself and E. N. HARTSHORN, of Mount Union, Ohio.—*Improved Cover for Stove Plates.*—Patent dated September 13, 1859.—This invention consists in the use of a wire handle in such relation to the common circular, or other shaped lid, used for covering the boiler holes in the top plates of stoves, that said handle will always keep an erect position, and at the same time will not be liable to be bent or broken off, or lie in the way in using the top of the stove.

*Claim.*—The self erecting handle *A*, in combination with weights *C*, arranged essentially as and for the purposes set forth.

No. 25,467.—JAMES A. HAMER, of Reading, Pa., assignor to Himself and NORRIS MARIS, of Kimberton, Pa.—*Improvement in Brick Machines.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the blades *I*<sup>1</sup> and rods *L*<sup>1</sup> with the valves *J*<sup>1</sup> and spiral *K*<sup>1</sup>, constructed, arranged, and operating in relation to each other, substantially as and for the purposes set forth.

Second. The combination of the adjustable cover *D* with spiral *K*<sup>1</sup> and trough *B*, for the purpose of relieving or increasing the pressure upon the clay in the moulds, as set forth.

Third. The combination of the hinged smoothing piece *Q* with the hinged vertically reciprocating piece *P*, as and for the purposes set forth.

Fourth. Providing the hinged smoothing piece *P* with the slot *O* and tube *S*, as and for the purposes set forth.

No. 25,468.—S. P. LA DUE, of Rockford, Iowa, assignor to THOMAS S. LA DUE, of said Rockford.—*Improvement in Calendar Clocks.*—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement and combination of the wheels *C D E*



and G, and the ring M and Q, the faces of which are marked with the proper figures and letters, so that they indicate the seconds, the minutes, the hours, and the days of the week and month, substantially in the manner specified.

Second. Arranging the wheel G in such a manner that it serves the double purpose of actuating the bell hammer and to indicate the hours of the day, substantially in the manner described.

Third. Placing the figures and dials on the faces of the driving wheels to indicate the seconds and minutes by a continuous motion; also, to indicate the hours by a continuous or intermittent motion, substantially in the manner described.

No. 25,469.—JOSEPH B. OKEY, of Indianapolis, Ind., assignor to Himself and WILLIAM H. KENDRICK, of said Indianapolis.—*Improvement in Straw Cutters*.—Patent dated September 13, 1859.—This invention consists in providing a common cutting box with a movable bottom, said bottom having a vibrating movement forward and backward, by means of which the straw is carried up to the knife. This bottom is moved by two cams upon the end of the lever, which operates the gate carrying the knife, said cams operating in a groove or notch cut in a horizontal bar, and this bar connected to the bottom by a yoke.

The inventor says: I claim, first, the combination of sliding bar B, when constructed as set forth, with yoke C and vibrating bottom D.

Second. The combination of cams F and G with lever A, when constructed and used as described; all operating substantially as and for the purposes mentioned.

No. 25,470.—JOSEPH RIDER, of Newark, Ohio, assignor to Himself and E. REMINGTON & SONS, of Ilion, N. Y.—*Improvement in Breech Loading Fire-Arms*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim the combination of the movable breech pin F and the cap tube E, applied to a pistol, substantially as described.

And, in combination with a hammer of the form described, I claim the arrangement of the main-spring and trigger, relatively to each other, to the hammer, and to the stock and barrel, substantially as described.

No. 25,471.—JOSEPH C. SILVY, of New Orleans, La., assignor to THOMAS J. DOBYNS, of St. Helena Parish, La.—*Improvement in Sewing Machines*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, operating the needle arm, by means of a grooved eccentric G and a pin b on the needle arm, arranged relatively to each other, to operate in the manner described and illustrated.

Second. The construction or arrangement of the portion of the feed plate or table B, through which the needle and the feeding dog work, to form an inclined plane relatively to the direction of the movement of the feeding dog, substantially as described and illustrated, for the purpose set forth.

Third. The combination of springs R T and M, applied in the manner described, to effect the tightening of the stitch, and otherwise control the thread between the perforating needle and its spool by the automatic operation explained.

No. 25,472.—SETH D. TRIPP, of Stoneham, Mass., assignor to Himself and LUTHER HILL, of said Stoneham.—*Improvement in Apparatus for Feeding Pegs*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, winding up the blank or strip of pegs with the ribbon f, so that, as the ribbon is wound off by the movement of the machine, the blank will be fed up in the manner substantially as set forth.

Second. I claim hanging the spool I on a vibrating arm F, so that the spool and trough M may follow the motions of the swinging gate or part of the pegging machine, to which the trough M is attached.

No. 25,473.—ANDREW TURNBULL, of West Meriden, Conn., assignor to Himself and JAMES D. FRARY, of Meriden, Conn.—*Improvement in Scales*.—Patent dated September 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, the combination of the beam lever F with scoop platform C attached, with the spring K, rack J, adjustable or fixed pinion e with index or indexes N attached to its arbor d, and traversing over a graduated plate or plates M, substantially as and for the purpose set forth.

Second. I claim attaching or suspending loosely the rack J to the beam lever F, by means of a pivot f, and having spring g acting on said rack in order to keep the same in gear with the pinion e, for the purpose set forth.

Third. I claim attaching the lower end of the spring K to the traverse bar h, by means of the screw L and nut i, in order to regulate the tension of the spring and preserve its uniformity, substantially as and for the purpose set forth.



Fourth. I claim, in combination with the beam lever F, spring K and indexes N, connected with the beam lever, the stop *j* on the arbor B, for the purposes specified.

No. 25,474.—O. H. WATERS, of Baltimore, Md., assignor to ALFRED HUNTER, of Washington, D. C.—*Improved Clothes Dryer*.—Patent dated September 13, 1859.—The inventor says: I construct the upright box A to contain the perpendicular post B that runs freely in the box A, and is suspended upon a cord C that runs in groove K<sup>2</sup>, cut in the bottom of the post B, and is wound upon the cylinder D by crank E. Upon the top of the adjustable grooved post B are placed four revolving radial arms F, upon which is arranged the line G upon which the clothes are hung. A box H is placed above the arms in which is a cylinder attached to a crank I for the purpose of winding the line G, when not in use, to protect it from the weather.

*Claim*.—The combination and arrangement of the adjustable grooved post B, its radial arms F, and box H, with box A, cylinder D, and protector K, the whole being constructed in the manner and for the purpose set forth.

No. 25,475.—LEWIS WHITE, of Hartford, Conn., assignor to Himself and DANIEL McLAUGHLIN, of New York city.—*Improvement in Lamps*.—Patent dated September 13, 1859. This invention consists in the application and arrangement of a series of gear wheels and movements for raising and lowering and adjusting the lamp wick while burning, and also an improved method in putting in the tube.

The inventor says: I *claim* the application and arrangement of the operating gears, when placed in the manner and for the purpose herein described.

I also claim the movable flaps B B, in the manner and for the purpose substantially as described.

No. 25,476.—LEMUEL ALLEN, of Pekin, Ill.—*Improved Planetarium*.—Patent dated September 20, 1859.—This invention consists in constructing a planetarium as a piece of common school apparatus, to be used as a hand implement.

The inventor says: I *claim* the representation of the planets and their orbits suspended on a diametric rod, and capable of rotating on said rod within a broad belt which represents the zodiac, substantially as set forth.

I also claim the arrangement of devices by which the earth may be adjusted to represent its relative position to the sun, and to the plane of its orbit at any point thereof, in the manner and for the purpose set forth.

No. 25,477.—ASTLEY C. ANCONA, of Reading, Pa.—*Improvement in Slide Valves for Steam Engines*.—Patent dated September 20, 1859.—This invention consists in corrugating the seat upon which the valve slides, so that the steam may act upon the under side of the valve, and thereby counteract the pressure of steam on the top of the valve, and also for the purpose of keeping the valve and its seat at all times well lubricated.

*Claim*.—The corrugated valve seat, in combination with the cavities *c c c c* in the face of the valve, substantially the same as and for the purpose set forth.

No. 25,478.—P. I. ANKNEY and DANIEL MCGREEVY, of New Lexington, Ohio.—*Improvement in Grain Separators*.—Patent dated September 20, 1859.—In operating this machine, the grain, which has previously been cleaned from the chaff, is put into hopper *h*; trough *b* is then oscillated until the opening in the screen is in a proper position; the hopper is then tilted down until the mouth thereof is in conjunction with the aperture; the grain thus passes from the hopper into the screen.

The inventors say: We *claim*, first, the oscillating hopper or trough *b*, as constructed, in combination with the revolving screen *e*, constructed and operating jointly, as described and for the purpose set forth.

Second. We claim the combination of the screen *e*, and trough and hopper *b*, with the adjustable hopper or trough *h*, and the spout *j*, with gauge *j*<sup>1</sup>, cut off *k*, and valve *k*<sup>1</sup>, the whole operating as described and for the purpose set forth.

No. 25,479.—WILLIAM R. AXE, of Beloit, Wis.—*Improvement in Mortising Machines*.—Patent dated September 20, 1859.—This invention consists in the employment of a square hollow chisel, inclosing a rotary auger of a peculiar shape, for the purpose of boring and squaring the hole at the same operation, at the same time obviating the clogging up of the bit, as is usually the case where a chisel and bit are combined for boring and mortising at the same moment; also, in combination with the above instrument, a reciprocating table, which is operated by a foot lever.

*Claim*.—The gauge plate R<sup>1</sup> and slides *x x*, in combination with the reciprocating table W and adjustable table W<sup>1</sup>, arranged in the manner and for the purpose set forth.

No. 25,480.—HORACE BERTOLET, of Reading, Pa.—*Improvement in Steam Engines*.—Patent dated September 20, 1859.—In operating this apparatus, if the lever D be drawn to P, the



whole mechanical arrangement changes its position to that indicated by the dotted lines, thus raising or opening the valves in two or four cylinder cocks simultaneously.

*Claim.*—The peculiar arrangement of the bar I I in the slotted valve stem, and the connection of the arms R R with the cylinder cocks C C.

No. 25,481.—JONATHAN BIGELOW, of Brighton, Mass.—*Improved Changeable Stencil.*—Patent dated September 20, 1859.—In the construction of this stencil, each end of each separate plate is bent at a right angle, and then bent again so as to be parallel with that part of the plate in which the character is cut. The central or main holding frame is provided with a handle *a* for convenience, being an extension of the top bar *b* through which the screws *c* act upon the follower *d*, to press it firmly upon the different plates which are inserted between *d* and *g*, and extend outward from either side of the main frame.

The inventor says: I *claim* the character plate formed at its ends as described, for the purpose specified, whether the same be swaged at one edge or not.

Also, the stencil formed by the combination of said character plates and a frame or frames, or clamps, as described.

No. 25,482.—PETER S. BISHOP, of Smithfield, R. I.—*Improvement in the Manufacture of Thimbles.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The new article of manufacture described, namely, a thimble made from plated or overlaid metal, either in the common form with fluted sides, or with sides in the form of a regular geometrical figure, the whole article being substantially such as specified.

No. 25,483.—ALPHEUS BISSELL, of Berlin, Wis.—*Improved Washing Machine.*—Patent dated September 20, 1859.—The bottom *c* is pressed against the rollers H by means of the chuck E, which bears the platform D down, thus, by means of the cords *a a*, elevating the bottom *c*. P is a bar placed longitudinally with the box over the rollers *m m* of the frame F, in such a manner that when the bottom *c* presses the said frame upwards, the rollers *m m* will bear against the bar P and thus keep the frame in its proper position.

*Claim.*—The arrangement of the false bottom C, cords *a a*, pulleys *x x*, platform D, and cam chuck E, with the frame F, provided with corrugated rubbers H H, with rollers *m m*, and with levers I I, said frame being operated by means of cranks J J, the whole being combined and operating substantially as and for the purposes set forth.

No. 25,484.—J. L. BOOTH, of Cuyahoga Falls, Ohio.—*Improvement in Grain Separators.* Patent dated September 20, 1859.—This invention consists in the employment of a series of inclined zigzag screens and boxes, having a proper motion communicated to them, and used in connection with a fan and blast spout.

*Claim.*—The inclined zigzag screens and boxes B C, and troughs E, having a shake motion given them, and used in connection with the revolving fan G and spout H; the parts being arranged relatively with each other, to operate as and for the purpose set forth.

No. 25,485.—J. H. BOYD, of Baltimore, Md.—*Improvement in Spring Saddle Trees.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment of the double head or gullet plates C and D, when the front head or gullet D is connected to the body of the tree by means of springs E E, in such manner that when the straining web is attached to said head and to the back of the tree, a spring seat will be formed, substantially as set forth.

No. 25,486.—SAMUEL W. BROWN, of Lowell, Mass.—*Improved Steam Pressure Indicator or Alarm.*—Patent dated September 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement and combination of cylinder A, rod F and *c*, tube G, and valve H, with each other, in the manner described, for indicating or giving the alarm with steam from the same or contiguous chamber, essentially in the manner and for the purposes fully set forth.

No. 25,487.—MORGAN CHITTENDEN, of Danbury, Conn.—*Improved Sash Fastener.*—Patent dated September 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of a T shaped wedge C, with a bolt case B, having an opening corresponding thereto, whereby the two sashes are uniformly and closely secured together, substantially in the manner and for the purpose set forth.

No. 25,488.—M. H. CLARK, of Danville, Va.—*Improvement in Hydraulic Presses.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the water reservoir D<sup>1</sup>, force pump or pumps E, main supply pipe F, branches G G, stop cocks H, and a series of hydraulic presses A B C, for united operation, substantially as and for the purpose set forth.



Second. Arranging a leather packing ring on a disk which is divided radially into a series of parts, and fitted loosely on a conical extension of the piston, and held in contact with said extension by means of an undivided disk, which is suspended loosely so as to have vertical play on a screw or head pin of the piston, substantially as and for the purposes set forth.

No. 25,489.—RICHARDSON P. CLARK, of Johnstown, N. Y.—*Improved Apple Parer*.—Patent dated September 20, 1859.—This invention consists of a certain combination and arrangement of parts whereby the requisite semi-circular reciprocating movements are given to the paring knife A from a revolving shaft c, which is geared with a revolving apple fork B, by which combination and arrangement of parts the rate of movement of the knife while cutting or moving from the rear to the front of the apple may be readily varied in two certain different ways, or by two different adjustments of the contrivances used in respect to the rate of the rotary motion of the apple fork, so that the machine is conveniently altered to be accurately suited to paring apples of different sizes.

*Claim*.—The combination and arrangement of the paring knife A, lever g N M, spring R, cord L, clutch drum K, and spring U, with shaft C, band g, and pulleys H and J, and wheels D and E, and apple fork B, substantially as and for the purposes described.

No. 25,490.—V. P. CORBETT, of Washington, D. C.—*Improvement in Stoppers for Preserve Cans*.—Patent dated September 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement of the plate m, screw p, conical nut b, and disk A, composed of two or more sections a, when the same are used in connection with an elastic band or rim h, when the whole is adapted to be used as a stopper for preserve cans, substantially as specified.

No. 25,491.—GEORGE B. CORNISH, of New York, N. Y.—*Improved Apparatus for Reefing Sails*.—Patent dated September 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Constructing the slip bands G G in one piece with four flanges, a a a<sup>1</sup> a<sup>1</sup>, the spaces between a a and a<sup>1</sup> a<sup>1</sup> serving as slip bands, and the central space between flanges a a<sup>1</sup> serving as a band on which the reef pennant J is wound, said flanges serving to prevent any lateral movement of the yard, and also to prevent the reef pennant from coming into contact with and being injured by the quarter bands H, all as shown and described.

No. 25,492.—RILEY DOTY, of Cardington, Ohio.—*Improved Device for Steadying Logs in Saw Mills*.—Patent dated September 20, 1859.—This invention relates to a mode of sustaining the log in a steady position upon the carriage during the process of sawing.

*Claim*.—The employment of the adjustable frames F F<sup>1</sup>, provided with journal bearings n n and with rollers a a, the same being operated in one direction by means of the head and tail blocks, and in the other direction by means of a cord and weight, one of said frames being stationed as described by a spring H, provided with a shoulder c and an inclined plane x, the whole being arranged substantially as and for the purpose specified.

No. 25,493.—JOHN L. DRAKE, of Cincinnati, Ohio.—*Improvement in Lamps*.—Patent dated September 20, 1859.—The object of this invention is to make suitable provision whereby the flame may be supplied with a requisite amount of warm oxygen to feed the flame, and, at the same time, the top or cap be kept in a sufficiently cool state to permit the same to be detached by the fingers, for the purpose of trimming the wick or supplying the fount with oil.

*Claim*.—The employment or use of the disk E, applied to the wick tube B, and used in connection with the cap C, and arranged relatively with it, for the purpose set forth.

No. 25,494.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improvement in Derricks*.—Patent dated September 20, 1859.—In this invention, on turning the screw, by a crank or otherwise, both the fulcrum of the boom and the weight on the end of the cable will be elevated at the same time.

*Claim*.—The combination of the toggles and right and left screw boom H, when the latter has its fulcrum movable, as above shown, with the pulleys J J L N and P, when the same are arranged essentially in the manner and for the purposes described.

No. 25,495.—OLIVER T. EDDY, of Philadelphia, Pa.—*Improvement in Coffee Pots*.—Patent dated September 20, 1859.—This invention consists of an annular cone shaped deflecting plate, resting on the bottom of a pot and arranged in respect to a cone shaped tube and a perforated plate.

*Claim*.—The annular, cone shaped deflecting plate E, resting on the bottom of the pot, and arranged in respect to the tube F and perforated plate G, substantially as set forth.

No. 25,496.—MOSES G. FARMER, of Salem, Mass.—*Improved Electro-Magnetic Steam Boiler Gauge*.—Patent dated September 20, 1859.—This apparatus is designed to show the



height of water or other liquids in steam boilers and reservoirs, the rise and fall of tides, or the position, within certain limits, of any traversing rod or lever.

*Claim.*—The combination of an indicator, an electric circuit or circuits, one or more circuit breakers, with a float, in any manner substantially as described.

No. 25,497.—L. R. FAUGHT, of Atlanta, Ga.—*Improvement in Horse Power Machines.*—Patent dated September 20, 1859.—This invention consists in a novel arrangement of gearing, whereby it is designed to transmit the power of the animals to the machinery to be driven, with as little loss by friction as possible.

*Claim.*—The arrangement and combination of a stationary geared rim A, movable rim E, supporting bar D fitted in the pinions C C, the shaft G G, provided with pinions F F and wheels H H, and the shaft F<sup>1</sup>, substantially as set forth.

No. 25,498.—GEORGE FINN, of Oswego, N. Y.—*Improved Method of Operating Crozing Knives.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Arranging the cam c that works the cutter on the bevel wheel O, so that it will not occupy more space on the arm that carries them than that occupied by said bevel wheel, for the purpose of simplifying the mechanism and economizing space on said arm, which is necessarily limited in length, as represented and shown.

No. 25,499.—ELI WHEELER, of Elmira, N. Y.—*Improvement in Railroad Car Seats.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of box formed supports c c, cushions C<sup>2</sup> C<sup>2</sup>, and cushioned seat backs D D, of a pair of car seats, in the manner specified, whereby when the bottoms of the seats are turned over, to fill up the space between the seats, the bed clothing contained in the box will be exposed so as to be readily removed, and then, when the backs are turned down to fill the place occupied by the bottoms, the said boxes will be closed up and a continuous bed formed from one back edge to the other of the seat, as and for the purpose set forth.

Second. The short open stationary partitions B B in combination with sliding panels b b, which, when elevated, serve as head and foot boards, and allow ventilation under and above the berth during night time, and when lowered during the day time, afford more room to the upper portion of the body of passengers, as they pass through the aisle of the car, substantially as set forth.

Third. The short sliding closed blinds C C, arranged to operate as described, and serve as foot and head boards and allowing ventilation above and below the upper berth, in combination with the upper berths E and partitions c c, substantially as set forth.

No. 25,500.—JOHN FRETZ, of Angel, Cal.—*Improved Furnace and Apparatus for Treating Pyritous Ores.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the hollow stationary cylinder F, its revolving worm, and its openings, for the admission of the pyrites, and the introduction of air and discharge of the fumes of sulphur, in combination with the rotating cylinder C, and its internal ribs, the said stationary and rotating cylinders communicating with each other through a pipe k, the whole being arranged in respect to the furnace A, substantially as and for the purpose set forth.

Second. The system of vertical boxes or chambers J K and L, communicating with each other, with the steam pipes k<sup>1</sup>, the rotating cylinder C, and the exit pipe M, and arranged substantially as set forth and for the purpose specified.

No. 25,501.—RICHARD Garsed and CLAYTON DENN, of Philadelphia, Pa.—*Improvement in Machinery for Warping Yarn.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the form of the drop wires as in Fig. 4, arranged in the manner and for the purpose specified.

Second. The cylinder 20, for the purpose of marking the cuts, operated substantially as above described.

Third. The employment of a register, constructed substantially as above specified, for the purpose of registering the number of cuts while the machine is in motion.

Fourth. The employment of the bar A, for the purpose of taking the leas, constructed with fingers either on one or both sides, as above described.

Fifth. The combination of the vibrating tube V, the stationary hook 52, the movable hook 55, and the pin 57, for the purpose of forming the yarn into links, constructed and operated in the manner substantially as above described.



No. 25,502.—SAMUEL GISSINGER, of Allegheny, Pa.—*Improved Churn*.—Patent dated September 20, 1859.—This invention consists in an arrangement of oscillating churns furnished with dashers and wings in combination with a revolving shaft armed with wings, the whole being arranged in a frame and placed in a case.

The inventor says: I *claim* the arrangement in the movable frame *e*, of the oscillating churns *i*, furnished with dashers *m*, and wings *h*, in combination with the revolving shaft *f*, armed with wings *g*, the whole being arranged and combined as described and represented, and for the purpose set forth.

No. 25,503.—EUGENE GRENET, Jr., of Paris, France.—*Improved Galvanic Battery*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the method of agitating the exciting liquid of a galvanic battery by forcing a current of air through it, in the manner and for the purposes substantially as set forth.

Second. Arranging and constructing the zinc and charcoal elements, in combination with the exciting fluid, substantially in the manner described, whereby they may be operated, the one by the other, substantially as set forth.

Third. Forming the charcoal elements by pressing into or on to the surface of plates of lead, when yet in a semi-liquid state, small pieces of charcoal, in the manner substantially as described.

No. 25,504.—COLLINS W. GRIFFITH, of Dayton, Ohio.—*Improved Gauge and Box for Casting Journals in Soft Metal*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* in combination with a hollow box, a loose removable gauge, or centring plate, fitted and fastened to, or held against the box, so as to hold the shaft in its proper position in the box, and at the same time retain or prevent the melted metal that is poured into the hollow box to form a box around the shaft from running out.

No. 25,505.—VALENTINE HALL, of New York, N. Y.—*Improvement in Apparatus for Cooling Liquids*.—Patent dated September 20, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the employment or use of one or more receivers A B, placed within a tank F, and connected with the barrel or cask H by means of a siphon I, and with a pump E within or at the outer side of the tank, for the purpose set forth.

I further claim combining a pump E with one or more receivers A B, connected together and made to communicate with each other by siphons C D, when said parts are submerged within a tank F, and made to communicate with a cask or barrel H by means of a siphon I extending over the top of the tank, substantially as and for the purpose set forth.

No. 25,506.—HALVOR HALVORSON, of Cambridge, Mass.—*Improvement in Lamps*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of the valve C, in connection with the wick tubes B B, for the purpose of regulating the supply of air to the interior of or between two planes of the wicks *g g*.

Second. The arrangement of the shafts *e f* and their wheels *e<sup>1</sup>* so that the wheels *e<sup>1</sup>*, on one shaft, may gear into those on the other, for the purpose of raising and lowering the wicks simultaneously by the turning of one shaft *f*.

No. 25,507.—RILEY HASKELL, of Painesville, Ohio.—*Trolling Bait for Catching Fish*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, constructing the body of an artificial representation of a natural fish, in two detached parts, to be used in combination—one portion thereof revolving and the other remaining fixed or stationary, both portions being on one shaft, as particularly described and for the purpose set forth.

Second. I claim, in connection with my first claim, filling the upper part of said fixed portion with a light substance, and weighting the lower part thereof, for the purpose of keeping the said fixed portion vertical in the water, as described.

No. 25,508.—ROCHUS HEINISCH, of Newark, N. J.—*Improvement in Tailors' Shears*.—Patent dated September 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Constructing the lower bow, with its upper portion widened and with the projection *p* thereon, so as to form a bearing for the forefinger within the bow, substantially as and for the purpose set forth.

No. 25,509.—W. M. HURLBERT, of Northfield, Vt.—*Improved Variable Exhaust for Steam Engines*.—Patent dated September 20, 1859.—This invention consists in making the upper



ends or nozzles of the blast pipes each in the form of an elbow or the inverted letter L, and fitting the regulating slides to the horizontal portions of the elbows.

*Claim.*—Applying the slides to operate in elbows or inverted L shaped nozzles, arranged substantially as described.

No. 25,510.—EDWARD T. JENKINS and FRANK B. POLLEY, of Williamsburg, N. Y.—*Improved Steam Trap.*—Patent dated September 20, 1859.—This invention is intended to be attached to a steam heating apparatus for warming buildings, &c., and is used for the purpose of retaining steam in the same, and allowing or facilitating the water of condensation to pass from the same.

*Claim.*—The round pipe B, in combination with the valve seat J, valve *a*, ring *c*, opening K, and float D, when arranged in the manner described and for the purpose specified.

No. 25,511.—CHRISTIAN KIEFFER, of Lancaster, Pa.—*Improvement in Boilers.*—Patent dated September 20, 1859.—This invention consists in the construction and arrangement of extension and perforated pipes, and frying pan with side pipes.

*Claim.*—The construction of the extension and perforated steam pipe C, with the extension hot air flue B, with the pan H, with pipes I I and perforated pipe K, arranged and combined substantially as described and for the purposes set forth.

No. 25,512.—JOSIAH KIRBY, of Cincinnati, Ohio.—*Improved Bunghole Borer and Reamer.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the conical shaped stock when made with a throat, cut through from the edge of the bit on one side to the opposite side of the stock, so that the shavings are made to pass through the stock and out on the opposite side, substantially as described.

I also claim the combination of the auger bit C with reamer, when made in the manner and for the purpose substantially as described.

No. 25,513.—LEVI L. LANCASTER, of Rocky Mount, N. C.—*Improvement in Seed Planters.*—Patent dated September 20, 1859.—*e* is a wooden frame of oblong shape, of dimensions sufficient to admit two wheels *c c* to be placed on the inside of the same, and leave sufficient space to receive the hopper *m* between them. The wheels are permanently fixed on a shaft which runs on bearings attached to the under frame *e*; on the centre of the shaft is a cylinder *b* with pockets, or depressions *r*, for the purpose of conveying the seed in proper quantities from the hopper *m* to the conveying tube D, which deposits the seeds in a furrow made by the opener F *u*; X is a coverer with arms extending to within a short distance of the front end of the machine, where they are pivoted loosely to the frame *e* by bolts *p p*. H H represents a leveller or cleaner.

*Claim.*—The frame *e*, wheels *c c*, hopper *m*, cylinder *b*, pockets or depressions *r*, carrying tube D, furrow opener F *u*, coulter Z, leveller H H, and bottom I I, the whole being arranged for operation conjointly as and for the purpose described.

No. 25,514.—LEWIS W. LEEDS and CALVERT VAUX, of New York, N. Y.—*Improved Thermometric Regulator for Heating Apparatus.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—So applying the vessel, which we have termed the secondary heater, containing the fluid to act upon the piston, or its equivalent, in combination with the primary heater, and so applying the piston, or its equivalent, in combination with said secondary heater and with the regulating valve, as described, that the secondary heater is exposed at the same time to the heating influence of the primary heater and the cooling influence of the incoming cold air, and the fluid contained therein is, by its expansion and contraction, made to control the admission of the steam or other heating agent, and cause the supply of such agent to the heater to vary inversely with variations in the atmospheric temperature, as set forth.

No. 25,515.—JULIUS S. LLOYD, of Philadelphia, Pa.—*Improved Approach Opening Gate.*—Patent dated September 20, 1859.—This improvement consists in operating the angular bar by means of a carriage having two pulleys and a guard, in combination with a rod having a projecting arm, and two cranked and weighted rods, the whole being arranged for joint action so that the said angular bar may be operated with much ease.

*Claim.*—Operating the angular bar D by means of the carriage I with its pulleys J and J<sup>1</sup> and guard L, in combination with the projecting arm *f*<sup>1</sup> of the rod F, and the cranked and weighted rods N and N<sup>1</sup>, and their respective cords or chains, the whole being arranged for joint action as and for the purpose set forth.

No. 25,516.—GEORGE LUTZ, of Logan, Ohio.—*Improved Water Indicator for Steam Boilers.*—Patent dated September 20, 1859.—These improvements have special reference to that class of gauges for indicating the height of water in steam boilers, in which the vertical movements of a ball or float are made by means of suitable mechanisms to give an alarm



signal whenever the water attains an unsafe level, and thus warn the attendant in order that he may at once apply the proper remedy.

The inventor says: I *claim*, first, operating auricular and visual alarms, either severally or conjointly, at will, by mechanism such as is described, for the purpose set forth.

Second. The combined index and tripping levers  $e e^1$ , arranged substantially in the manner and for the purpose set forth.

Third. The combination of the tripping levers  $e e^1$ , balance lever K, and bifurcated rocking lever J, substantially as and for the purpose described.

Fourth. The combination of the catch  $d$  and dogs  $j j^1$ , when arranged and operated substantially as and for the purpose set forth.

Fifth. The combination of the bent lever D, thumb screw  $d^1$ , and slotted bracket L, substantially as and for the purpose described.

No. 25,517.—AUGUSTUS MILLER, of Grafton, Ohio.—*Improved Method of Making Soap*.—Patent dated September 20, 1859.—In compounding this soap the following ingredients are used: Six gallons pure soft water, six pounds German erasive soap, one pound of soda, four ounces sulphuric ether, three ounces aqua ammonia, two ounces nitric ether, two ounces nitric passa, two ounces spirits of camphor, one ounce common alum, and two ounces gum resin.

*Claim*.—Soap manufactured from the herein-named ingredients and chemicals, when the same are compounded substantially in the manner and for the purpose specified.

No. 25,518.—G. I. MIX, of Wallingford, Conn.—*Improvement in the Manufacture of Iron Spoons*.—Patent dated September 20, 1859.—The object of the tongue  $D^1$  and recess D is to afford greater strength to the spoon at the points of union between the handle and bowl.

When the spoon is bent vertically the tongue also bends and prevents any opening of the joint. When the spoon is bent laterally the sides of the inlet or recess D prevent the projection  $D^1$  from moving out of place or becoming loose.

The inventor says: I *claim* first, the method, substantially as described, of making the handles of iron spoons.

Second. Forming a tongue  $D^1$  upon the bowl blank, and a corresponding recess or inlet D upon the handle, or *vice versa*, substantially as and for the purposes set forth.

No. 25,519.—GEORGE G. NOYES, of Worcester, Mass.—*Improved Carpet Fastener*.—Patent dated September 20, 1859.—This invention consists in having a hook at the outer end of a small metal bar, the opposite or inner end being provided with spurs, whereby the bar may be readily and securely adjusted to the floor without a permanent attachment and readily detached.

*Claim*.—The bar A provided with the hooks B, knife edge  $a$ , and spurs  $d$ , substantially as shown, so that it may be readily secured to and detached from the base board and floor, for the purpose set forth.

No. 25,520.—WILLIAM A. NUGENT, of Susquehanna Depot, Pa.—*Improvement in Railroad Chairs*.—Patent dated September 20, 1859.—This invention consists, first, of the shell or body  $a$ ; second, the cam jaws  $b b$ , which are adjusted to the rail  $c$ . The keys  $d d$  are intended to assist in retaining the chair immovably in its place, aided by the spikes  $e e$ .

*Claim*.—The shell or body  $a$ , with the cam jaws  $b b$ , and the chair, substantially as arranged and for the purpose specified.

No. 25,521.—JOHN K. O'NEIL, of Kingston, N. Y.—*Improved Horizontal Water Wheel*.—Patent dated September 20, 1859.—The inventor says: I employ a vertical cylindrical penstock A, in which are arranged two wheels C D, revolving closely within the penstock and working together in relation to each other and to the other parts connected therewith.

*Claim*.—The arrangement of the guide partitions  $b b g g$ , cylinders B E, wheels C D, and wheel or buckets  $f f$ , in the manner and for the purposes substantially as specified.

No. 25,522.—THOMAS S. PAGE, of Milan, Ohio.—*Improved Composition for Tanning Leather*.—Patent dated September 20, 1859.—The claim explains the nature of this invention.

*Claim*.—A liquor composed of terra japonica, sulphate of alumina and potassa, muriate of soda, nitrate of potash, and sulphate of soda, when combined in the proportions and for the purpose described.

No. 25,523.—COLLIN G. POLLOCK, of Cincinnati, Ohio.—*Improved Boring and Mortising Machine*.—Patent dated September 20, 1859.—The object of this invention is to perform the work of both boring and mortising with a single shaft, so arranged with certain necessary parts as to be capable of operating in a vertical direction, as the shaft of an ordinary mortising machine, and also being capable of being secured and prevented from moving in said direction and have a rotary motion imparted to it when used for boring.

*Claim*.—The arrangement and combination of the bar  $o$  on the arbor F, projection  $p$  on



the upright A, lever K, connected with the arbor F by the knuckle joint M and the bevel gear G H, for joint operation, substantially as set forth.

No. 25,524.—CHARLES POTTER, Jr., and C. B. COTTRELL, of Westerly, R. I.—*Improvement in Feeding Paper to and from Printing Presses.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the securing of the registering points I firmly to a fixed portion of the machine, and releasing the paper therefrom at the proper time by elevating the adjacent surface J J, as set forth.

We also claim depositing each sheet face upwards on the pile, by carrying it between a vibrating series of tapes R S, operated substantially in the manner set forth.

We likewise also claim the arrangement of the cylinders  $n n^1 p p^1$ , and the series of tapes R S, or their respective equivalents, in the vibrating frame P, which vibrates on the shaft F as a centre, and receives its proper vibratory motion from the hook *w*, or its equivalent, whereby the frame P may be readily unhooked and swung out of the way, to allow access to the bed of the press without deranging or disturbing any of the mechanism.

No. 25,525.—WILLIAM H. RACEY, of New York, N. Y.—*Improvement in Burners for Vapor Lamps.*—Patent dated September 20, 1859.—This invention relates to an improvement in a lamp for burning without a chimney the hydro carbons containing an excess of carbon, for which letters patent were granted to the above named inventor, June 29, 1858; the object being to obtain a lamp more portable than the one previously patented and that will still burn the material aforesaid more perfectly.

*Claim.*—The burner F and curved rods G G, one or more in combination with one or more deflecting caps D E and draft tube C, arranged for joint operation, substantially as and for the purpose set forth.

No. 25,526.—PETER REYNARD, of New York, N. Y., and VICTOR VARIN, of Brooklyn, N. Y.—*Improved Insect Powder Blower.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the divisions *c c* in the powder chamber, to insure the powder being in a position to be acted on by the air blown through the perforated diaphragm *d*, as and for the purposes set forth.

And in combination with said powder chamber, constructed as aforesaid, we claim the India rubber perforated ball, fitted and acting as specified, to give the blast of air.

No. 25,527.—JOSHUA ROLLMAN, of Sinking Springs, Pa.—*Improvement in Threshing Machines.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The application to a threshing machine of one or more independent fan blowers, which are attached outside of the machine, and in such position as to prevent any dust, arising from the operation of threshing, from reaching the attendant on the machine, when arranged and operated substantially in the manner described.

No. 25,528.—GELSTON SANFORD, of Poughkeepsie, N. Y.—*Improvement in Horse Power Machines.*—Patent dated September 20, 1859.—This invention consists, first, in arranging and combining a pair of internal toothed wheels and their pinions in such relation to each other as to make the driving gear occupy a less amount of space upon the floor or ground than is required for other machines of like kind, where the same amount of speed of the driving pulleys is attained.

Second. In elevating the driving pulleys to a height that places them above and out of the way of the operator, by elevating the driving shaft on a hollow standard.

Third. In making the line of the driving shaft adjustable to any required angle to the line of the bed of the machine, so that the machine can be employed to operate different machines, placed in different positions, without changing the position of the bed of the horse power.

The inventor says: I *claim*, first, the combination of the internal toothed wheels C and F, and their connected pinions, with the hollow standard B, when arranged in the manner and for the purpose set forth.

Second. The combination of the hollow standard B with the shaft K and its connected gearing I and J, in the manner and for the purpose described.

Third. The combination of the adjustable bearing or frame M with the hollow standard B and shaft K, as and for the purpose set forth.

No. 25,529.—NATHAN SARGENT, of Charlestown, Mass.—*Improved Tops for Tables.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, as an improved article of manufacture, a panoramic table or table top, the same being constructed and operated in the manner and for the purpose set forth.



I also claim the peculiar mechanism described, whereby the canvas or panoramic cloth is maintained with proper tension upon each of the rollers, however such cloth may vary in thickness or in number of folds upon such rollers.

No. 25,530.—CASPER SCHULTZE and J. FREDERICK SCHROEDER, of Covington, Ky.—*Improvement in Straw Cutters*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A cutting box, constructed as shown and specified—that is, with adjustable compound knife wheel H, in combination with feeding chute C, when these several parts are constructed and arranged for operation conjointly as and for the purposes described.

No. 25,531.—WILLIAM W. SHIPMAN, of New Haven, Conn.—*Improvement in Machines for Making Sewing Machine Needles*.—Patent dated September 20, 1859.—This invention consists in stamping and cutting off the wire, punching the eye of the needle, and counter sinking the same by each revolution of the machine.

*Claim*.—The feeding plier formed by the lever F and block D, in combination with the punching die P<sup>2</sup> and die P<sup>3</sup>, and 21 31, Fig. 8, the cutter N, and clamp formed by J J and I I; the whole in combination as set forth, and operated in the manner and for the purposes specified.

No. 25,532.—GEORGE B. SIMPSON, of Washington, D. C.—*Improved Electrical Heating Apparatus*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the insulation of the metallic coil or helical electrode, which I call an electro-heater, and the successful generation of heat by passing currents of electricity over a coil or coils of platina, or other metallic wire, resting on and supported by a non-conducting electrical base, or encased in metallic tubes, or open vessels insulated with any of well-known substances non-conducting of electricity, as described.

No. 25,533.—JOHN JOSEPH CHARLES SMITH, of Covington, Ky.—*Improved Mode of Constructing Matrices, &c.*—Patent dated September 20, 1859.—The claim explains the nature of this invention.

*Claim*.—The discovery of rendering a composition or alloy of copper and tin pliable, and in such a state as to admit of an easy impression of any figure or design on or in metal, whether engraved or produced by means of electrotyping, as a copy of any figure, design, or object, thus yielding a perfect matrix or mould; and this process I further claim as my invention, in connection with the manufacturing of types of the alloy of copper and tin, as already described, and which will and shall produce the intended effect.

No. 25,534.—CHARLES STEARNS, of Lowell, Mass.—*Improvement in Making Lightning Conductors*.—Patent dated September 20, 1859.—This invention consists in constructing twisting rollers, and so combining them with corrugating rollers as to produce corrugated and twisted lightning conductors or rods.

*Claim*.—The twisting rollers, constructed as described, in combination with the corrugating rollers, for producing the corrugated twisted copper rod.

No. 25,535.—THEODORE J. STEFFE, of Lancaster, Pa.—*Improvement in Horse Rakes*.—Patent dated September 20, 1859.—This invention relates to an improvement in horse rakes, by which the several devices all operate on the axle of the machine at their common centre.

The inventor says: I *claim* the arrangement and combination of the teeth heads E, key N, spiral spring attachment F, lifters B B, levers G H, cleaners c C, when these several parts have their centre of motion on the axle of the machine.

I also claim, in combination with the above, the foot brace K L, hinged at I I, slide M, and slot O, substantially as and for the purpose specified.

No. 25,536.—GEORGE STRAUSE, of Boonsboro', Md.—*Improvement in Hominy Mills*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Giving to the shaft D substantially the shape represented, when the said shaft is armed with toothed segments, and is also operated within a tube which is also armed with counteracting segments, substantially in the manner set forth.

No. 25,537.—DAVID H. VAN DUZER, of Sugar Loaf, N. Y.—*Improvement in Bridges*.—Patent dated September 20, 1859.—The engravings and claim will give an idea of the nature of this invention.

*Claim*.—In combination with the blocks E F G H I, rods B B<sup>1</sup>, blocks C C<sup>1</sup>, and bolts D D<sup>1</sup>, arranged as shown, the arrangement of the plates L, all substantially as and for the purposes shown and described.



No. 25,538.—SAMUEL WALKER, of Roxbury, Mass.—*Improvement in the Take Up for Trimming Looms.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Giving to the take up roll of a trimming loom a reciprocating motion longitudinally on its axis, for the purpose specified.

No. 25,539.—Suspended.

No. 25,540.—CHARLES FONTAYNE, of Cincinnati, Ohio.—*Improved Photographic Printing Machine.*—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the described machine for printing or multiplying photographic pictures.

Second. The described art of multiplying positive photographic pictures or expressions from the same negative upon the same sheet of sensitive paper or other material.

Third. Causing the sensitive material used for the reception of photographic impressions, latent or otherwise, made by the agency of solar or other light, passing through a negative, to traverse the aperture or negative employed.

Fourth. The traversing bed, whether cylindrical or plane, confined within a dark chamber, whose surface may be moved by ratchets, screws, cranks, or their equivalents, for the purpose of carrying the sensitive material when the same is used in connection with a negative, from which it receives positive impressions, substantially as described.

Fifth. The employment of continuous sliding or revolving disks, with springs and spring stops, or their equivalents, to give them a uniform motion, and overcome the momentum or rebound, for admitting and shutting off light uniformly to and from all parts of the surface to be acted upon in printing positive photographic pictures from a negative, substantially as described.

Sixth. The application of a lens or lenses for the purpose of condensing light, when used in combination with negative 28, the sensitive material, and slide or cut off for admitting or shutting off light, for the purpose of photographic printing.

Seventh. The combination of condensing lens 33, negative 34, daguerreotype tube 75, with its lenses 76, the sensitive material, and slide or cut off for photographic printing, substantially as described.

Eighth. The combination of the sensitive material, negative 28, (as distinguished from negative 34,) and slide or cut off, for the purpose of photographic printing.

Ninth. The method of raising the glass negative or other matrix 28 from the sensitive material, to permit the motion of the latter, and the method of lowering again, substantially as described.

Tenth. The method of supporting and adjusting negative 28, substantially as described.

Eleventh. The use of the glass negative, (when negative 28 is used,) or the use of a piece of plain glass in the place of it, (when negative 34 is used,) or the use of a skeleton frame for the purpose of pressing the sensitive material smoothly and evenly on roller 5, or traversing bed, while the photographic impression is being made.

Twelfth. The alternate admission and exclusion of light passing through a negative to act upon a traversing sensitive material, confined in a portable dark chamber, substantially as described.

Thirteenth. The rod 8 working through hollow slotted shaft 6, and affixed to roller 5 by plate 9, for the purpose described.

Fourteenth. The combination of the lever 12 with its spring catch 13, with the ratchet wheel 14, nose 82 of shield 15, and slotted stop 11, substantially as and for the purposes described.

No. 25,541.—HENRY WHITTINGTON, of Philadelphia, Pa.—*Improvement in Cut Off Gear for Steam Engines.*—Patent dated September 20, 1859.—The nature of this improvement will be understood by examining the claim and engraving.

*Claim.*—The inclined spiral edges  $xx$  on the revolving and sliding sleeve B, when the latter is applied to operate the cut off valve G, the descent of which is caused by the pressure of steam above the valve, and when the inclined edges serve to retard the descent of the valve, as set forth.

No. 25,542.—ASBURY WILKINSON, of Madison, Ind.—*Improved Washing Machine.*—Patent dated September 20, 1859.—This invention consists in providing two self-adjusting circular shaped washboards, between which a corrugated roller is made to revolve, thus converting the reciprocating motion into continuous rotary motion.

*Claim.*—The combination of circular boards B and C, suspended from a frame above by springs  $b b b$  and  $c$ , with a rotary corrugated roller working between them, all constructed and operated substantially as set forth.

No. 25,543.—JEPHTHA AVERY WILKINSON, of Brooklyn, N. Y.—*Improved Registering Ap-*



*paratus*.—Patent dated September 20, 1859.—This invention relates to an arrangement of circular dials that are provided with a screw thread around the periphery taking teeth on the next dial, whereby all the disks have a movement that is rapidly decreased, so that if the screw around the periphery of one disk be a single thread, and its matching gear have one hundred teeth, the first disk must revolve one hundred times to give one revolution to the next, and so on.

The inventor says: I *claim* a series of counting disks standing at right angles, or nearly so, to each other, and each formed with a thread or worm around its periphery, taking teeth on the next counting disk in the manner and for the purpose specified.

I also claim the arrangement of the counting disk  $q^9$  and  $q^{10}$ , in the manner specified, whereby they can be disconnected and set to commence counting when required, as and for the purpose described and shown.

No. 25,544.—JOHN F. COOK, of Baltimore, Md., assignor to Himself and GEORGE F. PAGE, of said Baltimore.—*Improved Try Cock for Steam Boilers*.—Patent dated September 20, 1859. The claim and engravings explain the nature of this invention.

*Claim*.—Combining with the barrel of a try cock, a two armed lever, one provided with springs or weights, and the other with a rubber or other equivalent disk, so that the weighted arm shall hold the valved or disk arm against the bore of the barrel of the cock, substantially as described and represented.

No. 25,545.—HENRY W. GRAY, of Cleveland, Ohio, assignor to Himself and W. H. ALVORD, of Homer, N. Y.—*Improvement in Railroad Chairs*.—Patent dated September 20, 1859. The claim and engravings explain the nature of this invention.

*Claim*.—Forming the railroad chair in two sections, having the outer surfaces F convex, as described, in combination with the gripe C and beam D, the several parts being arranged in the manner and for the purpose set forth.

No. 25,546.—HORATIO FRANCIS HICKS, of Grand View, Ind., assignor to HICKS BROTHERS, of said Grand View.—*Improvement in Presses*.—Patent dated September 20, 1859.—The object of this invention is to reduce friction in cotton presses, hay presses, &c., by means of stepped bearings and friction rollers, adapted to operate in connection therewith without tendency to displacement.

*Claim*.—The described combination of stepped bearings G and I with rollers  $K^1$ , adapted to operate in connection therewith, without endwise pressure or tendency to displacement, in the manner and for the purpose set forth.

No. 25,547.—GEORGE W. McCORD, of Centralia, Ill., assignor to Himself and J. F. LOBDELL, of Centralia, Ill., and P. V. N. DAVIS, of Rush, N. Y.—*Improved Deep Sea Sounding Apparatus*.—Patent dated September 20, 1859.—This invention relates to the arrangement of a piston within a suitable cylinder, in such a manner that the pressure of the water will force the piston into the cylinder as the instrument descends into the water, and also in combining therewith a graduated scale and provision for measuring the depth to which the instrument descends.

*Claim*.—The arrangement of the cylinder *a*, piston *p*, graduated scale *f*, cap *i*, and vernier or register *k*, constructed and operating substantially as described, for the registration of marine soundings upon the principle of hydraulic pressure.

No. 25,548.—G. H. SANBORN, of Boston, Mass., and JOHN E. COEFIN, of Portland, Me., assignors to G. H. SANBORN, aforesaid.—*Improved Machine for Shaping and Finishing the Backs of Books*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the employment, for shaping or finishing the backs of books, of a divided roll or pair of segments C  $C^1$  operating across the backs from the centre to both sides thereof, substantially as described.

Second. The combination of the cam T, slide R, toggle P P, spring Q, link *y*, lever *o*, link *u*, and toggles F F, with the book holder, for the purpose of raising the holder and causing it to close upon the book before each operation of the divided roll or pair of segments, substantially as described.

Third. Attaching the segment levers G  $G^1$ , or their equivalents, to levers H H, operated substantially as described, by cams N N, on the constantly revolving main shaft for the purpose of throwing the segments out of the way of the holder at the proper stage of the operation of the machine, to permit the removal and introduction of the books.

No. 25,549.—THOMAS SHAW, of Philadelphia, Pa., assignor to Himself and J. C. BAILEY, of said Philadelphia.—*Improvement in Stoves*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the adjustable legs *a* when combined with the casing



A and its gauge cylinder, and arranged as set forth, so as to serve the double purpose of tilting the stove more or less on one side, and regulating the admission of air into the casing.

Second. Operating the valve D for regulating the flow of gas into the casing, by means of the object to be heated by the flame, in conjunction with the devices set forth, or their equivalents.

No. 25,550.—A. T. UNDERHILL, of New York, N. Y., assignor to C. R. UNDERHILL, of New Castle, N. Y.—*Improvement in Converting Reciprocating into Rotary Motion*.—Patent dated September 20, 1859.—The wheels G G<sup>1</sup> turn loosely upon the shaft H, which has its bearings in the standards I I, and the motion communicated to these wheels by the two racks E E causes them to turn in opposite directions. On either side of each of the spur wheels G G are ratchet wheels J J<sup>1</sup> J<sup>2</sup> J<sup>3</sup>, which are all made fast to the shaft H.

*Claim*.—The arrangement and combination of the frame I, guards S S<sup>1</sup> S<sup>2</sup> S<sup>3</sup>, and ratchet wheels J J<sup>1</sup> J<sup>2</sup> J<sup>3</sup>, substantially as shown and described, so that the rotation of the shaft H may be reversed, as set forth.

No. 25,551.—WILLIAM F. WARBURTON and WILLIAM B. ATKIN, of Philadelphia, Pa., assignors to WILLIAM F. WARBURTON aforesaid.—*Improvement in Machinery for Perforating Hat Bodies*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the system of pointed pins *m*, hung independent of each other to the cross head *j*, furnished each with a separate spring, and arranged and operated substantially as set forth, in combination with the hat block attached to the face plate F, on the spindle E, for the purpose specified.

Second. The ratchet wheel G, of the same form, or thereabouts, as that presented by a transverse section of the hat to be perforated, in combination with the face plate F, and its hat block, the said wheel being operated by the pawl *f*, and the appliances connected therewith, or their equivalents, in the manner and for the purpose set forth.

No. 25,552.—MORRIS L. KEEN, of Rogers Ford, Pa.—*Improved Mode of Distilling Liquids from Coal Tar*.—Patent dated September 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application of additional heat at or near the surface of the coal tar, or other similar hydro carbon, when used in combination with pressure in the boiler, for the purpose of preventing the tarry foam from rising and overrunning the still, and thus endangering the operator as well as the premises, as described.

No. 25,553.—ABEL AUSTIN, of Alton, Ill.—*Improved Churn*.—Patent dated September 27, 1859.—The inventor says: My invention uses the old principle of the up and down dasher, and for the purpose gives the greatest possible effective motion to the milk in a breaking and dashing manner. The side dashers having a lateral stroke are added; they are also designed to gather the butter after it is churned, and press and work out the butter milk.

*Claim*.—The arrangement of the shaft *a*, cranks *a*<sup>1</sup> *a*<sup>2</sup>, dashers D E E, handles D<sup>1</sup> *e* *e*, links *b* *b* *b*, springs *c* *c* *c*, box *i* *i*, spring *g*, and lid F F together, the same being connected, combined, and constructed substantially as and for the purpose specified.

No. 25,554.—WILLIAM B. BARNARD and EDMUND JORDAN, of Waterbury, Conn.—*Improved Rotary Blower*.—Patent dated September 27, 1859.—This invention consists in the combination of double propeller fans, with an intermitting diaphragm applied within the case of the blower in such a manner that the propellers in being rotated cause the air to pass through between the diagonal blades into the intervening space, and the aforesaid diaphragm standing across this space at the line of the blower's mouth causes the air, that would otherwise be carried around between these double propellers, to be deflected off through the mouth and trunk of the blower.

*Claim*.—The diaphragm *l*, in combination with the revolving propeller or propellers *k*, to deflect the blast to the mouth or opening *f*, as the blower revolves in the case *e*, substantially as set forth.

No. 25,555.—ELBRIDGE G. BELKNAP, of Philadelphia, Pa.—*Improved Camp Stool*.—Patent dated September 27, 1859.—The seat frame consists of a block B of wood, or metal, the centre of which receives the thrust of the arms A *m*, and to which they are attached by means of the hinge plate H. It has also projections P on its surface between which the arms rest, and by which they are held in position.

*Claim*.—The combination of the base and the seat frame, with the swivel blocks, braces and connecting rod, the whole being arranged substantially in the manner specified and described.

No. 25,556.—LEWIS REESE CARPENTER, of Lancaster, Ohio.—*Improvement in Seed Planters*.—Patent dated September 27, 1859.—This invention consists in the arrangement of devices for joint operation in planting corn and other seeds.



*Claim.*—The arrangement of the beam A, handles C C, braces D D, furrowing scraper E, and seed box F, with the planting slide H, lever N, wheel S, and covering scrapers L L, the whole being constructed for joint operation, for the purpose set forth.

No. 25,557.—EDWIN S. COLLINS and THOMAS N. READ, of Aspen Wall, Va.—*Improvement in Machines for Preparing Tobacco for Pressing.*—Patent dated September 27, 1859.—This invention is intended for straightening, stretching, pressing, and oiling bundles of tobacco, preparatory to prizing or packing the same into hogsheads for shipment.

The inventors say: We *claim* the arrangement of two, three, or more pairs of progressive pressure rollers with each other, substantially in the manner and for the purpose set forth.

We also claim combining a series of oil vessels and oiling pads with the aforesaid pairs of pressure rollers, substantially in the manner set forth.

No. 25,558.—JOHN CRITCHELSON and ERI S. MOULTON, of Boston, Mass.—*Improvement in Machines for Splitting Welts.*—Patent dated September 27, 1859.—This invention consists in arranging an adjustable cutter between, and parallel with, two cylinders grooved in a peculiar manner, the grooves on the cylinder to which the crank is attached being provided with short projecting points or their equivalents, to prevent leather from slipping; by which means welts can be split more evenly, more rapidly, and with less effort and waste of leather than by most other machines.

*Claim.*—The beveled grooves *n* and *x*, constructed and arranged in reference to each other on the cylinders C and D, and operating in combination with the adjustable cutter H, substantially as set forth and for the purposes described.

No. 25,559.—TOBIAS CRUMLING, of Hellam, Pa.—*Improvement in Harvesters.*—Patent dated September 27, 1859.—In cutting grain, binders stand on the platform K, and the cut grain falls on the apron M<sup>1</sup>, which conveys it to the platform directly behind the main frame A, where it is bound and placed on the platform M<sup>2</sup>, which, when filled, or when it arrives at the proper place, is tilted and the sheaves discharged from the machine, so as to form shocks.

*Claim.*—The arrangement and combination, as shown and described, of the independent platform K with the frame L<sup>1</sup>, belt M, and driving axle C, for the purpose set forth.

No. 25,560.—GEORGE S. CURTIS, of Chicago, Ill.—*Improvement in Reels for Harvesters.*—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment of sliding heads B, and pivoted arms C, and bars E, in combination with the reel shaft A and beaters D, substantially as shown and described, so that the diameter of the reel can be contracted or expanded, as and for the purpose set forth.

No. 25,561.—JACOB D. CUSTER, of Norristown, Pa.—*Improvement in Harvesters.*—Patent dated September 27, 1859.—The operation of this machine is as follows: The castor wheel controlling lever S S is set so as to prevent side draft. The machine moves forward, and the escapement teeth vibrate the palates C C, the connecting rods D D, the cross bar E, the shaft F and arm F, which vibrates the cutter bar; the reel moves and the grain falls off the platform, the lifting and operating cam Q comes up under the self acting rake arm P, and lifts up and moves it forward over the grain on the platform, when it falls and sweeps the grain off the platform.

The inventor says: I *claim*, first, the main shoe A A A, constructed in the manner described, in combination with the bars J J of main frame and supporting bar T, arranged and operating in the manner described, for the purpose specified.

Second. The castor wheel L, in combination with the lever M and adjustable plate N, when the parts are constructed, arranged, and operated in the manner described, for the purpose specified, substantially as set forth.

No. 25,562.—J. S. DAVISON, of Cranberry, N. J.—*Improved Telegraphic Cable.*—Patent dated September 27, 1859.—This invention consists of a series of loose strips of copper wire that are hooked on, or otherwise united to the coil, and which fill up the space in the inside of the coil, so that when the coil stretches, each of said strips assumes a longitudinal sliding motion, and as the coil, by being stretched, diminishes its diameter, said strips are brought close together, and the current passes through without interruption.

*Claim.*—Arranging a series of loose metal strips *a* in a coil A, or its equivalent, substantially as and for the purpose described.

No. 25,563.—EBEN EATON, of Cincinnati, Ohio.—*Improved Bedstead.*—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction of bed posts with the wedge formed part and the square piece attached, so as to form a shoulder to receive the rail, in combination with the bottom or



platform of a bedstead, with the rails formed so as to fit the posts described, and all permanently connected together by means of cross pieces, substantially as specified.

No. 25,564.—G. D. FOOTE, of Danbury, Conn.—*Improvement in the Mode of Coloring Woolen Hats*.—Patent dated September 27, 1859.—The stiffening used in this process consists of a solution of shellac.

*Claim*.—The described process of restoring the color of the hats after they have been dipped in the stiffening and rubbed off with sand paper, by applying the hot dyeing liquid, substantially in the manner herein specified.

No. 25,565.—JOHN FRITZ and GEORGE FRITZ, of Johnstown, Pa.—*Improvement in Rolling Mills*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application to each of the pairs of drawing or forming rolls of a feed roll, such as described, and driven by gearing or other machinery, and turning in the same direction with said drawing or forming rolls, for the purpose of carrying and feeding into them the pile or bar of heavy iron, substantially as described.

No. 25,566.—HARVEY GUILD, of New Orleans, La.—*Improvement in Apparatus for Purifying Gas*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the water pipe G and rose H within the inlet pipe of the wash box A, in combination with the perforated plate or diaphragm F, at the junction of the inlet pipe with the wash box, substantially as described.

No. 25,567.—NOAH E. HALE, of Nashua, N. H.—*Improved Belt Hook, Pliers, and Punch*. Patent dated September 27, 1859.—The object of this tool is to facilitate the use of hooks, such as designed by the letter Q in the engravings, for the purpose of fastening together the two ends of belts used for driving machinery.

The inventor says: I *claim*, first, the combination of the roughened surfaces O and H with the triangular wedge end G, arranged in relation to each other substantially as and for the purposes set forth.

Second. The combination of the jaws E F with the punch J, roughened surfaces O H, and wedge end G, the whole being constructed and arranged as and for the purposes set forth.

No. 25,568.—JOHN HOWARTH, of Salem, Mass.—*Improvement in the Method of Distilling Oil from Coal*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* forming oleaginous vapors from coal or other substances yielding pyrogenous oil, by passing through the material to be acted on a current of superheated steam in combination with steam direct from the boiler, substantially in the manner and for the purpose set forth.

I also claim forming oleaginous vapors from coal or other substances yielding pyrogenous oils, by passing through the material to be acted upon air combined with superheated steam, substantially in the manner and for the purpose as set forth.

No. 25,569.—TYLER HOWE, of Cambridgeport, Mass.—*Improved Bedstead Slat*.—Patent dated September 27, 1859.—The object of this invention is to produce spring slats for a bed bottom, and those that will not permanently sag or set down, but, on the contrary, by the application of a lifter, the centre of each slat is made to bend upwards, giving to the bed, when made, a neat, full appearance.

The inventor says: I *claim* the described bed slat, consisting essentially of the lifter A, in combination with the slat, constructed and operating in the manner substantially as set forth; also, the construction of the ends of the slats, by which they are connected with the bedstead or springs, as shown by C and D, and as described.

No. 25,570.—EDWARD C. KNIGHT, of Philadelphia, Pa.—*Improved Mode of Arranging Couches in Railroad Cars*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of couches in railroad cars by means of the double hinged rod C C, constructed as described, in such a manner that the couch, when not in use, may be folded up against the ceiling and retained there by means of a button, or other suitable device, substantially as described.

No. 25,571.—W. KULENSCHMIDT, of New York, N. Y.—*Improved Screw Wrench*.—Patent dated September 27, 1859.—This invention consists in arranging a conical disk, with a helical groove, on a pin put obliquely in a pendant attached to the movable jaw of the wrench; said groove to gear into corresponding cogs on the back of the shank to which the stationary jaw



is attached, so that, by turning this disk, the movable jaw is closed or opened, and the disk is forced against the cogs on the shank by means of a spring, so that the same can be drawn back and the helical groove disengaged from the cogs, and so that the movable jaw slides on the shank that it can be rapidly opened and closed.

*Claim.*—The arrangement and combination of the conical disk E with the helical groove c, the spring d, the movable jaw C, and the shank B, to operate substantially as and for the purpose set forth.

No. 25,572.—JAMES ALLEN LOWE, of New York, N. Y.—*Improvement in Moulding Water Traps.*—Patent dated September 27, 1859.—The claim and engravings will give an idea of the nature of this invention.

*Claim.*—The application of a metallic core, constructed and operating substantially as described, to cast water traps.

No. 25,573.—JAMES L. MEAFROY, of Middletown, N. Y.—*Improvement in Cooking Stoves.*—Patent dated September 27, 1859.—This invention consists in having a fire chamber of cylindrical form placed in the front part of the stove, and encompassed by an air chamber communicating with the upper part of the fire chamber by small orifices, and having a water heater adjoining the air chamber; the above named parts being placed directly in front of the oven, and also used in connection with a perforated and equalizing draft plate, whereby the desired end is attained.

The inventor says: I *claim* the cylindrical fire chamber F and air chamber G, communicating with the fire chamber F and the heater chamber I, when combined and arranged relatively with each other and the oven B, for the purpose set forth.

I also claim, in combination with the fire chamber F, air chamber G, and heater chamber I, arranged as shown, the perforated plate K placed in the flue C, relatively with the fire chamber, for the purpose set forth.

No. 25,574.—Z. N. MORREL, of Cameron, Tex.—*Improvement in Machines for Distributing Fertilizers.*—Patent dated September 27, 1859.—This invention consists, not in any of the devices taken separately, but in the combined arrangement of a single side wheel D, a distributing wheel C placed in a slot in the beam, a slide I for regulating the amount of fertilizer distributed, revolving arms L within the hopper, a boot k under the distributing wheel, set screw J, shares d d, cog wheels E<sup>1</sup> E<sup>2</sup>, draft rod s, sprocket and wheels F<sup>1</sup> F<sup>2</sup>.

*Claim.*—The combined arrangement of the single side wheel D, distributing wheel C, regulating slide I, revolving arms L, boot K, set screw J, shares d d, cog wheels E<sup>1</sup> E<sup>2</sup>, draft rod s, sprocket wheels F<sup>1</sup> F<sup>2</sup>, roller H, and chain G, in the manner and for the purpose set forth.

No. 25,575.—GEORGE M. MOWBRAY, of Green Point, N. Y.—*Improvement in the Process of Distilling Oils from Coal.*—Patent dated September 27, 1859.—The claim explains the nature of this invention.

The inventor says: In the manufacture of coal oil, and other pyrogenous oils, by exposing the coal or other materials to the products of combustion generated in a separate furnace, I *claim* igniting said products of combustion previous to admitting the same into the distilling kiln by admixture of a sufficient proportion of the air to burn the oxide of carbon into carbonic acid, substantially as described and for the purposes set forth.

No. 25,576.—GEORGE MUNGER, of New Haven, Conn.—*Improved Writing Tablet.*—Patent dated September 27, 1859.—The claim explains the nature of this invention.

*Claim.*—A new article of manufacture, to wit: an argillaceous surface wood writing slate, which is formed by uniting several layers of veneering, or thin wood together, so that their grains run antagonistic to one another, and then coating the exterior surfaces of the compact mass with a composition of slate, emery, or other similar argillaceous material, substantially as and for the purposes set forth.

No. 25,577.—S. D. NEWBRO, of Lansing, Mich.—*Improved Bed Spring.*—Patent dated September 27, 1859.—This invention consists in constructing and securing together oblong plates of wood or metal in a peculiar way.

*Claim.*—The employment of the oblong plates a a a, whether made of wood or of metal, or of any other suitable material, when the same are secured together, substantially as and for the purposes set forth.

No. 25,578.—RUFUS NUTTING, of Randolph, Vt.—*Improved Manufacture of Wire Cloth.*—Patent dated September 27, 1859.—In the engravings A represents a specimen of the wire cloth in its ordinary condition, and B a specimen of similar cloth after it has been compressed.

*Claim.*—Compressing wire cloth by passing it through rollers suitably constructed, or by



equivalent means, whereby its surfaces are rendered smooth and even, in the manner and for the purpose substantially as specified.

No. 25,579.—OSCAR PADDOCK, of Watertown, N. Y.—*Improvement in Stoves*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The damper *c*, arranged over the pipe *b*, through which a direct communication between the fire place and the chimney is effected and operated by means of a rod *k*, or its equivalent, which is secured to the door *B*, and which acts against a forked lever *g*, substantially as and for the purpose specified.

No. 25,580.—ANDREW PATTERSON, of Birmingham, Pa.—*Improvement in the Manufacture of Hoes*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The improvement in the manufacture of hoes, as substantially described, viz: forming the head or eye of a hoe and attaching it to the blade at the same time, by pouring the molten metal to form the head on or around the blade, substantially as described and set forth.

No. 25,581.—EDWARD L. PERKINS, of Roxbury, Mass.—*Improved Construction of Packing Boxes*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor *claims*, first, forming the sides, ends, bottom, and top of the box with, or attaching thereto, the right angular shaped braces or shoulders *g g*, &c., formed with beveled corners, so as to make a close and binding joint, as described.

Second. In combination with the above the cover formed in two wedge shape pieces, or in any manner substantially similar, whereby all the parts constituting the box are drawn and held rigidly together, as set forth.

No. 25,582.—JANE PHILLIPS, of New York, N. Y.—*Improvement in Muffs*.—Patent dated September 27, 1859.—The claim and engraving explain the nature of the invention.

*Claim*.—A muff *A*, arranged with a cut *b* in its outside covering or shell, an annular space or pocket *a*, and a portmonnaie *D*, secured in its upper part, the whole constructed in a manner and for the purpose specified.

No. 25,583.—JOSEPH F. POND, of Cleveland, Ohio.—*Improvement in the Hoops of Skeleton Skirts*.—Patent dated September 27, 1859.—This invention consists in having an eye on one extremity of the hoop, and on the other a series of set offs, so that when the hoop is run through the back in the skirt, the one end is passed through the eye on the other end, and said eye catching against the set off, holds it securely; and by moving the eye to either of the set offs, the circumference of the hoop is increased or diminished, as desired.

*Claim*.—The combination of the eye *e* on one extremity of the hoop with the series of set offs *a* on the other, constructed and operated substantially as and for the purposes set forth.

No. 25,584.—C. W. PYLE, of Galveston, Texas.—*Improvement in Securing Iron Bands on Cotton Bales*.—Patent dated September 27, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A plate constructed with a short, open slot, a long, closed slot, and a turned down lip or flange, substantially as described and for the purposes set forth.

No. 25,585.—CORNELIUS I. ROONEY and DAVID RENSHAW, of New York, N. Y.—*Improved Spring Hinge*.—Patent dated September 27, 1859.—This invention consists in the manner of combining and arranging the spring and the parts of the hinge in connection with each other, by which the removal and replacement of a broken spring, without interfering with the connection of the parts of the hinge or its attachment to the door, is facilitated, and the hinge made more convenient to use and graduate.

*Claim*.—The arrangement of the coiled spring *E*, shaft *C*, and wings *A B*, in combination with each other, as described, for the purposes stated, when the parts are constructed substantially as herein set forth.

No. 25,586.—ABBOTT Q. ROSS, of Cincinnati, Ohio.—*Improvement in Burglars' Alarm*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* connecting the doors and windows of a house to an alarm mechanism, through a system of strained wires, so that the forcing of a door or the cutting of any wire shall let off the alarm mechanism, substantially in the manner described.

I also claim so connecting the panels of a door with the strained wires that unite the door with the alarm mechanism, as that the cutting out of a panel, or the cutting of one of the wires, shall let off the alarm mechanism, substantially as described.

I also claim the combination of the swinging lever *t*, on the bolt *r*, with its inclined plane *s*, that locks the spring drum *J*, for the purpose of putting said door in connection with the



alarm mechanism, when said door is drawn to and shut from the outside, substantially as described and represented.

No. 25,587.—JOHN ROUSE, of Port Gibson, N. Y.—*Improvement in Horses' Harness*.—Patent dated September 27, 1859.—This invention consists in dividing the hame strap used in double harness, which connects the collar of the yoke placed upon the end of the tongue of the vehicle to enable the horses to back or to hold back the vehicle, into two sections, in the direction of its length, and connecting the outer end of each section to the eye of a double eyed hook, which is placed over and upon the ring at the end of the yoke, and which serves to keep the yoke and the tongue to which it is attached steadily in position, and prevents the tongue swaying or vibrating from side to side, when the vehicle is in motion.

*Claim*.—The double eyed hook D, arranged as described in the yoke ring C, so as not to be withdrawn therefrom, in combination with said ring and with the divided hame straps E E<sup>1</sup>, which are respectively secured to the opposite eyes of the hook, for the purposes specified.

No. 25,588.—JOHN SPARROW, of Portland, Me.—*Improved Steam Punching Machine*.—Patent dated September 27, 1859.—This invention consists in the employment, in a machine for punching, riveting, or cutting metals, of a single acting cylinder and piston, operated by the pressure of steam, water, or other fluid, and a toggle, combined and applied to the punch or cutter, substantially as described, to effect the necessary pressure thereon for the riveting, punching, or cutting operation.

*Claim*.—The employment, for the purposes specified, of a single acting cylinder and piston, operated by the pressure of steam, water, or other fluid, and a toggle, combined with and arranged and applied relatively to each other and the punch or cutter, substantially as described.

No. 25,589.—PETER M. STATZELL, of Philadelphia, Pa.—*Improved Method of Operating Independent Second Hands of Stop Watches*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the independent second hand M adapted to a watch substantially in the manner described, so that by means of the devices described, or their equivalents, the said hand may be connected to or disconnected from the time train of the watch, without interfering with the movements of the latter, for the purposes specified.

Second. The stop arm N with its forked end so adapted to the hollow arbor L as to serve the purpose of stopping and releasing the said arbor, and at the same time serving to maintain it in its proper vertical position.

Third. The wheel P with the springs *ff*, in combination with the hollow arbor L of the independent second hand; the wheel being hung loosely to, and the spring bearing against the said arbor, as and for the purpose set forth.

No. 25,590.—W. S. STETSON, of Baltimore, Md.—*Improved Safety Envelope*.—Patent dated September 27, 1859.—The claim explains the nature of this invention.

The inventor says: What I *claim* as my invention is the mode of giving security to letter and other envelopes, substantially as set forth, the same consisting in waterproofing that part of the envelope upon which the adhesive material is applied.

No. 25,591.—JOHN STEVENS and JOHN JOHNSON, of New York, N. Y.—*Improvement in the Construction of Gas Burners*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the apertures B B<sup>1</sup> in combination with the movable slide C or its equivalent, substantially as described, whereby the area of the passage for the gas or vapor is contracted at pleasure at the point of its exit into the atmosphere, and the volume of the flame is diminished without substantially changing its character.

We also claim the arrangement of the branches B B<sup>1</sup> diverging from a single pipe A, and pressing, by their elasticity, against the opposite sides of the slide C, for the purposes explained.

No. 25,592.—J. C. STODDARD, of Worcester, Mass.—*Improved Chamber Utensil*.—Patent dated September 27, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A chamber vessel provided with a flange *a c* and elastic ring *b*, made as shown and described, so as to form a tight joint and also prevent noise, as set forth.

No. 25,593.—JOSEPH N. TREADWELL, of Redding, Conn.—*Improvement in Machines for Scouring and Hulling Buckwheat*.—Patent dated September 27, 1859.—These improvements relate to the arrangement of the huller, scouring cylinders, conveyors, and hoppers, by means of which the operation is effectually performed.

*Claim*.—The arrangement of the revolving and graduated screens, with the hoppers, conveyors, blasts, and conductors, in the manner as and for the purpose described.



No. 25,594.—RICHARD WARD, of Edinburg, Ind.—*Improvement in Smut Machines*.—Patent dated September 27, 1859.—This invention relates to the preparation of the iron plates which form the cylinder within which the grain is operated upon, and their arrangement in the formation of said cylinder.

*Claim*.—The employment of the corrugated iron plate C having the horse shoe perforations *c*, in combination with the iron plate D having the diamond perforations *b*, in the construction of a perforated scouring and separating cylinder B, all arranged to operate substantially as and for the purposes set forth.

No. 25,595.—S. J. WASTERBARG, of Altona, Ill.—*Improvement in Seed Planters*.—Patent dated September 27, 1859.—In the operation of this invention the grain is placed in the hopper H through a suitable door in it, and thence it passes down and enters the four chambers B. By pressing down the handle F it bears upon the rod or shaft *a*, and thus depresses the rods D, the ends of said rods bear upon the grain which has passed into the chamber C from chambers B, and bearing against the beveled ends of the slides E they revolve partially around and allow the grain to pass out into the discharge spouts, from whence it falls to the ground.

*Claim*.—The arrangement of the block A provided with chambers C and chambers B, with the rods D, shaft *a*, handle F, hopper H, spring I, slides E, and spring G, substantially in the manner and for the purpose set forth.

No. 25,596.—C. L. WHITNEY and SAMUEL REED, of Geneseo, Ill.—*Improvement in Stoves*.—Patent dated September 27, 1859.—This invention consists in the arrangement of flues and flue spaces, so that the hot air is carried from the fire chamber under a deflecting plate and passed up through pipes arranged in the rear of the oven, and thence out into the smoke pipe, and in the manner of obtaining a regular increased draft in its passages through the stove; also in the arrangement of pipes of clay, or other similar substance, within the oven and between the flue pipes, in order to abstract and to retain the heat and give it out slowly into the oven during the operation of baking.

The inventors say: We *claim* the arrangement of the deflecting plate F, chamber C, graduating damper J, and flue pipes H H in the four corners of the oven, all in combination for the purposes set forth; and also, in combination with this, we claim the use of pipes of clay, or other similar material, when the same are arranged in the manner and for the purpose set forth.

No. 25,597.—A. B. WEAVER, of Carthage, Ind. —*Improved Abdominal Supporters*.—Patent dated September 27, 1859.—This invention relates to certain improvements in abdominal supporters.

*Claim*.—The employment of the hip pads F F and centre straps *i i*, in combination with the straps A A<sup>1</sup>, arranged substantially as described for the purposes set forth.

No. 25,598.—ZATTER F. WILDER, of Painted Post, N. Y.—*Improvement in the Method of Raising Water by Animal Power*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of a series of platforms in combination with a pump, so that a series or a succession of strokes of the pump piston shall be produced before the cattle arrive at the drinking trough, substantially as and for the purposes set forth.

No. 25,599.—REUBEN WOOD, of Grand Ledge, Mich.—*Improved Hand Punch*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the peculiar relative arrangement of the two series of inclined planes on the contact faces of the circular plates C C<sup>2</sup> C<sup>3</sup>, to be used either with or without interposed balls or rollers, in the manner and for the purposes substantially as specified.

Second. I claim the use of the slotted tube I, in combination with the two inclined ways P P and cross bars J, (with or without the rollers R R,) constructed and arranged substantially as described, for the purpose of extricating and lifting a punch, or other tool in the bar E, by a reversed motion of the lever.

No. 25,600.—JOHN WILSON, of Anderson C. H., S. C.—*Improvement in Cotton Gins*.—Patent dated September 27, 1859.—This invention consists in the use of three or more finely toothed or serrated cylinders set vertically, and so arranged or disposed as to rotate nearly in contact one with another, and form a cotton chamber or inclosure at their inner sides, the contiguous cylinders rotating in the same direction, so that they will present, at the space between them, oppositely moving surfaces to the cotton, and, by the action of said surfaces, effectually separate the cotton from the seed.

It also consists in using, in connection with the cylinders aforesaid, stripping brushes and a register, the former to strip the bait from the cylinders and the latter to regulate the discharge of the seed from the cotton chamber.



*Claim.*—First. The employment or use of three or more toothed or serrated cylinders D, arranged and disposed so as to operate substantially as and for the purpose set forth.

Second. In connection with the cylinders D, thus arranged and disposed, the rotating stripping brushes M and adjustable plug or register P, to ensure respectively the proper discharge of the lint and the seed.

No. 25,601.—HENRY WILLIAM WIMSHURST, of Dalston, England.—*Improved Manufacture of Sheet Metal.*—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The improvement described in the manufacture or production of the sheet metal, or metal foil, as an article of manufacture and trade, by cutting the same from a block or solid mass by means of a cutting mechanism, in lieu of rolling or beating the same by means of a rolling or beating mechanism, as this has heretofore been done.

No. 25,602.—O. D. BARRETT, of Cleveland, Ohio, assignor to Himself and J. F. KEELER, of said Cleveland.—*Improved Door Spring.*—Patent dated September 27, 1859.—By the action of the levers D and E the pressure on the door gradually diminishes as the door is opened, and ceases when opened a little more than ninety degrees, and, when past that point, the spring will hold the door open; thus the greatest pressure on the door is obtained just as it shuts.

*Claim.*—The levers D and E, in combination with the connecting rod F and springs H H, constructed and operated as specified.

No. 25,603.—JAMES DECKER, of Reidsville, Ga., assignor to Himself and A. P. McRAE, of said Reidsville.—*Improved Stave Machine.*—Patent dated September 27, 1859.—This invention consists in the employment of concave and convex rotating cutters with a suitable bed piece, tonguing and grooving cutters, and a pressure roller and cam, combined and arranged for joint operation, whereby the staves may be dressed at both sides and ready for use as they leave the machine.

*Claim.*—The combination and arrangement of the convex and concave cutters *a f*, bed piece C, tonguing and grooving cutters in the heads L L<sup>1</sup>, and the cam H, attached to the pressure hub or roller G and lever N, connected with said cam and the shaft of the cutter head L, substantially as and for the purpose set forth.

No. 25,604.—FRANCIS DIXON, of Lynn, Mass., assignor to Himself and MOSES SWEETSER, of Newburyport, Mass.—*Improvement in the Manufacture of Cigar Wrappers.*—Patent dated September 27, 1859.—The claim explains the nature of this invention.

*Claim.*—A new article of manufacture for the special purpose as set forth, the same consisting of tobacco leaf reduced to pulp, and subsequently converted into sheets or other desirable form suitable for use, or the making of cigar wrappers, as explained.

No. 25,605.—LUTHER HALL, of Boston, Mass., assignor to Himself and S. S. HEMENWAY, of said Boston.—*Improved Machine for Shaping Heels for Boots and Shoes.*—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the stationary bed plate A, the movable cutter carriage D, provided with self adjusting cutters O P, and carriers J K, adjustable clamps S T, a guide friction wheel N, and a curved rack and pinion, the whole being arranged and made to operate substantially as and for the purposes set forth.

I also claim combining with the adjustable clamps S T, constructed as described, an adjustable holder and former Y, so constructed and arranged as not only to cooperate with the clamp in maintaining the heel of the boot or shoe firmly in position, but to serve as a pattern to give the heel any desirable contour on its bearing surface.

I also claim the peculiar construction of the secondary cutter carriage set forth, and the arrangement of the secondary cutter with respect to the primary cutter, the guide friction wheel, and the heel tread former Y, whereby the secondary cutter is rendered capable of giving to the lower or bearing surface of the heel any form that may be desired.

No. 25,606.—JOHN KEANE, of New York, N. Y., assignor to Himself and ANDREW McLEAN WOOD, of said New York.—*Improvement in Bungs of Casks.*—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* providing a bung or spigot, with reservoir for spirit, and a system of pipes or passages *a b* or their equivalent, so arranged as to cause all the air entering the cask to pass through the spirit in said reservoir, substantially as and for the purpose specified.

And in combination with such a reservoir and system of pipes and passages, or their equivalents, I claim a valve *c* applied to the bung or spigot, substantially as and for the purpose specified.

No. 25,607.—JAMES McFARLAN, of Brooklyn, N. Y., assignor to JAMES McFARLAN, JR.,



and E. McFARLAN, of said Brooklyn.—*Improved Portable Gas Holder*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of the gasometer with the upper portion B C of conical form, with flexible sides and with a stiff head and of such size that it may be introverted, substantially as described, within the stationary tank like portion A, to which its flexible sides are attached.

No. 25,608.—JEFFERSON NASH, of Jamesville, Wis., assignor to Himself and ALONZO K. CUTTS, of Fulton, Wis.—*Improvement in Grain Separators*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination of the vibrating lever E, the elbow crank *f*, and the rods *e* and *h*, whereby the motion of the shoe can be changed from a longitudinal to a transverse direction and *vice versa*, substantially as described.

No. 25,609.—AUGUST SCHMIDT, of New York, N. Y., assignor to Himself, CHARLES SCHMIDT, EDWARD SCHMIDT, and HERMAN SCHMIDT, of said New York.—*Improvement in Apparatus in Making Gas from Wood*.—Patent dated September 27, 1859.—This invention consists in the construction of a retort used for heating, whereby a larger surface is exposed to the heat, and that under circumstances which render the heat effective in accomplishing the desired result.

*Claim*.—The arrangement of the arch shaped retort *a*, and narrow flues  $g^1$   $g^2$ , &c., within the arch of the retort, in the manner and for the purposes substantially as specified.

No. 25,610.—AUGUST SCHMIDT, of New York, N. Y., assignor to Himself, CHARLES SCHMIDT, EDWARD SCHMIDT, and HERMAN SCHMIDT, of said New York.—*Improvement in Apparatus for Making Gas from Rosin*.—Patent dated September 27, 1859.—This invention consists in arranging a retort and heating flues in such a manner as to receive a regulated supply of rosin or other material, rendered fluid by heat, upon coke contained in said retort, and thereby form an illuminating gas of superior quality and quantity.

*Claim*.—The retort *c* and its flues *e e*, combined with the receptacle or kettle *g*, and arranged in the manner and for the purpose specified.

No. 25,611.—GEORGE HAND SMITH, of Rochester, N. Y., assignor to SILAS O. SMITH, of said Rochester.—*Improved Apparatus for the Production of Hare's Hydro-Oxygen Light*.—Patent dated September 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the use of carburetted hydrogen gas, in combination with atmospheric air, or oxygen gas, in proportion as desired, operating under condensation through a proper regulator, and discharging through jets of minute orifice, upon and rendering incandescent any proper radiating material of any form, being independent of any atmospheric circumstances or situation, in the manner and through the means and machinery, substantially as described.

Second. The arrangement of four jets, or burners, for directing the impact of gases on incandescent surfaces, such burners having minute orifices pointing to a common centre, three are placed so that their orifices of discharge shall be within or nearly within one quarter of a circle drawn through them from the centre to which they point (being not more than one eighth of such circumference distant) and the orifice of the fourth being diametrically opposite in such circle to the middle orifice of the other three, substantially as described.

No. 25,612.—JAMES G. ABBOTT and ARCHELAUS LAWRENCE, of Philadelphia, Pa.—*Improvement in Stoves*.—Patent dated October 4, 1859.—R is the air ring around which the sheet-iron cylinder is fixed. It receives its supply of air through the openings *a*, and discharges them through the small openings *o* in the usual way. The openings *a* are made through the lower portion of the door frame F, and are closed by a slide B.

*Claim*.—The combination of the ring R, perforated door frame F, extending down over the ring and slide B, with the stove cylinder, as set forth.

No. 25,613.—J. C. ADAMS, of Greensburg, Ind.—*Improvement in Corn Planters*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the clevis device *t* on the rear of the pole *s*, when said pole is received through the mortise in the bar, and when the said bar is made adjustable by means of bolts and bolt holes through its ends and through the frame pieces A, said clevis device being made so as to clasp together cross pieces *c* and  $c^1$ , all in the manner and for the purpose set forth.

No. 25,614.—CHARLES ALDEN, of New York, N. Y.—*Improvement in Apparatus for Evaporation*.—Patent dated October 4, 1859.—This invention consists in employing, in connection with the application of heat, such a system of agitation as will effect the almost instantaneous



discharge from the liquid of the vesicle of steam formed at the bottom and sides of the dissector, as well as away from the vessel itself.

*Claim.*—The agitator so constructed as to be capable of acting as a blower as well as a stirrer, substantially as set forth.

No. 25,615.—ALBERT J. ALLEN, of Buffalo, N. Y.—*Improved Steam Gauge.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, capsule G of peculiar construction, having the steam admitted at one side and through the centre of that side, and using the flexibility of both sides (such capsule being made of a permanently elastic metal, and not injuriously oxidized by steam or water, preferring for that purpose the metal used in making melodeon reeds,) in combination with fulcrum block F, lever H, spring P, rod O, rod I, swivel block J, radius bar L, and segment K, having tail pin *k*, pinion N, index pointer E, dial plate D, and friction pressure spring M, substantially as shown and described.

Second. I claim radius bar L in combination with rod I, swivel block J, segment K, having tail pin *k*, pinion N, index pointer E, and dial plate D, having increasing divisions on its face, substantially as shown and described.

Third. I claim swivel block J, in combination with rod I, radius bar L, and segment K, having tail pin *k*, substantially as shown and described.

No. 25,616.—JOHN P. ALLEN, of Midville, Ga.—*Improvement in Seed Planters.*—Patent dated October 4, 1859.—This invention consists in a peculiar arrangement and combination of a coverer, hopper, and distributing device, whereby the hopper is prevented from becoming choked or clogged, the machine allowed to work smoothly, and the seed perfectly covered.

*Claim.*—The arrangement and combination of the frame E, provided with the armed hub g, the hopper F, and its bar G, in connection with the adjustable bar I, provided with the self adjusting covering plate or bar K, substantially as and for the purpose set forth.

No. 25,617.—THOMAS ARMITAGE, of Philadelphia, Pa.—*Improvement in Feed Apparatus for Steam Boilers.*—Patent dated October 4, 1859.—This invention consists of a vessel immersed in a well and furnished with a valve opening inwards, in combination with a system of pipes, the whole being arranged in respect to a steam boiler, so as to form a cheap and serviceable substitute for the ordinary feed pump.

*Claim.*—The vessel C with its valve *c* opening inwards, in combination with the pipes D E F H and I, with their respective cocks and the drum B, the whole being arranged in respect to the boiler, substantially as and for the purpose set forth.

No. 25,618.—HENRY F. BAKER, of Centreville, Ind.—*Improvement in Mole Ploughs.*—Patent dated October 4, 1859.—In using this invention the team is attached to the beam A, the same as to an ordinary plough, and, as the implement is drawn along, the knife C and share G enter the earth to the depth of the share G, being regulated by adjusting the knife C and rollers B. The knife merely makes a narrow cut in the earth, which is closed by the pressure of the roller I; but the conical share G makes a cylindrical hole, which is increased by the packer H; said packer rotating in consequence of the resistance offered by the earth to its spirally fluted periphery.

The inventor says: I *claim* the arrangement and combination of the screw E, key F, knife C, share G, and revolving packer H, as and for the purpose shown and described.

I also claim the employment of a revolving mole or packer H, substantially as and for the purpose shown and described.

No. 25,619.—H. H. BAKER, of New Market, N. J.—*Improvement in Weeding Hoes.*—Patent dated October 4, 1859.—This invention consists in so constructing an implement for cutting or dressing weeds from plants growing in drills, as to avoid the reciprocating or shuffling motion, and enable the operator to proceed rapidly, as on a common walk, without endangering the plants, and removing from them lumps of dirt or pebbles, and delivering next to the plants a layer of fine soil, leaving the surface of the plants flat as before, and at the same time forming a subsoil groove at a given distance from the plants, for the purpose of admitting moisture and air into the soil around the roots.

*Claim.*—The arrangement of the piece B, standard D, plate A, concave E, and ferrule F, as described, as and for the purposes substantially as set forth.

No. 25,620.—O. D. BARRETT, of Cleveland, Ohio.—*Improvement in Rotary Harrows.*—Patent dated October 4, 1859.—The team being attached to the two hooks H H by proper appliances, the draft will cause the two harrows to tend toward each other. This causes the jointed arms F F to rise at D, which rising is controlled by the spring C. Thus the two harrows must run lighter in the soil on their adjacent sides than on their opposite sides, and being free to turn on their centre pins, they rotate in opposite directions.

*Claim.*—The arrangement of the hooks H H, draft bars G G, centre pins B B<sup>1</sup> B B<sup>1</sup>,



arms F F, and spring joint D, in relation to each other and to the harrows, as and for the purpose set forth.

No. 25,621.—WILLIAM W. BATCHELDER, of New York, N. Y.—*Improvement in the Construction of Vapor Burners*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim arranging the orifice of discharge *i* from the retort, in reference to the open end of the gas pipe *d*, so that the sediment from the orifice cannot fall into said pipe nor remain about and choke the orifice, substantially in the manner and for the purposes set forth.

I also claim the entire disconnection of the pipe *d*, and retort, as set forth.

I also claim the combination of the circular form of the gas pipe *d* with the horizontal discharge, as set forth.

I also claim connecting the retort with the ascending part of the gas pipe near the burner, as set forth.

No. 25,622.—MAHLON BONNELL, of New York, N. Y., and ISAAC I. COLE, of Tappan, N. J.—*Improved Machine for Cutting Veneers*.—Patent dated October 4, 1859.—This invention consists, first, in arranging the rotary log carrier, by means of cams, in such a manner that the same receives a longitudinal motion whenever one of the logs comes in contact with the knife, and during the whole time which it takes the knife to pass through the log. This operation is intended to facilitate the cutting. This invention also consists in combining with the log carrier a tank containing hot water, so that each log is passed through the water and reheated with every revolution of the carrier, and just before the log comes in contact with the knife.

The inventors say: We claim, first, the arrangement of the cams *a a*<sup>1</sup> or their equivalents, in combination with the log-carrier A, substantially in the manner and for the purpose specified.

Second. The arrangement and combination of the log carrier A, with the tank M or its equivalent, substantially as and for the purpose described.

No. 25,623.—NATHANIEL BOURNE, of Peosta, Iowa.—*Improvement in the Construction of Evaporating Apparatus*.—Patent dated October 4, 1859.—This invention consists in providing an evaporating pan with a double bottom, having applied to it a system of shutters, by which the boiling or evaporation can be regulated.

*Claim*.—The arrangement and combination with the evaporating pan A of a series of partitions and shutters, substantially as and for the purpose shown and described.

No. 25,624.—B. B. BRIGGS, of Sharon, Ohio.—*Improvement in Apparatus for Laying Drain Tile*.—Patent dated October 4, 1859.—The clutch D has two fingers F F connected to the clutch block by the pins G, which pass through the clutch block. In the others (E E<sup>1</sup> E<sup>2</sup>) there are three fingers H H<sup>1</sup> H<sup>2</sup>, which are secured to the blocks by the pins I.

*Claim*.—The described clutches, consisting of the block or body and the fingers H H<sup>1</sup> H<sup>2</sup> and F F<sup>1</sup>, constructed and operating as set forth, in combination with the rope C, or its equivalent, and hook B, when these several parts are arranged and operated substantially as specified.

No. 25,625.—ROBERT C. BUCHANAN, of the United States Army.—*Improvement in Knapsacks*.—Patent dated October 4, 1859.—The knapsack may be made in the ordinary shape of the usual material. On the upper and inner seam, in the line *a a a* is fastened a yoke *b b b*, made after the fashion of a shirt yoke, passing over the shoulders, terminating in two ends *c c* on the breast, and passing backward, is sewed on the inner side from *x* to *y* of the knapsack.

*Claim*.—The combination of the body yoke and end pockets to the knapsack, the whole being combined and operating substantially as set forth.

No. 25,626.—J. A. BUCKWATER, of Kimberton, Pa.—*Improvement in Brick Moulds*.—Patent dated October 4, 1859.—The plates *c c*<sup>1</sup> and *h*<sup>\*</sup> work within the frame A<sup>1</sup>. When the plates *c c*<sup>1</sup> and *h*<sup>\*</sup> are in the frame A<sup>1</sup> the moulds receive the clay and the clay is compressed therein by the followers when said plates are within the frame. When the clay is fully compressed the frame A<sup>1</sup> is raised, and the plates *c c*<sup>1</sup> *h*<sup>\*</sup> are expanded and the capacity of the moulds is increased, so that the moulded clay may be readily discharged.

*Claim*.—The expanding frame B<sup>1</sup>, formed of the movable plates *c c*<sup>1</sup> *h*<sup>\*</sup>, and fitted within the frame A<sup>1</sup>, provided with the inclined or taper pendants *d* and inclined slats L L<sup>1</sup>, the plates *c c*<sup>1</sup> *h*<sup>\*</sup> being connected respectively to the pendants *d* and slats L by the pins *f* and staples *g*, substantially as and for the purpose set forth.

No. 25,627.—ERASTUS TOUCEY BUSSELL, of Covington, Ky.—*Improved Measuring Faucet*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim* operating the cut off by a rotary movement of the exhaust chamber, which comprises the measure proper, whereby the fluid is first admitted into said measure and then discharged therefrom.

I also claim a graduated plunger rod, square or otherwise, so as to admit of stop notches on each side, independent of the others, into which a pin is forced by a spring, as set forth, or its equivalent.

No. 25,628.—LYSANDER BUTTON and ROBERT BLAKE, of Waterford, N. Y.—*Improvement in Supporting the Carriage Bodies of Fire Engines.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The propping of fire engines which are mounted upon springs by means of cams *a* or mechanical equivalent thereof, so arranged and operated as, by lever power, to throw the weight of the engine from and upon the springs, substantially in the manner and for the purposes set forth.

No. 25,629.—G. A. CLARK, of Farmington, Conn.—*Improvement in Fireplaces.*—Patent dated October 4, 1859.—This invention relates to the heating of apartments by an economy of the heat of the ordinary fireplace, and instead of conducting the hot air and smoke directly up the chimney, as in ordinary fireplaces, it is retained and radiated wheresoever it may be desired, while at the same time the heat, by reflection into the room, is obtained as with the common fireplace.

*Claim.*—The described arrangement of caliducts C D E E F G G H H<sup>1</sup> and C<sup>1</sup>, when the same are applied to a fireplace, in the manner and for the purposes set forth.

No. 25,630.—POWHATTAN ELLIS COLLINS, of Mobile, Ala.—*Improvement in Cotton Gins.* Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* an adjustable hopper, as described, for changing and regulating the feed of cotton to a gin, as set forth.

I also claim, in combination with an adjustable and regulating hopper, the toothed cylinder D, for conveying the cotton from the hopper to the ginning or saw cylinder, as set forth.

I also claim the arrangement of the hopper, feeding toothed roller, saw and brush cylinders, as shown, so as to operate in connection with each other, in the manner described.

No. 25,631.—GARRET COOPER, of Jersey City, N. J.—*Improved Tray Bolt.*—Patent dated October 4, 1859.—The bolt has at its back end an elongated slot D, and is held and retained in its position between the shield B and plate H by means of a nipple C punched up from the underside of the plate H into slot D, giving the bolt A the necessary backward and forward motion and retaining it in its position.

*Claim.*—The general arrangement of bolt A, shield B, nipple C, and plate of metal H, when said bolt shall effect its own spring, and when the said parts shall be arranged and operated in the manner described and for the purpose specified.

No. 25,632.—PEARSON CROSBY, of New York, N. Y.—*Improved Manner of Hanging Reciprocating Saws.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* connecting the two plates *b b* of the caps B by means of rivets *d* and pins *g k*, the ends of which are fitted in holes countersunk at the inner sides of the plates to admit of the vertical adjustment of the plates *b*, for the purpose set forth.

I also claim encompassing the rivets *d* of the cap B by tubes or cases *f*, to form a bearing for the plates *b b* and prevent an undue pressure of the caps against the saw, so that the latter may be adjusted to compensate for wear, as specified; it being understood that I do not claim, broadly, the tubes or cases *f*, but only when used in connection with or applied to the caps B, for the purpose set forth.

No. 25,633.—JOSHUA DAVIES and SARAH A. DAVIES, of Muskegon, Mich.—*Improved Bread and Vegetable Cutter.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement and combination of the adjustable slotted plates H, gauge I, rod *h*, spring J, and lever F, as shown and described, so that the slice of bread shall be supported by the gauge until the stroke of the knife is almost finished, and so that the gauge I shall fall outwardly on the depression of spring J, all as set forth.

No. 25,634.—WILLIAM H. DAVIS, of Taunton, Mass.—*Improved Blind Fastener.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The application to the catch of a box to secure it from getting out of place, and of the hook on a blind a rest to prevent the blind from sagging, as described.

No. 25,635.—ROBERT DICK, of Toronto, Canada.—*Improvement in Accountant Labels for*



*Periodicals, &c.*—Patent dated October 4, 1859; patented in Canada, July 26, 1858.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the contrivance of keeping accounts in printed form by the use of printer's type or their equivalents, kept so arranged as to admit readily of all the readjustments which the currents of business may require, in the manner substantially as set forth.

Based on this primary invention, I also claim the device of rendering or transmitting accounts thus, or substantially thus kept in type, by sending printed impressions taken therefrom, though the particular form of sending may not be mine. While at the same time I claim, in the broadest and fullest terms, the special mode and form set forth by use of the machine described, as constituted by the combination of fluid vessel, reel, apron movement and cutter stamp, which machine I also claim, with all the modes indicated for operating the same, and in connection with the recited claims I thus formally make.

I also claim all other means and appliances substantially the same as those claimed or intended to be claimed.

No. 25,636.—MASON H. FORD, of New York, N. Y.—*Improvement in Borers for Excavating Mud, &c.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the construction of revolving excavating scoops provided either with openings and wings or flanges on its sides, capable of opening and shutting or so constructed that part of the sides may be opened, and act in that position as wings or flanges, by which the dirt, mud, or sand is, during the revolving of the scoop, thrown into the inside of the scoop, as described.

Second. I claim the manner of attaching scoops to the shafts, so that the same will be made to turn with the shaft when the same is revolving, and at the same time capable of being raised above the surface of the water, when filled for the purpose of being emptied, without requiring to raise the shaft, substantially as described.

No. 25,637.—PETER GETZ, of Lancaster, Pa.—*Improvement in Cooking Stoves.*—Patent dated October 4, 1859.—By pouring water in the boiler tank O, it finds its way through the openings s and pipes K L into the steam generating box B, in immediate contact with the fire chamber M; thus steam is generated and imparted to the water in the tank and boilers, which is thereby brought into brisk ebullition.

*Claim.*—The specific arrangement of the boilers O H H, drumhead oven C, and their combination in manner as set forth, for the purpose specified.

No. 25,638.—WILLIAM D. GUSEMAN, of Morgantown, Va.—*Improvement in Weighing Scales.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the triangular recess cut out on the under side of the journals of the pendulum drum or shaft, to enable said drum to swing or roll on its axis on the upward pointing knife edges g, substantially in the manner and for the purpose described.

I also claim, in combination with an upward pointing knife edge, a roller or pendulum drum, the journals of which are formed with triangular recesses and a counterpoise weight, or its equivalent, vibrating below the centre of the drum or roller, substantially in the manner and for the purpose described; and this I claim, whether the counterpoise be adjustable on its lever or not.

No. 25,639.—HENRY HAYS, of New York, N. Y.—*Improved Stave Machine.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Dressing staves by a continuous operation, regardless of length or thickness, by the combined action of the feed rollers c d and cutters u v, when said parts are arranged as set forth, to remove a shaving from the outer side of the stave, under all circumstances, and split out more or less from the inner side, to reduce the stave to a uniform thickness, as specified.

No. 25,640.—JOSEPH HARRISON, Jr., of Philadelphia, Pa.—*Improved Steam Boiler.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the construction of a boiler of distinct globular or spherical parts, single or in groups, substantially as described, united in the manner specified, or any other analogous thereto, and wherein the strength of the globular form of such parts is common to the entire structure; this claim being intended to include not true spheres only, but elliptical, conical, polyhedral, or any other analogous forms also, where the results looking to strength and construction of the boiler are substantially the same as those enumerated.

I also claim the employment, as units of construction, as hereinbefore explained, of separate chambers of cast-iron or other metal, of uniform size and shape, substantially as



described, to be used as wanted, wherewith boilers of different forms and dimensions may be built up, being united together in the manner specified, or any other analogous thereto.

Both of the above claims involve an outside casing for the particular construction, with furnaces, substantially as described. It is not, however, my intention to confine myself to any special form of boiler, or mode of casing the same.

No. 25,641.—JOEL HAINES, of West Middleborough, Ohio.—*Improved Device for Connecting the Panels of Portable Field Fences.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The jointed link J, for connecting the ends of the panels, so arranged that by using a tapering key in the link, the angle of a zigzag fence may be made more or less obtuse, as required, to make the fence stand firm in the position in which it is placed.

No. 25,642.—WILLIAM M. HENDERSON, of Baltimore, Md.—*Improvement in Pumps.*—Patent dated October 4, 1859.—The object of this invention is to simplify the construction and operation of pumps, by a certain combination of valves, pistons, and water ways, causing a continuous flow of water in the same direction.

*Claim.*—The two ball valve cages, with the suction valves in their interior, attached to the extremity of a central perforated tube, or its equivalent, in combination with the water ways and discharge valve, when constructed and operated substantially in the manner and for the purposes set forth.

No. 25,643.—THOMPSON HERSEE and PIERRE JOS. BOURGNON, of Buffalo, N. Y.—*Improvement in Faucets.*—Patent dated October 4, 1859.—When it is proposed not to draw from the cask for a given time, the keg or plug B may be turned so as to shut off the issue of the chamber C, the same as in a common faucet.

The inventors say: We *claim*, first, the relative arrangement of the valve H, chamber F, and spherical part D, in combination with the plug B, said valve having a lifter K, and stem L, the whole operating substantially as described.

Second. The combination and arrangement of the lifting rod N, valve o, tube P, and pipe 4, with the cross piece L, for the purpose of ventilating the barrel at each draft, substantially as described.

No. 25,644.—JOHN B. HOLMES, JR., of New York, N. Y.—*Improved Curtain Fixture.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the spring *d*, in combination with the roughened V shaped, grooved pulley *b*, an endless cord or band *b*<sup>1</sup>, said parts being arranged to operate in relation to each other, as specified.

I also claim the brackets *c c*<sup>1</sup>, provided with the centre pins 1, entering the roller ends *b b*<sup>2</sup>, in the manner and for the purpose specified.

I also claim forming the bracket *c*, with the slot and open ring 3, and the bracket *c*<sup>1</sup>, with a hook shaped slot 2, to afford opportunity of removing the whole of the parts without having to draw the screws or nails passing through said brackets, as specified.

No. 25,645.—LEWIS HOVER, of Flushing, N. Y.—*Improvement in Signal Lanterns.*—Patent dated October 4, 1859.—This invention consists in the arrangement and combination within the lantern case and above the lamp, of a metallic cylinder and a colored glass cylinder, the metallic cylinder serving to protect the glass from the heat and smoke of the lamp, and also serving as a guide and support, or fastening for the rise and descent of the glass.

*Claim.*—The arrangement and combination with the case A, and lamp C, of the metallic cylinder D, and glass cylinder E, substantially as and for the purpose shown and described.

No. 25,646.—JOB F. HOWLAND, of New York, N. Y.—*Improved Tool for Cutting Gas Pipes.*—Patent dated October 4, 1859.—This invention consists in the arrangement of a stationary iron frame with a slot in it which terminates in a conical form at one end, in combination with a sliding jaw having a V shaped tongue with an adjustable sliding cutter, whereby the tool is made to answer for cutting gas pipes of various diameters, and the necessity of using a plate with a series of holes of different sizes avoided.

*Claim.*—The arrangement of a stationary iron frame with a slot in it, which terminates in a conical form at one end, in combination with a sliding jaw having a V shaped tongue, and with an adjustable sliding cutter, substantially as and for the purposes set forth.

No. 25,647.—J. W. HOWLETT, of Greensboro', N. C.—*Improved Mode of Disinfecting Feathers.*—Patent dated October 4, 1859.—This invention consists in disinfecting feathers by placing the same in a suitable retort into which a combination of steam and chlorine gas is injected, the steam and chlorine gas being generated in a suitable boiler containing water and chloride of lime, or other substance, which would generate chlorine gas, and the whole arranged, whereby the desired work is accomplished.



*Claim.*—The injection of combined steam and chlorine gas among the feathers, substantially as shown and described.

No. 25,648.—B. C. HOYT, of Port Washington, Wis.—*Improved Vegetable Cutter.*—Patent dated October 4, 1859.—This invention consists in pivoting a lever or frame, to a standard fixed to a bench or any suitable stand, upon the top of which lever is fixed an angular box provided with longitudinal slots extending from end to end, under which the articles to be cut are placed, and in operating a slide which is immediately under this box, armed with vertical knives passing through the slots in said box, by means of a jointed arm spring and the lever upon which the box itself is fixed, so as to give the knives a reciprocating motion and a draw cut upon the inclined edges of the box.

The inventor says: I *claim* the arrangement of the cutting box upon a vibrating lever C, when the lever is supported by a spring E, actuating arm D, for keeping the whole in an elevated position, as set forth.

I also claim the combination of slide H, angular slotted box K, and vertical cutters J, arranged and operating substantially in the manner and for the purpose set forth.

No. 25,649.—RAMETH HUSSEY and URIAH THORNBURGH, Sr., of Walnut Run, Ohio.—*Improvement in Mole Ploughs.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* suspending the plough beam that carries the mole to the plough frame by means of ropes or chains, connecting its ends to one capstan, in combination with suitable catches for holding it at any adjusted height thereon, the whole being arranged in the manner and for the purpose set forth and explained.

We also claim, in combination with the rotary mole, suspending the plough beam by both its ends to ropes or chains which connect with a common capstan on the plough frame, in combination with racks and pawls for holding said beam when adjusted, the whole being arranged for the purpose and substantially in the manner stated.

No. 25,650.—ISAAC E. JONES, of Cincinnati, Ohio.—*Improvement in Spark Arresters.* Patent dated October 4, 1859.—This invention relates to the employment of a water tank, so constructed and arranged upon the top of a cab or housing of locomotives, that all the smoke, sparks, and cinders coming from the smoke stacks of said locomotives be received within said tank, the sparks and cinders being arrested and extinguished and the smoke discharged, in combination with a wind wheel and an agitator, by means of which the upper part of the tank may be filled with fine spray for the purpose of extinguishing sparks, &c.

*Claim.*—The arrangement of the tank A A<sup>1</sup>, wind wheel g, and agitator k, with reference to the receiving trunk F and valve l, all being constructed and arranged to operate conjointly as described, and for the purposes set forth.

No. 25,651.—MARTIN C. KILGORE, of Washington, Iowa.—*Improvement in Rotary Harrows.*—Patent dated October 4, 1859.—The object of this invention is to raise the harrow from the ground, for the purpose of transportation, &c., at the same time arranging the parts in such a manner that one side of the harrow can be slightly raised from the ground, in order that the other may preponderate, and thus effect a rotary motion without weights.

*Claim.*—The arrangement and combination of the windlass E, arms I, socket N, collar J, harrow P, and spindle K, as and for the purpose shown and described.

No. 25,652.—H. B. KNOWLES, of Providence, R. I.—*Improved Attachment to Treadles of Sewing Machines.*—Patent dated October 4, 1859.—This invention consists in the employment of a yielding, adjustable rod, having a cross head with hooks at its upper end, in combination with a shackle bar, crank shaft, and treadle.

*Claim.*—The employment of a yielding adjustable rod, having a crosshead with hooks at its upper end, in combination with a shackle bar, crank shaft, and treadle, substantially as and for the purposes set forth.

No. 25,653.—PHILIPP KOCH, of New Haven, Conn.—*Improvement in Punching Metals.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of a series of arbors, to which punches or shear blades are attached, fitted in a rotating or adjustable head d, when said head is connected with an arbor B, having a plate c attached, provided with bolsters e<sup>1</sup> and shear blades f, corresponding with the punches and shear blades of the head, substantially as and for the purpose set forth.

Second. The means employed for actuating the yoke H, and consequently the arbors e, to wit: the adjustable shaft K, provided with the eccentric J, pin w, fitted within the block L of yoke H, the adjustable shaft P, provided with the lower crank r, and the recess v in the back part of plate o to receive pin w, substantially as and for the purpose set forth.

No. 25,654.—E. D. LEE and Z. W. LEE, of Blakely, Ga.—*Improvement in Ploughs.*—



Patent dated October 4, 1859.—To the lower end of the bar D the share F is attached. This share is of shovel form, and its upper end has a shank *f* formed on it, leaving a shoulder *g* at each side. On the foot D and around the shank *f* of the share, a metal band G is placed, and a metal wedge or key H is driven through the band G at the back side of the foot. Near the lower end of the foot D there is a pin or projection *h*, which fits in a hole or recess in the back side of the share.

*Claim.*—The arrangement of the peculiar curved clevis I, beam A, curved rod E, bar D, band G, wedge H, shank *f*, projection *h*, and share F, as specified, for the purpose set forth.

No. 25,655.—LEVI E. LINCOLN, of Lowell, Mass.—*Improvement in Safety Apparatus for Steam Boilers.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The application of a low water alarm to more than one boiler (or to one) by means of a two or more legged tube, a simple or a compound siphon, in such manner that said tube shall keep said alarm charged with water, when all its pendant ends are covered by water, and shall cause said alarm to be supplied with steam, when any one of its pendant ends is exposed to steam, substantially as set forth and described.

No. 25,656.—W. T. LITTLEJOHN, of Kalamazoo, Mich.—*Improved Mangle.*—Patent dated October 4, 1859.—This invention consists in an improved mode of graduating the pressure of the rollers on the clothes, whereby the mechanism is placed under the complete control of the operator.

*Claim.*—The arrangement of the levers D D, with roller C at their upper end, the spring F, bar G, connected to the treadle I by the rope H, in combination with stationary roller B, substantially as and for the purpose set forth.

No. 25,657.—CORNELIUS MAHONY, of New York, N. Y.—*Improvement in Musical Notation for the Blind.*—Patent dated October 4, 1859.—This improvement consists in the combination of raised or embossed letters and notes, so as to represent music for the blind.

*Claim.*—The combination of letters and characters or notes, in embossed print, so as to represent music for the blind, substantially as set forth.

No. 25,658.—NEWTON S. MANROSS, of Bristol, Conn.—*Improvement in Valves for Retarding and Arresting the Flow of Gases, &c.*—Patent dated October 4, 1859.—The nature of this invention is explained by the claim and engravings.

The inventor says: I *claim* the use of a recurved or V shaped tube, or passage, having its lower part connected with a well or reservoir, containing quicksilver, which is made to rise within the tube, by means of a plug or other equivalent pressure, substantially in the manner and for the purpose specified.

I also claim the combination of such recurved tube, closed by quicksilver, with the regulating apparatus, consisting of a tapering shoulder and movable rod, secured from leakage, by passing through the quicksilver.

No. 25,659.—H. MARSHALL, of Cincinnati, Ohio.—*Improvement in Coffins.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The new article of manufacture named, to wit: a coffin having its bottom, ends, and sides wholly constructed of corrugated sheet metal, which is rolled or stamped into proper form, and surrounded at the upper edge of its body with a wrought or cast-iron frame, which serves as a brace to the body and a hold fast for screws, substantially in the manner and for the purpose described.

No. 25,660.—NATHAN B. MARSH, of Cincinnati, Ohio.—*Improvement in Hydrants.*—Patent dated October 4, 1859.—The hydrant represented in the engravings is of that class in which an upper large and lower small packed piston or plunger are used to work together in cylinders or valve chambers, into which the water is made to enter by holes in the sides of the smaller cylinder, above and below which holes the small piston is made to play, while the large piston has its action restricted to play on one side only or above the discharge outlet which may be in the bottom of the large cylinder that is in open connection or constant water communication with the small cylinder.

*Claim.*—The arrangement, in connection with the main casing G, discharge pipe S, and air chamber E of a hydrant, of the upper and lower plunger or valve chamber A C, made in one piece F, upper plunger or valve D, when composed of parts *k l m n r*, and lower conical guide and stop plunger, composed of parts *B h i*, the whole being constructed, arranged, and used together, in the manner and for the purpose described.

No. 25,661.—J. PLYMPTON MARSHALL, of Millbury, Mass.—*Improvement in Breech Loading Fire-Arms.*—Patent dated October 4, 1859.—These improvements consist in combining the catch or lock bolt of the movable breech with the discharging lock of the arm, in such a manner that removing the catch so as to raise the movable breech, will put a stop catch on



the lock so as to prevent its discharge; also, in arranging the lock for the tape primers in such a manner that the coil of caps may be put in edgewise, and the end of the coil laid upon the mechanical device for carrying them out, instead of crowding them in sidewise.

The inventor says: I *claim*, first, the combination of the lock bolt (of the movable breech) or its equivalent, and the discharging lock of the arm, with intermediate parts, for the purpose above set forth.

Second. Arranging the lock for the tape primers, in the manner above described, and for the purpose specified.

No. 25,662.—EDWIN MAY, of Indianapolis, Ind.—*Improvement in the Construction of Prisons*.—Patent dated October 4, 1859.—The object sought by this invention is avoiding the necessity of actual contact with the prisoners, while the keeper has perfect knowledge and control of their actions, and preventing the escape of prisoners, which has often been done by knocking the keeper down.

The inventor says: I *claim*, first, the angle door D, in combination with the safe lock or bolt I, when constructed and operated substantially as set forth.

Second. The safe J, containing the drum *p*, and bolt I, and being held by the outer door C, when constructed and operated substantially as and for the purpose set forth.

Third. The endless chain or rope *e*, in combination with the levers *d*, when constructed and operated substantially as and for the purpose set forth.

Fourth. The combination and arrangement of the levers *b*, bar *a*, and bolts or lugs *s*, when operated from without the grating *i*, substantially as and for the purposes set forth.

No. 25,663.—EDWARD MAYNARD, of Washington, D. C.—*Improvement in the Back Sights of Fire-Arms*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the device as set forth, viz: the grooved cylindrical end of the sight carriage in combination with a spring bolt or pin of such form that it shall fall into the grooves and bear against their two sides, and yet not touch the bottoms of the grooves, so that as it wears it will still press on the sides of the grooves, and hold the carriage firm in either of its positions.

Second. I claim the device as set forth of placing the spring and its bolt or pin within the stock or breech of the gun for its more perfect protection from wet and damage by accident, the opening through which the pin acts being susceptible of being closed without oil or packing.

No. 25,664.—EDWARD MAYNARD, of Washington, D. C.—*Improvement in Fire-Arms*.—Patent dated October 4, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The permanent union of a cap or nipple *a*, with the closed end of the tube *b*, whose open ends has screw threads formed within it, by which I am enabled to combine the said nipple and its tubular seat with the abutment *d* of the breech piece of a fire-arm, by means of a transverse perforation in said abutment, for the reception of the tubular nipple-seat, and a nick headed screw *c* inserted into the left hand end of said perforation, and working into the screw threads in the open end of said tubular nipple-seat, substantially as herein set forth.

No. 25,665.—JOHN McCLUSKEY, Jr., of South Boston, Mass.—*Improvement in Skates*.—Patent dated October 4, 1859.—This invention consists in making the skate so that the toe strap may have a longitudinal adjustment upon the runner, and provided with an adjusting screw for fixing it at any desired point adapted to the size of the foot. It also consists, in conjunction with the toe strap, in hinging the heel strap and plate to the rear end of the runner, and fixing it rigidly to the runner when the skate is on the foot, by a spring catch or thumb screw.

*Claim*.—The jointed heel strap C, as set forth, in combination with the toe strap B, when the latter is made longitudinally adjustable upon the runner A, substantially as specified.

No. 25,666.—WILLIAM HOWARD MITCHELL, of San Francisco, Cal.—*Improvement in Window Sash Supporters*.—Patent dated October 4, 1859.—This invention consists in the combination roller, double jointed arm, self adjusting spiral spring, and stationary stop; also, in the combination of the above named parts with a semi-circular recess in the window frame.

The inventor says: I *claim*, first, the roller A arranged on an angular double jointed arm B B C C, so as to have slight play up or down between two stops E G, accordingly as it is operated upon by a spring F, or the weight of the sash N, substantially as and for the purposes set forth.

Second. The combination of the angular double jointed arm B B C C, spring F, thumb piece H, friction roller A, and semi-circular recess *m* in the window frame, substantially as and for the purposes set forth.



No. 25,667.—MORTIMER NELSON, of New York, N. Y.—*Improved Gold Washer*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of a series of concave plain pans with a series of convex rifled pans, said pans all being arranged on the same vertical shaft, substantially as and for the purposes set forth.

Second. The arrangement of a horizontal cam wheel, ball, horizontal friction roller, two bevel wheels, a rising and falling driving shaft, and a collar on the vertical shaft, for operation together, substantially in the manner and for the purposes set forth.

Third. The combination of a revolving perforated platform or grating, with a non-revolving, but yielding raking device, substantially as and for the purpose set forth.

Fourth. The combination of the stationary case with the revolving perforated platform, raking device, and the horizontally revolving pans, substantially as and for the purpose set forth.

No. 25,668.—NELSON ORCUTT, of Binghamton, N. Y.—*Improvement in Composition for Soap*.—Patent dated October 4, 1859.—The inventor says: In carrying out my invention I use the following named articles in the quantity and proportion stated: 100 pounds of sal-soda, or  $33\frac{1}{3}$  pounds of soda ash put into 23 gallons of boiling water, for forming the lye; 20 pounds of limestone put into 20 gallons of water; 100 pounds of untried or unrendered tallow or crude grease; 50 pounds of rosin; and 1 pound of alum.

*Claim*.—Making soap from untried or unrendered tallow or grease, and the other ingredients named, the ingredients being in the proportions as stated.

No. 25,669.—LEWIS PAGIN, of Elmore, Ohio.—*Improved Combined Table and Clothes Dryer*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A combined table or stand and a clothes dryer, composed substantially of a table or stand with a reversible top, and a box, drawer or recess, and two or more jointed arms that will fold up and lie within said box, drawer or recess, the whole being combined and arranged for the purposes set forth.

No. 25,670.—BENJAMIN S. PARDEE, of Mount Carmel, and THOMAS RAWLING, of New Haven, Conn.—*Improved Upholstery Nail*.—Patent dated October 4, 1859.—This invention consists of a paper headed nail or tack, and constitutes a new article of manufacture.

*Claim*.—As a new article of manufacture, the paper headed nail or tack, substantially as described.

No. 25,671.—SENECA PIERCE and FREDERICK F. BEARDSLEY, of Castle Grove, Iowa.—*Improvement in Composition for Tanning*.—Patent dated October 4, 1859.—This invention consists in the employment of terra japonica, alum (sulphate of alumini), Glauber salts (sulphate of soda), and saltpetre (nitrate of potassa), dissolved in water, in certain proportions, for the purpose of tanning skins and hides, and converting them into leather by a short and cheap process.

*Claim*.—A composition for tanning, made of terra japonica, alum, Glauber salts, and saltpetre, in the proportions and manner herein set forth.

No. 25,672.—JOSIAH W. PRENTISS, of Pultney, N. Y.—*Improved Mode of Restoring Rancid Butter*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The mode described of restoring rancid butter in the firkin, by removing the hoops so as to open the joints, inclosing it in a bag, or other textile fabric, and then surrounding the whole with charcoal, substantially as described, and for the purpose set forth.

No. 25,673.—J. PURINTON, Jr., of Lynn, Mass.—*Improved Machine for Lasting Boots and Shoes*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the clamps A A A A, in combination with the slides B B B and C, for the purposes described, said clamps and slides being carried to their place by their levers I I I I and J J J J, or their equivalents.

I also claim the opening and closing slide C, and Fig. 2; also, the roughing or cutting slide D, Fig. 3, for the purposes described.

No. 25,674.—EDWARD A. L. ROBERTS, of New York, N. Y.—*Improved Lathe Chuck*.—Patent dated October 4, 1859.—This invention consists in so constructing the chuck and mandrel that the parts shall have free motion upon each other in every direction, so that any tool can be quickly, easily, and perfectly centred, and can also, when desired, be set at any angle.

*Claim*.—The application and use of the ball and socket joint, in combination with the mandrel or chuck of lathes, substantially as and for the purposes set forth.



No. 25,675.—CHRISTIAN ROPP, of McLean County, Ill.—*Improvement in Corn Planters*.—Patent dated October 4, 1859.—The inventor says: My invention relates to certain improvements in corn planters, by means of which I am enabled to plant two rows of corn at a time, and to adjust and regulate the distance between said rows, and also the distance between the hills of corn.

*Claim*.—The arrangement of the dog wheel P, levers  $u^2$  and  $u^3$ , stops  $u$  and  $u^1$ , with stops  $f$ , springs  $s$ , bent rods  $g$ , and feed wheels F F<sup>1</sup>, the whole being constructed substantially as and for the purpose set forth.

No. 25,676.—O. SAGE, of Wellington, Ohio.—*Improvement in Cheese Vats*.—Patent dated October 4, 1859.—B is the frame of the milk box  $c$ , which is placed in the water box  $b$ , and to the bottom of which is attached an equalizer or fender plate G. The milk box has a curd strainer  $c^1$ . The furnace D is provided with a door  $f$ , for the insertion of fuel, &c., while the smoke pipe  $e$  has an extension  $e^1$ , for the purpose of affording a ready means of cleaning it out.

*Claim*.—The combination of the furnace D and smoke pipe  $e$  with the open and curved bottom  $b^1$  of the water box  $b$ , pipe E, equalizer G, and milk box  $c$ , said parts being constructed, arranged, and combined and operating substantially as and for the purposes set forth.

No. 25,677.—JACOB SEEBOLD, of New Berlin, Pa.—*Improvement in Grain Separators*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Attaching the separator to the thresher by rocking frames  $c$  and  $f$ , in combination with wheel W, rod  $d$ , slotted arm  $b$ , and spring  $s$ , for producing its reciprocating movement, substantially as described.

No. 25,678.—SAMUEL R. SEIBERT, of Munising, Mich.—*Improved Surveying Instrument*.—Patent dated October 4, 1859.—This invention consists in constructing the supports of the telescope in such a manner as to allow it to be revolved upon its axis and be brought to bear upon any object appearing between the zenith and horizon; the construction also admits of a magnetic needle and an improved sextant in principle the same as that invented by William Burt.

*Claim*.—Constructing the "Ys" or supports of the telescope in a surveying instrument, as set forth; also constructing a clamping pinion in the manner and for the purposes described.

No. 25,679.—J. H. SHIREMAN, of East Berlin, Pa.—*Improvement in Dividers for Harvesters*.—Patent dated October 4, 1859.—This invention consists in providing certain means for the convenient adjustment of its width, whereby it may be adapted to use in harvesting various kinds of grass.

*Claim*.—The combination of the adjustable case B, with the stationary horizontal dividing point A, the parts being constructed and arranged in the manner and for the purpose set forth.

No. 25,680.—THOMAS P. SINK, of Fairton, N. J.—*Improvement in Oyster Dredges*.—Patent dated October 4, 1859.—In the use of this device the rope to which the dredge is attached is placed over the pulley, and the block or chuck, by its capacity to rotate, readily adapts itself to any change in the direction the rope may take, in consequence of a change in the course of the boat as the dredge is dragged along after it.

*Claim*.—The arrangement and combination of the chuck or block A, and its pulley B, with the roller E, the respective parts being formed and operating substantially in the manner and for the purpose set forth.

No. 25,681.—SEYMOUR SMITH, of Sharon, Conn.—*Improved Saw Set*.—Patent dated October 4, 1859.—This invention consists in the arrangement of an angular, or V shaped stock or body, an adjustable slide carrying a face parallel to the angular portion thereof with suitable means for gauging the angularity of the teeth, and an adjustable gauge extending across to the gauge the depth of the nip or set, the whole mounted so as to be operated.

*Claim*.—The mill saw set described, as a new article of manufacture; the several parts A, B, and F, being constructed and arranged substantially in the manner and for the purposes set forth.

No. 25,682.—LEONARD SNIDER, of Indianapolis, Ind.—*Improvement in Covering Coffins*.—Patent dated October 4, 1859.—The claim explains the nature of this invention.

*Claim*.—Using and applying flock as a covering for coffins, whether the same is prepared or secured in the manner set forth, or in any other manner substantially the same.



No. 25,683.—CHARLES L. STACY, of Cincinnati, Ohio.—*Improvement in Hydrants*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The relative arrangement of the cup formed disks F, G, and G<sup>3</sup>, and the apertures K and L, adapted in the manner set forth, to form a chamber I, closed on all sides (with the exception of the ingress aperture K,) while the hydrant is open, for the purpose of expanding the flanges *f* and *g*, and upon the closing of the hydrant to uncover the aperture I, and thereby empty the discharge pipe C.

No. 25,684.—JAMES E. B. STUART, of Wytheville, Va.—*Improved Method of Attaching Sabres to Belts*.—Patent dated October 4, 1859.—This invention consists in having the sabre attached to the belt so as to enable the wearer to detach it at pleasure in an instant, so that when mounted troops are called upon to dismount and fight, they can by this method leave the sabre hanging to the pommel of the saddle, and when they remount by the same method they can attach the sabre to the belt.

*Claim*.—The attachment hook H, in combination with the ring O, P, or its equivalent, attached to the waist belt, as indicated in the drawing M, the whole being constructed and operated substantially as and for the purpose set forth.

No. 25,685.—W. H. STUART, of Millington, Md.—*Improvement in Seed Planters*.—Patent dated October 4, 1859.—The slides *e e*<sup>1</sup>, on one side, are connected to the corresponding slides on the other side by means of pins or hooks *g g*<sup>1</sup>, taking into holes in the plates G G<sup>1</sup>. The slides *e e*<sup>1</sup> are connected at one side of the frame by means of the springs *h h*<sup>1</sup>, and at the other end by a rope H or its equivalent, while a second rope H<sup>1</sup> is attached to the rope H.

The inventor says: I *claim*, first, a double corn planter, the parts of which are constructed, combined, and arranged to operate in relation to each other, as described.

Second. Connecting the two independent sets of valves by means of the flexible connection H, in combination with single operating chain or cord H<sup>1</sup>, as and for the purposes set forth.

No. 25,686.—H. K. SYMMES, of Newton, Mass.—*Improvement in the Construction of Gas Burners*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination with the inverted cup D, and tube C, and the quicksilver basin or basins or their equivalents, forming a movable connection between the base and tip of the burner, operating as described, of the pawl like rod or its equivalent, attached to the cup, and a rest for said rod attached to the base of the burner, the whole operating as described, to shut off the gas from the tip by the temporary increase and subsequent reduction of the pressure in the pipes.

No. 25,687.—GEORGE S. TIFFANY, of Palmyra, Mich.—*Improvement in Tile Machines*.—Patent dated October 4, 1859.—Within the hopper A a shaft C is placed longitudinally, one end of this shaft extends through the end of the box or hopper, and has either a driving pulley or a crank *a* attached to it. The opposite end of the shaft C is fitted in the tube B, and it has a spiral flanch D on it, which flanch fits in the tube B.

*Claim*.—The extension of the flanged feeding shaft C, as to form a revolving core C<sup>1</sup>, operating substantially as shown and described.

No. 25,688.—GEORGE W. TOLHURST, of Liverpool, Ohio.—*Improvement in Corn Shellers*.—Patent dated October 4, 1859.—The inventor says: To the toothed side of the disk, I apply a flexible apron which extends about one third of the surface of the disk, and is placed in a manner so as to cause the cob to be separated from the corn as soon as it is shelled and carried off in one direction, while the corn is thrown into another.

*Claim*.—The flexible hinged apron in combination with the disk B, and flange wheel D, when the several parts are constructed and arranged for operation, in the manner described and for the purposes specified.

No. 25,689.—PHILIP ULMER, of New York, N. Y.—*Improved Spring Bed Bottom*.—Patent dated October 4, 1859.—This invention consists in an improved application or manner of attaching elastic webbing or other similar materials, (used as a spring,) to the rails and slats of a bedstead, forming a spring bottom to the same.

*Claim*.—The method described of connecting the spring *b*, or its equivalent means, by which the same is secured in place by contact between compressing surfaces, substantially as and for the purposes set forth.

No. 25,690.—RUFUS M. VARNER, of Oxford, Miss.—*Improvement in Corn Planters*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of the table *r*, delivering tube *h*, furrow plough *j*, feeding disk *g*, hopper *f*, all attached to the rear end of the tongue, and placed between and



subject to the action of the straps and the springs, as herein described and in connection therewith.

I claim the combination of the spaces  $p$  of the hopper's side, with the India rubber strip, the beveled edge of the hopper's bottom, and the gouged holes of the feeding disk, as and for the purposes set forth.

No. 25,691.—JOHN WAGNER, of Philadelphia, Pa.—*Improvement in Machines for Hoisting Ice.*—Patent dated October 4, 1859.—This invention consists in attaching anti-friction rollers to the slides on which the carriages are hung, and the peculiar manner of hanging, supporting, and tilting the carriages.

The inventor says: I *claim*, first, the combination of the slides, carriages, supporters, and projections on the chutes, arranged and operating in the manner and for the purpose specified.

Second. The anti-friction rollers  $y y y^1$ , &c., in connection with the slides, arranged and operating as specified.

Third. The counterbalancing rope or chain and rollers  $K$  and  $K^1$ , in combination with the pulley  $B$  and the slides  $S$  and  $S^1$ , operating in the manner and for the purpose specified.

No. 25,692.—KASIMIR VOGEL, of Chelsea, Mass.—*Improvement in Sewing Machines.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in combination with two or more needles  $a b$  or their equivalents, which work together to perforate or pass from one side to the other of the cloth or other material to be operated upon, and with suitable means of carrying a locking thread through the loops of the threads of these needles, of a thread conductor  $Y$ , so applied and operated as to effect the interlacing of the threads of said needles on the opposite side of the material to that on which they are interlaced with the locking thread, substantially as described, whereby they are made to produce the different kinds of stitching represented.

Second. The employment of a movable needle plate  $K$ , containing two or more needle holes, of a different size, form, or arrangement, applied to the bed plate or work plate of a sewing machine, in such a manner as to be capable of adjustment to bring either of its holes into position for the proper needles to work in it, substantially as described.

No. 25,693.—HENRY PRITCHARD, of Brooklyn, N. Y.—*Improvement in Guide Rings for Fishing Rods.*—Patent dated October 4, 1859.—This invention consists in combining a movable thimble, (having the eye permanently attached thereto,) with a ferrule securely fastened to the fish pole, in such a manner as to allow the thimble to turn freely on the ferrule, thereby adjusting the eyes on the thimbles to one and the same line, in case the pole should get warped or twisted.

*Claim.*—The combination of the fixed ferrule  $f$  and the movable thimble  $c$  with its eye  $d$ , constructed substantially as described, for the purpose set forth.

No. 25,694.—JOHN I. VINTON and EDWARD JOHN, of Ironton, Ohio.—*Improvement in Furnaces.*—Patent dated October 4, 1859.—This invention consists in make the liner of malleable iron.

*Claim.*—The employment in reverberatory furnaces of the water-space, as described, when constructed and fitted in place in the manner set forth.

No. 25,695.—CHAPMAN WARNER, of New York, N. Y.—*Improved Clothes Clamp.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The mode of securing, between the buttons  $A$  and  $C$ , the garment, or whatever else may be placed between them, by means of binding or wedging effect of the pin  $B$  in the hole of button  $C$  with the spiral spring  $D$ , as and for the purpose specified.

No. 25,696.—A. L. WHIPPLE, of Elmira, N. Y.—*Improvement in Machines for Trimming Wall Paper.*—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The manner of constructing the spool, with fixed rotating head  $D$ , and yielding head  $C$ , in combination with the movable bed  $B$ , for holding the roll firmly in the proper relative position to the knives, substantially as described.

No. 25,697.—DAVID ZUG, of Shaefferstown, Pa.—*Improvement in Harvesters.*—Patent dated October 4, 1859.—The elastic spring brace  $V$  embraces the supporting bar  $Y$  at  $v$ , in which the bar can vibrate to adapt it to the folding over of the sickle bar  $2$  and finger supports  $1$  on the truck when desired; the other end of the spring brace  $V$  is hinged to a bolt passing through a box  $P$  with a nut and screw.

*Claim.*—The combination of the brace  $V$  with the gum elastic stuffing box  $P$  and the sup-



porting bar Y, when the several parts are constructed and arranged in the manner described, for the purpose specified.

No. 25,698.—WILLIAM BINKLEY, of Manchester, N. H., assignor to SAMUEL N. BELL, of said Manchester.—*Improvement in Knitting Machines*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The hollow cone 2, cut off elliptically, and with the parallel elliptical cam R on its inner surface, together with the projection P on the lower side, supported by the shaft O passing through the hollow shaft S, and attached to the arm Q of the standard No. 3, or other equivalents, substantially as described for the purposes set forth.

No. 25,699.—WALDREN BEACH, of Baltimore, Md., assignor to Himself and JOHN L. REESE, Jr., of said Baltimore.—*Improvement in Corn Harvesters*.—Patent dated October 4, 1859.—This invention consists of oblique cutters on each side for cutting off the corn, which are vertically adjustable, by means of the axle of the wheels fitting into boxes having screws on the top, by which the wheels are moved up or down, thus regulating the distance from the ground at which the corn is cut.

*Claim*.—The vertically adjustable cutting apparatus C in combination with rests R R<sup>1</sup>, lever L, jointed arms A, and spring f, operating substantially as and for the purposes set forth.

No. 25,700.—A. D. BROWN, of Columbus, Ga., assignor to SALLIE C. BROWN, of said Columbus.—*Improvement in Straw Cutters*.—Patent dated October 4, 1859.—A represents the frame of the machine supporting the straw box B; C is a shaft or drum provided with a suitable number of feed wheels D which are similar to circular saws, and acting to feed the straw to the knife like those in common use. These feed wheels are rotated by a ratchet wheel E and pawl F, so as to impel the straw forward at each revolution of the fly wheel G, to which the pawl is attached by a connecting rod H.

*Claim*.—The arrangement and combination of the yielding strips a, constituting guard R, with the wheels D, sash L, and trough B, as and for the purpose shown and described.

No. 25,701.—JAMES DRAPER, of New York, N. Y., assignor to Himself and SAMUEL H. DOUGHERTY, of said New York.—*Improvement in Skeleton Skirts*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The new manufacture of skeleton skirts described, in which the hoops B are secured by glue or equivalent cement, between separately woven parts of the tapes, in contradistinction to the stitched or clasped skirt when the parts are woven together as single tapes between the hoops, and separately as distinct tapes, at the points where the hoops are received.

No. 25,702.—NATHAN C. LEWIS, Jr., of Boston, Mass., assignor to Himself and EDWIN BRUCE, of said Boston.—*Improvement in the Construction of Dentists' Chairs*.—Patent dated October 4, 1859.—This invention is intended to provide, in connection with a chair for the reception of a patient, a means not only of sustaining the body but also the elbow of the operator.

The inventor says: I *claim* the combination of the adjustable body-rest with the chair.

I also claim the combination of the auxiliary or elbow-rest and the body-rest, applied to a chair.

I also claim the mode of applying the body-rest to the elbow-rest, that is, by means of an adjustable arm c applied and operating with respect to the elbow-rest as set forth.

No. 25,703.—JAMES C. MILLER, of Irwin, Ohio, STILLMAN A. CLEMENS, of Rockford, Ill., and GILBERT H. CLEMENS, of Urbana, Ohio.—*Improvement in Lining Underground Drains*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the method of making covered field drains by lining the inside with hydraulic lime, mortar, or other suitable material.

Second. A conducting tube connected with a couler.

Third. A forcing bar, with valve pistons attached, and working in a conducting tube.

Fourth. A follower of less transverse dimensions than the mole to which it is attached, all substantially as described and for the specified purposes.

No. 25,704.—JAMES MOLYNEUX, of Bordentown, N. J., assignor to the BORDENTOWN MACHINE COMPANY.—*Improvement in Rotary Dredging Machines*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination and arrangement of devices, substantially as set forth and described, for raising, lowering, and holding the levers C C which support and carry the dredging wheel as required.

Second. I claim the rams on the dredging wheel, for the purposes set forth, substantially as described.

Third. I claim the chute, hinged substantially as described, so that it may be raised when



the socket passes under it, and lowered to receive the contents of the buckets, substantially as described.

Fourth. And, in combination with a hinged chute, I claim the arm *c* on the wheel B just before the bucket, for the purpose of raising the chute and allowing the bucket to pass under it.

Fifth. I claim a chute arranged to traverse on ways, so as that it may be adjusted to the dredging wheel.

Sixth. I claim the levers M and links M<sup>1</sup>, arranged to operate substantially as described, for the purpose of traversing the chute as described, for the purposes set forth.

Seventh. I claim the traversing bars P P armed with picks or chisels, and arranged to operate on the bottom of the river, in advance of the dredging wheel, substantially as described.

Eighth. I claim the shaft and wipers, in combination with the traversing bars, carrying picks, chisels, &c., for the purposes specified, substantially as described.

No. 25,705.—JOHN SLOAN, of Pittsburg, Pa., assignor to Himself and EBERHARD H. DIERKER, of said Pittsburg.—*Improvement in the Construction of Distilling Apparatus*.—Patent dated October 4, 1859.—This invention consists in furnishing the steam or heating pipes of stills with valves, for the purpose of regulating the admission of steam or heat into the pipes, the valves being operated by a governor, which is moved by an incased wheel and the flow of liquor from the condenser. It also consists in dividing the still into three or more compartments, which are furnished with conducting pipes, and with one or more steam heating pipes traversing the whole series of chambers or compartments.

The inventor says: I claim, first, the combination and arrangement of the condensing worm or pipe F, the wheels *h i* and *j*, the receiving chamber *x*, with the governor *g* and valve *o*, for the purpose of regulating the quantity of steam in the heating pipe *d*, as described, and for the purpose set forth.

Second. The combination and arrangement of the chambers A B C and D with the conducting pipes *e*, when used in connection with the condensing worm or pipe F, as described, and for the purpose set forth.

No. 25,706.—ADOLPH STEMPEL, of Newark, N. J., assignor to Himself and OWEN McFARLAND, of said Newark.—*Improved Trace Trimmer*.—Patent dated October 4, 1859.—This invention consists in arranging a vertically sliding spring bar in combination with laterally adjustable bed pieces and suspended curved cutters, in such a manner that leather belts and traces of all sizes, when drawn through between the cutters, are rounded on their edges. It also consists in combining with the cutters and bed pieces adjustable jaws, for the purpose of guiding the belts laterally and of regulating the depth of the cut.

The inventor says: I claim, first, the arrangement and combination of the vertically sliding spring bar C, laterally adjustable bed pieces D D<sup>1</sup>, and suspended curved cutters F, substantially as and for the purpose described.

Second. In combination with the bed pieces D D<sup>1</sup> and cutters F, I claim the adjustable jaws E or their equivalents, arranged substantially as and for the purpose specified.

No. 25,707.—DAVID L. STILES, of Rochester, N. Y., assignor to JOHN M. FRENCH & Co., of said Rochester.—*Improvement in Moulding Stove Covers*.—Patent dated October 4, 1859.—A is the plate which forms the cover, and B the portion which forms the recess C in the reverse side for the reception of the cover lifter. This invention is designed to obviate the difficulty of moulding the lips or projections *d d* for the handle and the necessity of setting wire in the mould for that purpose.

Claim.—The employment of the cone form plugs *d d* and pivoted thumb levers *ff* in combination with that portion of the pattern which forms the recess of the cover, substantially in the manner and for the purposes specified.

No. 25,708.—WILLIAM F. STEUART, of Patuxent Forge, Md.—*Improvement in Railroad Car Brakes*.—Patent dated October 4, 1859.—The claim and engravings explain the nature of this invention.

Claim.—The combination of the various parts of the apparatus described, when so constructed and arranged in relation to the means by which they are actuated as to apply and release the brakes upon the whole train, upon sections, or upon single cars, by the engineer, or by one or more of the brakemen, or by all or part of them, collectively or individually, the brake apparatus of each car or of each section being complete in itself when the cars are uncoupled or the train divided into sections.

No. 25,709.—W. H. ALLEN and A. J. BENTLEY, of New York, N. Y.—*Improved Rope Nipper*.—Patent dated October 11, 1859.—The object of this invention is to obtain an instrument which will gripe the rope to which a block and tackle are to be hooked, so securely that there will be no liability of its slipping, and which will be readily attached and detached from the rope, at the same time offering no injury to the surface or fibre of the rope.



*Claim.*—The rope pinchers, composed of the grooved pivoted jaws D and levers A, and otherwise constructed, as shown and described.

No. 25,710.—THOMAS C. AVERY, of New York, N. Y.—*Improved Galvanic Battery.*—Patent dated October 11, 1859.—This invention consists in amalgamating the outside of the zinc cups by an amalgam very little susceptible to any action from the sulphuric acid, and thus leaving the inner surface of the zinc to be acted upon by the nitro-sulphuric acid, directly opposite to the surfaces of the platinum, to prevent local action in consequence of the difference of degree of intensity of the exciting fluids on the external and internal surfaces of the zinc.

The inventor says: I *claim*, first, the use of the insulating amalgam, substantially as described, in combination with the surfaces of the zincs of galvanic batteries for telegraphic purposes, for obtaining the results before set forth.

Second. I also claim the use of two or more independent strips of platinum in the construction of galvanic batteries for telegraphic purposes, as an improvement on the Grove Battery, for the purpose of obtaining the results before set forth, but irrespective of their use in combination with the insulated amalgamated zincs before described.

No. 25,711.—AUGUSTUS BAILEY, of Gardiner, Me.—*Improved Machine for Bending Wood.*—Patent dated October 11, 1859.—This machine consists of a frame B, in which is hung the semi-cylinder A upon, and revolving with, the axis C, by means of the pinion D and the internal segment E. This frame is also provided with a horizontal roll G, connected with and attached to the sliding bar H by the bolts P P, the whole being operated and made to move freely back and forth through the slots K K by the two screws J J. There are also a stationary clamp M and a movable, graduated hook Q, attached to this machine.

*Claim.*—The combination of the aforesaid horizontal sliding roll G and graduated hook Q, with the semi-cylinder A, acting substantially in the manner and for the purpose set forth and described.

No. 25,712.—JAMES D. BALDWIN, of Columbus, Ga.—*Improvement in Composition for Paint Oil.*—Patent dated October 11, 1859.—In making this paint oil, the inventor says, I take one gallon and three pints of rain water, two ounces of saleratus, which is allowed to dissolve; then add half a pound of gum shellac, and boil all together in any suitable pot, without stirring, till all is dissolved and well mixed. I now add three quarts more of rain water, put the mixture in a tin vessel, and taking four ounces of ground flaxseed and two ounces of slippery elm bark in powder, tie these two ingredients together in a machine cloth and put them in the tin vessel and allow the whole to remain for twelve hours. I then draw from the vessel one gallon of the composition, put it into a pot, and as soon as it begins to boil add one quart of linseed oil, which will stop the boiling; then increase the fire and add one gallon more of linseed oil, and stir and boil the whole together five minutes longer.

*Claim.*—As a new or improved article of manufacture, the paint oil composed of the ingredients specified, essentially in the proportions named and prepared, substantially as described, for use as set forth.

No. 25,713.—W. D. BALLARD, of Kansas City, Mo.—*Improvement in Steam Boiler Furnaces.*—Patent dated October 11, 1859.—This invention consists in a novel arrangement of a fireplace, setting and external flues, in combination with what is known as a two flue boiler, whereby the several parts of the heating surface are exposed in an effective manner to the action of the fire.

*Claim.*—The arrangement of the fireplace B, the partitions *f f g h h* of the setting, and the chimney F, substantially as described, with the two flued boiler.

No. 25,714.—GEORGE F. BENCKERT and DAVID H. BENCKERT, of Philadelphia, Pa.—*Improved Signal Bell.*—Patent dated October 11, 1859.—This invention consists in the peculiar arrangement of the straight pull bar, latch, and spring, when used in combination with the hammer and bell.

The inventors say: We *claim*, first, the latch D, operating with the hammer and pull bar, with the one spring, as specified.

Second. Placing the working parts of a signal bell within the sounding box, substantially as and for the purpose specified.

No. 25,715.—SOLOMON E. BLAKE and THOMAS JOHNSTON, of Louisville, Ky.—*Improvement in Hemming Guides for Sewing Machines.*—Patent dated October 11, 1859.—This invention relates to provisions for turning and folding hems and tucks, and for folding them flat and at any uniform width.

The inventors say: We *claim*, first, the combination and arrangement of the spiral tongue G, flanged roller F *f*, and yielding plate B, for the purpose set forth.



Second. The spring plate B B<sup>1</sup>, constructed as described, with an oblique slot in the limb B, combined with the adjustable gauge C, in the manner and for the purpose set forth.

Third. The yielding pressure roller K, adapted and applied substantially as set forth, to smooth and flatten the hem previous to stitching.

No. 25,716.—REINHOLD BOEKLEN, of Jersey City, N. J.—*Improvement in Connecting Rods Applied to Cranks*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Giving the rod elasticity, both longitudinally and in a lateral direction, parallel with the plane of revolution of the crank, by extending it in the form of a bow or arc, beyond the crank pin or wrist, and making such bow elastic, substantially as and for the purpose specified.

No. 25,717.—JOHN K. BOOTON, of Luray, Va.—*Improvement in Machines for Breaking and Cleaning Hemp*.—Patent dated October 11, 1859.—The nature of these improvements is explained in the claim and engravings.

The inventor says: I *claim*, first, the combination and arrangement of the cylindrical grating J J K K K, and lever arms *x x y y*, and swords *z z*, and concave grating *b<sup>2</sup> b<sup>2</sup>*, with the hurder cylinder P, formed with alternate plain edges and serrated ridges or ribs *q r q r*, substantially as set forth and described.

Second. I claim the combination and arrangement of a fan or blast wheel C<sup>2</sup> C<sup>2</sup> C<sup>2</sup>, with the hurder cylinder P *q r* and endless apron *u u*, substantially as set forth and described.

No. 25,718.—L. BRADLEY, of Tolsom, Cal.—*Improved Telegraphic Machine*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, arranging the type and mechanism for closing the circuit, substantially as described, or in an equivalent manner, so that a double closing of the circuit is effected as each tooth of the type comes in contact with the closing mechanism.

Second. The combination of the type and composing sticks with a yielding insulating plate, carrying the mechanism for breaking and closing the circuit, whereby the contact of the closing mechanism with the face of the type is insured.

Third. The vibrating hook *g* and bar *i* or their equivalents, in combination with a yielding insulating plate and type and sticks, for the purpose of closing the circuit.

Fourth. The combination of the composing stick and type with the spring *c* or its equivalent, arranged substantially as described, so that the type are made to form a portion of the circuit for the purpose set forth.

Fifth. The combination of the carrying band and mechanism for closing the circuit with the composing sticks, and type arranged on the band, in relation to each other, substantially as described, so that the sticks are successively carried forward in the order in which they are arranged, brought into the current, and the message transmitted without interruption.

Sixth. The combination of the movable platform carrying the recording mechanism, with the rotating cylinder carrying the record paper, arranged substantially as described, so that the message as transmitted is recorded in parallel lines on the paper.

Seventh. Constructing the composing sticks and types, substantially as described, so that the sticks when filled with the type shall present an even and flat surface on either side.

Eighth. The application of a siphon pen, constructed and arranged substantially as described, for the purpose of recording the messages.

Ninth. The inclined plane B, arranged substantially as described, in combination with the band D, whereby the composing sticks are received from the band in such manner as not to interfere with each other's delivery, and in the same order in which they were placed on the band.

No. 25,719.—T. B. BURTIS, of Chicago, Illinois.—*Improved Refrigerator*.—Patent dated October 11, 1859.—This invention consists in a peculiar arrangement of an ice chamber, water chamber, air passages, and provision chambers, whereby currents of cool air are made to pass simultaneously through a series of separate provision chambers, keeping the contents cool and removing impurities, &c.

*Claim*.—The employment or use of the ice chamber B, water chamber C, air passages D E G, and a series of provision chambers F, arranged relatively with each other, for the purpose set forth.

No. 25,720.—JOHN BUZBY, of Moorestown, N. J.—*Improvement in Grate Bars*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Making the mortises *m* and the tenons on the grate bars, alternately, one above the other, so that the mortises may be made entirely through the bar, without interfering with the tenons, and so the tenons may extend entirely through the bar without interfering with one another, and be made so long as not to be drawn out of the mortise by the warping or springing of the grate bars.



No. 25,721.—A. S. CAPRON and D. S. DAVIS, of Grass Lake, Mich.—*Improvement in Potato Diggers*.—Patent dated October 11, 1859.—When the machine is set in motion, the wheel C communicates motion to the pinion F, the crank shaft E, and thence to the rake D; the handle of the rake resting upon the roller *x*, and operated by means of the crank on shaft E, the rake will have a motion given to it similar to the movement of the ordinary rake—it will be dragged along on the ground, then raised and pushed back, and then dragged along on the ground again.

*Claim*.—The arrangement of axle B, wheels A A<sup>1</sup>, and wheel C; pinion F, crank and shaft E, guides *e e*, roller *y*, rake D, apron H, and hooks *i i*, the whole being connected together, and operating substantially as and for the purpose specified.

No. 25,722.—TISDALE CARPENTER, of Providence, R. I.—*Improvement for Operating the Valves of Steam Engines*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the adjustable graduated scroll shaped side cam, so arranged as to be traversed and adjusted by a regulator or governor, while the engine is in motion, substantially as described, or adjusted and fixed or set by hand while the engine is stopped.

No. 25,723.—SAMUEL CHACE, of Providence, R. I.—*Improvement in Awnings*.—Patent dated October 11, 1859.—G G<sup>1</sup> are dogs fastened to the rod *c* in such manner that they may turn and not move longitudinally thereon. These dogs have rollers attached to their lower extremities by pivots *e*, which rollers being underneath the tracks prevent the awning from being raised perpendicularly therefrom while the flanges F prevent it sliding off.

*Claim*.—The application of the various devices described, viz: the gear toothed tracks C C, with the pinions E E; also the dogs G G, and finally the box or covering K, to an awning, the whole being constructed substantially as and for the purposes set forth.

No. 25,724.—JAMES S. COLVIN, of Allegheny, Pa.—*Improved Gasket for Steam and Other Joints*.—Patent dated October 11, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A joint gasket, composed of a ring of India rubber, encased with copper or other metal, substantially as described.

No. 25,725.—NORMAN COWLES and A. HURLBURT, of Edgefield, S. C.—*Improvement in Spring Back Carriage Seats*.—Patent dated October 11, 1859.—This invention consists of an upper back, called a "lazy back," attached by hinged uprights to the frame work of the seat, when employed with a pair of springs at the sides of the seat for giving the back a support and forming an arm rest for the occupant of the carriage.

*Claim*.—The employment of springs D D, substantially as described, when in connection with a back B, supported by hinged uprights, in the manner and for the purposes set forth.

No. 25,726.—BIRAM C. DAVIS, of Binghamton, N. Y.—*Improved Hand Machine for Wiring Blind Rods*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the setting form A, which sets over the rod C and straddles the slats D, and which is secured under the blind by means of the stationary bar B, in such a manner as to let the staples through the eye of the staple in the rod C into the slats, D D being the equivalent means employed for setting the staple into the rod C in combination with the adjustable arrangement K, operating substantially as described.

Second. I *claim*, in combination with the form A, the joint lever G, flange rod or drivers H, dividing slide I, inclined needle bar J, the whole being arranged substantially as described and for the purpose set forth.

No. 25,727.—E. DOUGHERTY, of Cedarville, Ohio.—*Improved Wheelwright Machine*.—Patent dated October 11, 1859.—This invention consists in a combination of devices by which the spokes are sawed of equal lengths, the tenons are made at equal distances from the hub, and the felloes bored at regular distances so as to fit in the spokes.

*Claim*.—The combination of devices as specified, substantially as and for the purposes set forth.

No. 25,728.—H. F. DROTT, of Cumberland, Md.—*Improved Shutter Hinge*.—Patent dated October 11, 1859.—This invention consists in the arrangement of a plate provided with a projection and a spring provided with a projection, the two being secured to different sides or parts of the hinge and catching together when the hinge is open.

*Claim*.—The employment of the spring E, as constructed, when used in connection with the plate *n*, as constructed, the two being used in combination with any common shutter hinge, substantially as and for the purpose specified.

No. 25,729.—B. WELLS DUNKLEE, of Boston, Mass.—*Improvement in Furnaces*.—Patent



dated October 11, 1859.—The object of this invention is to construct a furnace so that the heated air shall be conducted from the hot air chamber to the discharge flues, without coming in contact with the open air or any other cooling surfaces; and also to increase rather than diminish the quantity of heat in its passage to, and until it enters, the flues, thus economizing heat and fuel.

*Claim.*—The general arrangement, as described, of the space Q, the chamber or dome I, the dampers M and N and the pipe or T—L and the ventilating pipe S and smoke drum G and ventilating pipe P and smoke pipe *t* and air duct R and series of dampers in flues F, in relation to each other and with respect to the flue F and hot air chamber E, the whole being made to operate substantially in the manner and for the purposes set forth.

No. 25,730.—WILLIAM O. GROVER and WILLIAM E. BAKER, of Boston, Mass., and O. B. POTTER, of New York.—*Improvement in Sewing Machines.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* a non-penetrating instrument and a piercing eye pointed needle, acting together to make an interlocking of threads, substantially as represented, in combination with a clamping apparatus, acting substantially as specified, the combination being substantially such as set forth, and acting to make a double looped stitch substantially in the manner described.

Second. We claim mounting a spool or bobbin, from which thread is to be delivered for the purpose of sewing by machinery, upon two truncated cones, substantially as set forth.

No. 25,731.—HORACE GUSHEE and JOHN G. DAWES, of San Francisco, Cal.—*Improvement in Bee Hives.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the comb frames D, rods E, staples *a*<sup>1</sup> *a*, and cleat H, arranged as described, whereby the comb frames may be readily removed or inserted in the manner described and for the purpose specified.

No. 25,732.—JOHN R. GUY, of Springfield, Ohio.—*Improved Bedstead.*—Patent dated October 11, 1859.—This invention relates to the construction of bedsteads, so as to employ the cross rail, self tightening arrangement, in connection with the heads of ordinary form.

*Claim.*—The arrangement of the frame C D E, with reference to the heads B A, and their connection by means of the joints H G and slides I and plates J or their equivalents, substantially as described.

No. 25,733.—JOSHUA HENDY, of San Francisco, Cal.—*Improved Double Friction Coupling.* Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The application of two such truncated cones to one coupling (one at either end), and operated by a single lever, so as to work in cavities or conical sleeves attached to pulleys or wheels arranged on one shaft, so that said shaft may be run slow, or fast, or backward, or forward, or entirely stopped, without stopping the primè motor or changing its speed, substantially as set forth and explained.

No. 25,734.—HATSEL HIGGINS, of Orleans, Mass.—*Improved Steering Apparatus.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement, substantially as specified, of the rudder head intermediately between the supports which, respectively, serve as bearings to the hand wheel shaft and the rudder operating gear, said shaft extending back of and over said gear, whereby the rudder may be operated either by the gear or by a tiller from the wheel shaft, as described; and also compactness of steering apparatus and economy of deck space are obtained.

No. 25,735.—ISAAC H. HOBBS, ABRAHAM W. RAND, and GEORGE H. SELLERS, of Philadelphia, Pa.—*Improvement in Hot Air Furnaces.*—Patent dated October 11, 1859.—The object of this invention is the heating of a larger amount of air with the same heating surface, than has heretofore been done, and to make the furnace better adapted to the distributing of the hot air to different parts of the building.

The inventors say: We *claim*, first, the general arrangement of the subdivided air chamber, in connection with the separate receiving and discharging openings, substantially in the manner and for the purpose specified.

Second. We also claim the deflecting diaphragms, in combination with the above described arrangement, in the manner substantially and for the purpose set forth.

No. 25,736.—HENRY S. HOGLE, of Cleveland, Ohio.—*Improvement in Rotary Harrows.*—Patent dated October 11, 1859.—A hub of suitable shape receives the inner ends of the radial arms E E of the rotating central frame of this harrow, and the outer ends of said arms may be connected with each other by bolting them to a metallic rim G, or the said central frame of the harrow may be constructed in any suitable manner. The rotating central frame is



pivoted to the draft bar A, in such manner as to allow the same to rotate freely beneath the draft bar.

*Claim.*—The combination of a series of individually rotating toothed frames or wheels, with a rotating central frame or wheel, in such a manner that the said parts will operate substantially in the manner set forth.

No. 25,737.—D. E. HOLMES, of Halifax, Mass.—*Improved Clothes Frame.*—Patent dated October 11, 1859.—This invention consists in the arrangement of the racks upon which the clothes are hung, in such a manner that they can be spread out for receiving a large amount of clothing, and supported by suitable braces while in this position, and hinging and jointing the parts constituting the frame, so that when not in use it can be closed in a very compact state.

*Claim.*—The combination of the standards A A, horizontal hinged frames C C, when the same are sustained and braced by slotted braces F F, all arranged substantially in the manner as and for the purposes set forth.

No. 25,738.—BOLD R. HOOD, of Clinton, N. C.—*Improvement in Ploughs.*—Patent dated October 11, 1859.—This invention consists in the manner in which the standard is constructed for the purpose of making it susceptible of receiving the several changes of shovel points and mould boards which are ordinarily used on a farm and even a harrow, thus making a one stocked standard serve the purpose of holding the several varieties of plough points and mould boards.

*Claim.*—The combination of the standard D, with the standard C, and land sides E, when the parts are constructed as described, and adapted to receive the various forms of shovel points and mould boards in use, in the manner described, for the purpose specified.

No. 25,739.—WILLIAM H. JOHNSON, of Springfield, Mass.—*Improved Telegraphic Cable.*—Patent dated October 11, 1859.—In this invention *a* is the tube or conductor, *b* a coating of gutta percha which surrounds it; over this are placed the wires *c*, which lie parallel to the axis of the tube, and are held in position during the construction of the cable by a thin wire *d*, which is wound spirally around them, the outer coating *f* of gutta percha, is then applied binding the whole in one solid mass.

*Claim.*—An electric telegraphic conductor, constructed in the manner and for the purpose set forth.

No. 25,740.—WILLIAM M. KEAGUE, of Brooklyn, N. Y.—*Improved Omnibus Register.*—Patent dated October 11, 1859.—This invention consists in a particular arrangement of parts for the purpose of transmitting the vibrating motion of the step to the registering apparatus, the whole being so arranged and adjusted that certain known weights placed on the step send the index hand of the registering apparatus around one half of the space between two successive marks on the dial plate, and that for every full grown person, as the same steps into the omnibus and out again, one fare is registered. Persons of less than the standard weight will cause the index hand to move only in stepping out.

The inventor says: I *claim*, first, the arrangement and combination of the platform D, vibrating lever C, and adjustable spring G, substantially as and for the purpose specified.

Second. In combination with the platform D and spring G, I claim the sliding bar H, spring catch *n*, and wheel K, substantially as and for the purpose described.

Third. Arranging the step A, in combination with the registering apparatus, substantially as described, so that it registers half fares as well as full fares.

No. 25,741.—MILES KEELY and G. W. CRESSMAN, of Barren Hill, Pa.—*Improvement in Hydraulic Motors.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement and combination with the levers M, lever frames K L, and bottoms *k*, of the adjustable slots *r* and bars *t*, by which the speed of the machine, length of stroke of the levers, and distance of water may be regulated at pleasure, as shown and described.

No. 25,742.—ARCHIBALD C. KETCHUM, of New York, N. Y.—*Improvement in Tea Kettles.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the tin top, copper bottom, and sheet iron skirt, when the same are all united by one and the same lap joints, and just below the spout of the kettle, as described, constituting a new article of manufacture.

No. 25,743.—ISAAC R. LAWRENCE and GEORGE E. GOULD, of Green Island, N. Y.—*Improvement in Endless Chains for Horse Power Machines.*—Patent dated October 11, 1855.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, extending both the lugs A and links B, of such



chainst *o* or beyond the treads *q* of the friction wheels *c*, carried by axles *h*, cast on the links, substantially as and for the purpose described.

Second. We also claim forming and arranging projections *r* and *s*, on the links *B* of the chain, substantially as and for the purpose set forth, the links being provided with male lugs *d* and female lugs *f*, substantially as described.

No. 25,744.—LUCIUS LEAVENWORTH, of Trumansburgh, N. Y.—*Improvement in Straw Cutters*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement and combination of the rockers *C* and *E*, and springs *d*, substantially as described, for the purpose of giving a double motion to the knife and to avoid friction of the working parts.

No. 25,745.—SYLVESTER MARSH, of West Roxbury, Mass.—*Improved Apparatus for Stirring and Delivering Grain*.—Patent dated October 11, 1859.—These improvements will be understood by an examination of the claim and engravings.

The inventor says: I *claim*, first, the combination, with the reticulated bed or other suitable drying table, of a reciprocating truck, armed with paddles or stirrers for agitating the grain on the drying surface.

Second. The arrangement, substantially as specified, of the truck paddles in rows, one in advance of the other, and the paddles of each preceding row intermediate of those next behind them.

Third. Giving to the paddles of the reciprocating truck an oblique set for and during the forward travel of the truck, and giving them an edge presentation or set for and during the back travel of the same, essentially as and for the purposes set forth.

Fourth. Giving to said paddles reverse obliquities, for and during the forward travel of the truck, so as to throw the grain to the right and to the left, alternately, in the feed forward of the grain by the paddles.

Fifth. The combination with the reciprocating truck and its paddles of a cross sliding frame, made to gear by cranks or their equivalents, with the several paddles, for simultaneously changing the latter from an oblique to a straight set, and *vice versa*, substantially as specified.

Sixth. The combination, with the cross sliding frame to the reciprocating truck, of one or more adjustable inclines and stops for automatically reversing the position of the paddles in their one direction.

Seventh. Drawing the cross frame back to its original position to give to the paddles a different set, by means of a clip lever, acted on by a weight, weighted catch, and inclined projection, connected with the reciprocating truck or their equivalents; also, afterwards returning said lever to its former position, to be locked by the weighted catch by an inclined plane on the truck, acting against and over a swell on the lever, substantially as set forth.

Eighth. Varying the range of motion of the reciprocating truck on or over the drying surface and relatively to the feed or delivering ends thereof, by means of a lengthening and shortening driving pitman, made adjustable, substantially as specified.

No. 25,746.—ANDREAS MAURER, of New Carlisle, Ind.—*Improvement in Seed Planters*.—Patent dated October 11, 1859.—This invention relates to an improved arrangement of the seed distributing device, whereby the same may be adjusted with ease so as to be rendered, as the machine moves along, operative and inoperative when desired.

*Claim*.—The arrangement and combination of the vertically moving and seed distributing supporting axle *D* and boxes *E* and lever *F*, as and for the purpose set forth.

No. 25,747.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in Method of Combining Emery with Caoutchouc*.—Patent dated October 11, 1859.—The claim explains the nature of this invention.

*Claim*.—The new process described of making emery sharpening and polishing tools, by combining emery with India rubber, gutta percha, or other substances, and then submitting them, while under great pressure, to a high degree of artificial heat, substantially as set forth, whereby, with a given quantity of rubber, emery may be combined in much greater quantities than it could be heretofore done.

No. 25,748.—JAMES McALEER, of Chambersburgh, Pa.—*Improvement in Harvesters*.—Patent dated October 11, 1859.—This invention relates to certain improvements in the binding apparatus of *C. H. McAleer*, patented August 16, 1859, and consists in the arrangement of two seats, which face at right angles to each other, directly behind the forked elevating device of *C. H. McAleer*, and by the side of a combination gavel trough and platform.

*Claim*.—The arrangement of the two seats *D D*<sup>1</sup>, one facing at right angles to the other, conducting trough and binding table *F F*<sup>1</sup>, and the elevating device *C*, all for use together, in the manner and for the purposes set forth.



No. 25,749.—J. McDougall, of Masonville, Mich.—*Improved Mode of Forming Joints in India Rubber Belting*.—Patent dated October 11, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The employment, in combination with the belt ends A B, of the tongues and cavities *c c*, so that the sides of the tongue portion shall be protected by the selvages of the cavity parts, substantially as shown and described.

No. 25,750.—S. T. McDougall, of New York, N. Y.—*Traveller's Ticket Holder*.—Patent dated October 11, 1859.—This machine consists of a clamp so constructed that it will readily secure any ticket, tag, or badge placed within its grasp, combined with a pin similar to that used for securing shawls or breastpins, by which such clamp may be securely and readily attached to a cloak, shawl, or other article of dress.

*Claim*.—The levers C, spring C<sup>1</sup>, point *i*, or other equivalents, in combination with an ordinary shawl pin; the whole constructed and operating as set forth.

No. 25,751.—JAMES P. McLEAN, of New York, N. Y.—*Improvement in Skates*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement and use of the side or ankle springs A A<sup>1</sup> with parts B B<sup>1</sup> and instep projections 2 and 3, adjustable or otherwise, in combination with the heel spring *h*, having a pad at its top end, and with the cork sole *m* in the form of a shoe or otherwise, as set forth.

Second. I claim the combined arrangement and use of the railroad attachment K K<sup>1</sup> and Y Y<sup>1</sup>, as applied to a skate, the same forming a toe strap loop if required, in the manner and for the purpose set forth.

No. 25,752.—JAMES C. MILLER, of Union Township, Pa.—*Improvement in Horse Power Locomotives*.—Patent dated October 11, 1859.—This invention principally consists in the combination of a sweep lever horse power by frame work and gearing with one or more ground wheels, which, by the revolution of the axis of the horizontal sweep levers, are made to roll upon the surface of the ground and move the whole machine, and by the adhesion of the ground wheels to the surface may be made to exert a powerful tractive force upon any resisting object.

*Claim*.—Horse power sweep levers connected with one or more ground wheels, substantially as described and for the purposes specified.

No. 25,753.—GEORGE F. MILLIKEN, of Somerville, Mass.—*Improved Electro-Magnetic Burglar Alarm*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of a galvanic battery, an electric circuit, a circuit breaker, operated by a window or door, with a step by step indicator, substantially as described.

I claim causing a window or door automatically to prevent any alteration upon the circuit during the closing of the window or door until it is nearly closed, in any manner, substantially as described.

I claim the use of the armature J for the double purpose of regulating the movements of the points and setting in motion the alarm apparatus.

No. 25,754.—B. S. MORGAN, of Delhi, Iowa.—*Improvement in Cultivators*.—Patent dated October 11, 1859.—By throwing the hand lever *f* in the direction of the arrow 1, the levers *h h i* are turned so as to come to a more upright or vertical position, and the frame A is raised; when the hand lever *f* is thrown in the direction of arrow 2, the frame A is lowered. The raising as well as the lowering of the frame is done parallel to the ground.

*Claim*.—The arrangement and combination of the side wings D and wheels H H I of a cultivator, with the levers *h h i*, bar *d*, rods *e*, and hand lever *f*, substantially as and for the purpose specified.

No. 25,755.—WILLIAM A. MORRISON, of Morrisania, N. Y.—*Improved Boot and Shoe Brush and Scraper*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the springs B in combination with screws A in such a manner as to throw the brushes C forward parallel with the scraper D, as and for the purpose specified.

No. 25,756.—ABEL R. NIXON, of Rhea Springs, Tenn.—*Improvement in Hand Looms*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, in combination with the lay beam and spring picker staffs, the toggle levers *b b*, triggers *f f*, and flexible connections *e h*, for effecting the setting and tripping of the picker staff substantially as described.



And I also claim, in combination with the lay and the treadles for working the harness or sheds, the toggle levers *q* and trigger cords *h*, so that the shed shall be properly made before the trigger is drawn to let the shuttle fly, thus ensuring a perfect sequency of operation and with great saving of manual labor on the operator, as set forth.

No. 25,757.—SAMUEL PAGE, of Chelsea, Mass.—*Improved Varnish*.—Patent dated October 11, 1859.—This invention consists in mixing together a distillate of coal tar, produced by distillation at a certain temperature and the residuum left from a further distillation at a higher temperature.

*Claim*.—The described varnish, made of the materials specified.

No. 25,758.—WILLIAM MUNROE, of West Auburn, Maine.—*Improvement in Sole Cutting Machines*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the vertical slots *i i* in the arbor E, elastic bars *q r*, with their projections *s*, fitting respectively in said slots, the weight P, bar *f*, and the shafts I N, provided respectively with the cam K, spring P<sup>1</sup>, pinions M, part pinion L, and strap O, substantially as described, to operate the arbor E and its die or cutting flanch *l*.

Second. The stop S attached to a shaft Q provided with springs *j<sup>1</sup> k<sup>1</sup>*, and actuated by the pin *h<sup>1</sup>* on the rod F, and the notched block *f<sup>1</sup>* attached to the bar R, substantially as and for the purpose set forth.

No. 25,759.—HENRY PFARRER, of New York, N. Y.—*Improvement in Gear Cutting Engines*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a pattern *t* mounted on a shaft or spindle, which also carries the gear to be cut, in combination with a fixed dog or guide *u*, when said dog or guide is so located that the pattern runs off and is clear of the same, so as to be turned at the time the gear is clear of the cutter, and said pattern again takes and is held by said dog, as the cutting commences, and is proceeded with as set forth.

I also claim the arrangement of the lever *x*, pawl *y*, and adjustable stop *z*, to give motion to the pattern *t*, when not in contact with the stop or dog *u*, as described.

In combination with the pattern *t* and dog *u*, I also claim the stock carrying the shaft or spindle *s*, and actuated by the lever *k*, for the purposes as specified.

No. 25,760.—MATHIEU PHILIPPI, of Troy, N. Y.—*Improvement in Key Boards for Piano Fortes*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—So constructing the upper surfaces of the keys of a piano forte, that while the ordinary form of the key board is retained, portions of all the keys are brought to the same level in the key board, substantially as and for the purpose specified.

No. 25,761.—HENRY R. RAMSEY, of Indianapolis, Ind.—*Improvement in Harvesters*.—Patent dated October 11, 1859.—The following is the operation of this machine: As it is moved forward, revolving the wheel B, which gears with the pinion C, this pinion being upon the same shaft with and giving motion to the wheel D, gearing with the pinion G, which operates the crank H, motion is thereby given to the sickle bar T by means of the pitman I and lever J. The machine is guided by operating the chain wheel M, which carries the back part of the frame K K K K and the front part of the frame O to the side required, while the joint or bolt S being nearly at the same equal distance from the ground as the bearing or tread wheels A A and Q, the machine is carried around a true curve which prevents it from sweeping sideways over the grain.

*Claim*.—The combination of the frames N O and K, chain L, chain wheel M, crank V, screw rod X, friction bearers *b b*, and grain table Y, when the several parts are constructed and arranged for operation in the manner and for the purpose set forth.

No. 25,762.—L. B. RICHARDSON, of Athol, Mass.—*Improvement in Lasting Pincers*.—Patent dated October 11, 1859.—This invention consists in the application of a movable fulcrum A to the pincers in such a manner as to permit the jaws B B to swing with the work, accommodating themselves to the form of the last, and increasing the facility of using them.

*Claim*.—The application of a swinging fulcrum to lasting pincers, constructed and arranged substantially in the manner and for the purpose set forth.

No. 25,763.—ROBERT E. ROGERS, of Philadelphia, Pa.—*Improvement in Umbrella Frames*.—Patent dated October 11, 1859.—This invention has reference to umbrella and parasol frames constructed of tubes, and consists in combining with tubular ribs and stretchers means for uniting the different parts of the frame and giving strength to the same.

*Claim*.—Combining, with the tubular ribs and stretchers, constructed as described the



means for uniting the ribs and stretchers, and for strengthening the tubular parts of the frame, as set forth.

No. 25,764.—WILLIAM SULLY, of Chillicothe, Ill.—*Improvement in Cultivators*.—Patent dated October 11, 1859.—The object of this invention is to enable one person to perform as much work in a day by using two horses as can be done by two persons with the single ploughs or cultivators in the usual way. For this purpose there is made a double shovel plough, having its frame elevated above what is to be cultivated, high enough to clear the row of plants which pass under the middle of the frame, having two horses harnessed so as to travel on each side of a row.

*Claim*.—The arrangement of the post D, arms E, cross bar F, lever H, wheels W, shovels B and C, chains R and Q, arms U, cross bar K, vertical lever Y and Y<sup>2</sup>, rods Z, whiffletree X, and draft hook A<sup>2</sup>, the whole being constructed and combined in the manner and for the purpose described.

No. 25,765.—JOSEPH SEYMOUR, of Syracuse, N. Y.—*Improvement in Making Spoons*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The machine known as the "rolls," having the form or figure of any article to be made up plain, of silver or other metal, cut upon one or both of them, so much larger than the same article when finished, that the article itself can be cut with a punch, of the desired size and shape, out of a piece of metal after it has been passed between the rolls and entirely within the margin or edge of the impression made upon the metal by the form or figure cut into one or both of the rolls, substantially as described and set forth.

No. 25,766.—H. O. SHEIDLEY, of Republic, Ohio.—*Improved Invalid Bedstead*.—Patent dated October 11, 1859.—This invention consists in so constructing the bedstead that the whole bottom thereof slides forward and backward upon the frame, the bottom being so divided and hinged that that section which is next to the head of the bedstead can, by means of a crank, be raised from its horizontal position as near to a vertical one as desired.

*Claim*.—The combination of the sliding hinged bottom B B<sup>1</sup> B<sup>2</sup>, with the crank shaft, cords, and attached levers, and the movable foot board F, substantially as and for the purposes set forth.

No. 25,767.—JOHN H. SHROTE, of Baltimore, Md.—*Improvement in Cutting and Panning Cakes*.—Patent dated October 11, 1859.—The claim and engravings give an idea of the nature of this invention.

*Claim*.—The cutters A, as constructed, or their equivalents, in combination with the pan E and bottom board D, for the purpose of facilitating the cutting and removing the cakes to the oven, as set forth and described.

No. 25,768.—CHARLES R. SMITH, of Haverhill, N. H.—*Improved Device for Bracing and Ventilating Fence Posts*.—Patent dated October 11, 1859.—This invention consists in the peculiar construction and arrangement of the wire loop K, in combination with one pair of braces, a post, and sill. It also consists in providing grooves in the posts and cleats of the panels for the purpose of allowing air to circulate between the rails, posts, and cleats to obviate rot and decay.

The inventor says: I *claim*, first, the peculiar construction and arrangement of the wire loop K, in combination with one pair of braces, a post, and a sill, substantially as and for the purposes set forth.

Second. The grooved post E, and the grooved cleats D and F, in combination with the lengthwise boards or slats B B B B, substantially as and for the purpose set forth.

No. 25,769.—H. D. SNOW, of Rochester, N. Y.—*Improvement in Governors for Steam and Other Engines*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the use of collar T, first, to control the passage of steam through the valve A, on starting the engine; secondly, to control the extreme downward movement of the valve A by means of the stops I I, so connected with the valve openings E E, as to close them at either extreme of the movement.

I also claim locating the weights X, beneath and partially entering the tube of the valve A, as represented.

No. 25,770.—C. M. SPENCER, of Manchester, Conn.—*Improved Apparatus for Cutting and Attaching Labels*.—Patent dated October 11, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Cutting and affixing labels upon spools by one or the same action of a machine as the dies M L, or the tubular cutters e, followers c, or their equivalents, substantially in the manner and for the purpose described.



No. 25,771.—JOSEPH ANDREW STEPHAN, of Lafayette, Ind.—*Improvement in Adjustable Rails for Replacing Cars on the Track.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the fish pieces B C D, clamped to the permanent rails A A and elevated high enough above said rails to carry the flanges of the car to be replaced over them, substantially as described.

Second. I also claim, in combination with an elevated temporary track, secured to and high enough above the permanent track, to carry over the flanges of the wheels, the sections G G<sup>1</sup> and their switches *e h*, extending to each of the pairs of wheels of the car, said sections having all the elements of switches, frogs, and rails, substantially as described.

No. 25,772.—DAVID STEWART, of Annapolis, Md.—*Improved Method of Preparing Bones for Fertilizing Purposes.*—Patent dated October 11, 1859.—The claim explains the nature of this invention.

*Claim.*—The stratification of the bones with materials, animal, vegetable, and mineral, substantially in the order and upon the principles set forth, using the materials above designated or their equivalents, whereby bones are reduced, in a most economical manner, to an available condition for manure, and a thorough compost obtained adapted to all the necessities of growing and fruiting plants without any mechanical labor other than that of stratifying, cutting down, and screening, as set forth.

No. 25,773.—WILLIAM H. TAMBLING, of Berlin, Wis.—*Improved Milk Safe.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The described safe, as an article of manufacture, constructed in the particular manner set forth, to wit: with gauze wire sides and doors, and with shelves, which consist of longitudinal slats C C, to which are secured a series of wooden cross slats D D, which are made broad at their base and beveled to an edge on their tops, the whole being arranged together and used in the manner and for the purpose specified.

No. 25,774.—WILLIAM H. TAMBLING, of Berlin, Wis.—*Improved Washing Machine.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the buckets D D, in the four corners of the interior of the box A, said buckets being made in a triangular form and open at one angle, as at *x x*<sup>1</sup>, the same being used in the manner and for the purpose specified.

Second. The arrangement of the bars *a a*, as provided with pins *n n*, and in the form represented when used in connection with the box A and the buckets D D, as constructed, the whole operating substantially as and for the purpose specified.

No. 25,775.—FRANCIS C. TREADWELL, Jr., of New York, N. Y., and HENRY McCULLOM, of Windham, Conn.—*Improved Mode of Making Cylindrical Strips of Dough in the Manufacture of Crackers.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The described improved method of forming skin covered strips from a sheet of previously smoothed rolled dough, by passing it between a pair of grooved rollers, arranged and constructed substantially as described, with the groove separated by portions of the plain surface of the rollers.

No. 25,776.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Apparatus for Ventilating Railroad Cars.*—Patent dated October 11, 1859.—In using this invention water is first placed in the tank F, thence it passes into the main pipe E, and is then distributed in all the smaller pipes *e e e* and is sprinkled upon the porous partitions C C, and passing down it leaves the boxes through the openings B B.

*Claim.*—The arrangement of the boxes A<sup>1</sup> of the porous partitions C C, and the pipe *e*, provided at its lower end with a sprinkler O, when the same are used in connection with the openings D, substantially in the manner and for the purpose specified.

No. 25,777.—ISAAC WAIT, of Watertown, N. Y.—*Improvement in Grain Cleaners.*—Patent dated October 11, 1859.—This invention consists in effecting the combination of the separating sieves, scouring surfaces, and driving gear, by means of a single vibrating lever which gives a contrary motion to the sieves and scouring surfaces, at each revolution of the crank or driving shaft.

*Claim.*—The combination of the separating sieves and the burr surfaced plates, by means of the vibrating lever, which gives a contrary motion to each at every revolution of the wheel or crank, substantially in the manner and for the purpose described.

No. 25,778.—JOHN WALKER, of Sunbury, Ohio.—*Improved Locomotive Crosscut Sawing Machine.*—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, the arrangement of an upright steam engine A, on a truck frame B, with a horizontal crank shaft D, and a vibrating saw L, substantially as set forth.

Second. The employment of conical pulleys Q Q<sup>1</sup> Q<sup>2</sup> Q<sup>3</sup> and shiftable bands R R, in combination with the other machinery and the engine which operates the saw, for the purpose of guiding the machine when moving from place to place, substantially as and for the purposes set forth.

No. 25,779.—CALEB C. WALWORTH, of Boston, Mass.—*Improvement in Cutting Screw Threads on Gas Pipes*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of two or more mandrels parallel, or nearly parallel to each other, and arranged to carry cutting tools with two or more vises, when these are arranged to revolve round a common centre.

I also claim the combination of two or more sets of mandrels, as above, with two or more sets of vises, as above, when each set of mandrels is arranged to operate in unison with its corresponding set of vises.

I also claim the combination of two or more series of vises, one beyond the other, and arranged to revolve about a common centre.

I also claim operating two or more vises, independently of each other or together, by one wrench, and by the means and in the manner substantially as specified.

No. 25,780.—DANIEL WINDER, of Cincinnati, Ohio.—*Improved Bed Bottom*.—Patent dated October 11, 1859.—This invention relates to that class of bed bottoms whose web or cording is gathered radially from all sides to a centre ring, and consists in an appliance or provision for the cheap, effective, and easy sustaining of the cord or webbing.

*Claim*.—The combination of the rings *a* and *b*, and tension screw *c*, operating in connection with a radial bed cord or webbing, in the manner and for the purpose set forth.

No. 25,781.—OLIVER EVANS WOODS, of Philadelphia, Pa.—*Improved Life Preserving Buoy*. Patent dated October 11, 1859.—When this buoy is to be used and inflated through the agency of gravity, the inventor says: then let the upper frame be sustained, and upon opening the valve F the adjacent frame immediately descends, and the air rushing into and through the valve opening inflates the buoy. The valve F is now closed, and the air prevented from escaping. When the buoy is to be inflated through the mechanical agency or the stays, then open the valve as before, and simultaneously with making the stays rigid, the two frames will be separated, and the air rushing through the valve opening will fill the buoy.

*Claim*.—A buoy arranged with two frames A A<sup>1</sup>, stays D, and cross braces E, and with a valve or valves F, and otherwise constructed and operated as described.

No. 25,782.—FRANCIS G. WOODWARD, of Worcester, Mass.—*Improvement in Sewing Machines*.—Patent dated October 11, 1859.—The novelty of this invention consists in the manner of working the looping hook *d*, by means of the wheel F and the double joint E.

*Claim*.—The peculiar manner of working the looping hook *d*, by means of the wheel F and the double joint E<sup>1</sup>, substantially as specified.

No. 25,783.—LEROY S. WHITE, of Waterbury, Conn.—*Improved Burnishing Machine*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the burnisher or burnishers in a burnishing machine in a sliding gate or its equivalent, carried by and working perpendicularly to a rectilinearly reciprocating shaft or its equivalent, substantially as and for the purposes described.

Second. Providing for the burnisher or burnishers employed on one side of the article to be burnished, in a so applied gate or its equivalent, such a movement, independently of that or those employed on the opposite side, substantially as described, as to produce the greater movement that is necessary or desirable, for the reason explained, on the convex side of any article of curved form.

Third. Fitting a burnisher in a burnishing machine to a suitable holder *g* or its equivalent, in which it is permitted a free vibration, laterally, to the movement it makes in the burnishing operation, substantially as and for the purpose specified.

No. 25,784.—GEORGE W. BANKER, of Medford, Mass., assignor to Himself and G. O. CARPENTER, of South Reading, Mass.—*Improved Mode of Manufacturing Barrels, &c.*—Patent dated October 11, 1859.—The lower head B is secured in the ordinary manner, the stave being chamfered and crozed, and the hoops *a* and *b* driven on to hold the head in place; the upper head C, to which this improvement is applied, is left of a uniform thickness throughout, and is slightly beveled around its edge, as shown at 5, and the chine is beveled to correspond thereto.



The inventor says: I *claim* the method described of securing the heads of casks by means of the chamber 5 and shoulder *e*, as described.

Second. I claim a keg furnished with ears and a bail, as described, for the purpose specified.

No. 25,785.—OLIVER D. BARRETT, of Cleveland, Ohio, assignor to Himself and SEARS E. SMITH, of said Cleveland.—*Improvement in Sewing Machines*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the crank, consisting of the disk Q and pin O, in combination with the pin *o*<sup>1</sup> in the pulley Q<sup>1</sup>, and hinge R, whereby I am enabled to turn the machine up from the table designed for it to stand on, in order to adjust or thread the under needle *d*, without unbanding the machine, substantially in the manner and for the purpose described.

Second. Hinging the footholder F to the head of the goose necks B, in a position vertical to the feeding surface of the feeder Y, substantially in the manner and for the purpose described.

Third. The footholder F, constructed and hinged as set forth, in combination with the rod H, spring I, foot K, and feeder Y, substantially in the manner and for the purpose set forth.

No. 25,786.—THOMAS A. EARL, of North Attleborough, Mass., assignor to Himself and CHARLES A. DURGIN, of New York city.—*Improvement in Bustles*.—Patent dated October 11, 1859.—The bustle being placed upon the wearer, the clasp F on the piece E being up to the belt, there is little or no expansion, and to adjust it at any degree, it is only necessary to reach back the hand and move the clasp F on the projecting piece E down, which, by means of the strip G, draws back the segments and thereby expands the dress to the desired position.

*Claim*.—The segment C, supported as described, in combination with the projecting strut E, slide F, and strip G, the whole being constructed and operated substantially as set forth and described.

No. 25,787.—WILLIAM GLUYAS, of San Francisco, Cal., assignor to Himself and WILLIAM H. O'NEILL, of said San Francisco.—*Composition for Preparing Gold and Silver Ores for Amalgamation*.—Patent dated October 11, 1859.—The mixture consists of the following articles and proportions: One gallon of water, one half pound of unslaked lime, one pound of common salt, and one and a half pounds of soda ash.

*Claim*.—The mixture or composition described, used with pulverized ores or tailings, the whole being brought to a boiling heat and being constantly agitated, thereby preparing the precious metals for a more perfect amalgamation with quicksilver.

No. 25,788.—STOUGHTON B. HOLDEN, of Woburn, Mass., assignor to Himself and PARKER NICHOLS, of Reading, Mass.—*Improved Burglar's Alarm*.—Patent dated October 11, 1859.—This invention consists of an improved apparatus for sounding an alarm and giving a light, in case an attempt is made to enter a house during the night, or it may be employed for waking a person at any hour during the night.

*Claim*.—The arrangement of the candle carrier D and its hammer *b* upon the torpedo post or standard B, the trigger lever *g*, and the grate or friction plate C, the whole forming an improved, efficient, and simple alarm, to operate as specified.

No. 25,789.—JOHN S. LASH, of Carlisle, Pa., assignor to Himself and FRANKLIN KNAUSS, of Allentown, Pa.—*Improvement in Straw Cutters*.—Patent dated October 11, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Forming the bed F; in sections *c*, each being provided with a spring *e*, and having the spiral beaters or followers provided with shoulders *g*, substantially as shown, to prevent the lateral movement of the straw or stalks in the feed box, under the action of the beaters or followers.

No. 25,790.—ALFRED MARSH, of Detroit, Mich., assignor to JOHN Q. DUDLEY, of said Detroit.—*Improved Method of Preventing the Deposition of Carbon in Gas Retorts*.—Patent dated October 11, 1859.—The claim explains the nature of this invention.

*Claim*.—The introduction into the retort, during the gas making process, of chlorate of potash, or other substance which evolves oxygen, when heated for the purpose set forth.

No. 25,791.—CHARLES O'BRYAN, of Salem, Ohio, assignor to Himself and JOSEPH S. HALDEMAN, of said Salem.—*Improved Tool for Cutting Round Tenons*.—Patent dated October 11, 1859.—The rear of the stock or head A has a screw thread cut in it, into which a screw shank D is run, the inner end of which screw defines the length of tenon to be cut when doing such work, said adjusting shank being held firmly in its proper position when adjusted by a jam nut E or its equivalent.

*Claim*.—The combination of the hollow conical head A, external nut B, and plate C, con-



structed and arranged as described, for adjusting and holding, when adjusted, the bits or cutters, or their guides, substantially as represented.

No. 25,792.—ROBERT PATTERSON, of Philadelphia, Pa., assignor to HORACE VAUGHN, of Providence, R. I.—*Solution for Thinning a Lubricating Compound*.—Patent dated October 11, 1859.—The claim explains the nature of this invention.

*Claim*.—A thinning solution applicable to the reduction of the lubricating compound described in the patent of Vaughn & Hutton, dated August 2, 1859, made of the substances and applied substantially in the manner specified.

No. 25,793.—THOMAS D. RICHARDSON, of New York, N. Y., assignor to WILLIAM RICHARDSON, of said New York.—*Improvement in Pen and Pencil Holders*.—Patent dated October 11, 1859.—A represents a wooden handle or holder; B is a metal tube encompassed by a ring *a*, to which a pen slide B is attached, the pen slide being within tube B, and of the usual form; within the tube B a tube C is placed; this tube is smaller than tube B, but somewhat longer; the part *h* of the tube is fitted in a recess *i* in the handle, and a pin *j* passes through the handle and the part *h* of the tube C.

*Claim*.—The arrangement and combination of the elongated tube *h* with the handle A and tubes B C, as and for the purpose shown and described.

No. 25,794.—NATHAN C. TRAVIS, of Alton, Ill., assignor to Himself, NATHAN JOHNSON, and RICHARD EMERSON, of said Alton.—*Improved Regulator Valve for Steam Engines*.—Patent dated October 11, 1859.—C is the annular steam casing surrounding the lower part of the valve box A and communicating therewith by means of the openings *d d*. This casing forms a base to the valve box and has an outlet *g* in the bottom surrounded by a flanch *f*, by which it is to be bolted to the steam chest or steam pipe of the engine.

The inventor says: I *claim*, first, the arrangement and combination of the valve box A and casing C, as and for the purposes shown and described.

Second. The arrangement and combination of the screw socket *k*, stem *j*, rod *l*, arm *p*, groove *q*, and band wheel J, so that by turning the band wheel J the stem *j* may be elevated and depressed irrespective of the rise and fall of the rod *l* and without rotating the latter, all as shown and described.

No. 25,795.—SAMUEL C. ABBOTT, of Zanesville, Ohio.—*Improvement in the Adaptation of Wads to Shot and Shells*.—Patent dated October 18, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—In combination with a shot or shell that receives its rotation by the action of the atmosphere in its flight, and which has an open funnel shaped base, a similarly shaped open wad or packing, that when expanded by the gas shall impinge both upon the bore of the gun and the interior of the shot or shell, as described and represented.

No. 25,796.—AVERY BABBETT, of Auburn, N. Y.—*Improvement in Jacquard Machines*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, Arranging two or more trap boards in one frame in such manner that when all the said trap boards, so arranged, are lifted for the purpose of opening the shed, all the untrapped knot cords may pass said trap boards without obstruction, in combination with an ascending and descending suspension board, substantially as above described.

Second. In combination with the Jacquard machine, I claim the device represented on the sides of the machine for working the journals or parts of journals, consisting of the pin wheel Z, shaft B<sup>1</sup>, hooks *y y y y*, and the hooks *o o o o*, and the dog E<sup>1</sup>, substantially in the manner and for the purposes specified.

Third. Dividing the journals commonly used in two or three ply Jacquard weaving machines, and working them in any required order, substantially in the manner and for the purpose specified.

No. 25,797.—E. BALL, of Canton, Ohio.—*Improvement in Harvesters*.—Patent dated October 18, 1859.—In moving the machine from field to field, the finger bar D, together with the cutting apparatus being turned up, they are held in that position by means of a hook or catch I<sup>1</sup> on the lever I being inserted into a slot in the track clearer, and held firmly in place by the bolt *p*<sup>2</sup>, which can be moved back and forth in connection with the arms *p p*; the latter can be moved so as to grasp firmly anything placed in the slot in which the bolt *p*<sup>2</sup> works.

The inventor says: I *claim*, first, the hinged plated G, constructed as shown and specified, in combination with the finger bar D and brace plate E, substantially as described.

Second. I claim the combination of the coupling arm *t*, (swiveled only at the point of connection with the main frame,) in combination with hinged plate G, hinged brace plate E, and guide piece F, substantially as set forth.



Third. I claim the guide piece *F*, in combination with the brace rod *q*, hinged plate *G*, brace plate *E*, coupling arm *t*, and chain *V*, substantially as described.

Fourth. I claim the combination and relative arrangement of spur *k*<sup>1</sup>, with coupling arm *t*, and pitman *k*, as and for the purposes set forth.

Fifth. I claim the combination of the hinged plate *G*, and adjusting screw *s*, with the slotted guide piece *F*, hinged brace plate *E*, and chain *b*<sup>2</sup>, arranged as and for the purposes set forth.

No. 25,798.—DANIEL BARNUM, of New York, N. Y.—*Improvement in Steam Engines*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim the method of constructing and combining adjustable cut off cams and adjusting screws, and a revolving and sliding rock shaft, substantially as specified, and of combining these with the means described, for working puppet valves in steam engines, substantially as and for the purposes specified.

I claim the method of constructing or using or adjusting the cut off cams *l* *l*<sup>1</sup> for the purpose of enabling me to fix or to adjust the point at which the steam is to be cut off, during any portion of the stroke, whether it be done while the engine is in motion or at rest, substantially as described and shown.

No. 25,799.—WILLIAM W. BATCHELDER, of New York, N. Y.—*Improvement in the Construction of Vapor Lamp Burners*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim modifying the flame under the retort, by means of the wires *a*<sup>1</sup> *a*<sup>2</sup> or their equivalents, in such manner that the deposit of carbon shall be prevented and the blue flame produced, as set forth.

I claim deriving the gas for heating the retort from the gas pipe *d*, after its commixture with air, and before it reaches the illuminating jet *m*, by means of the aperture *n*, as set forth.

No. 25,800.—JOHN BEACH, of De Ruyter, N. Y.—*Improvement in Cheese Hoops*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, a hoop having a cross cut or division at its periphery, and constructed to open and close as described, when provided, on opposite sides of said division, with hook or eye straps, united by a tie band or oval configuration, or other similar shape, and serving, in connection with the eye straps, to open and close the hoop, and to hold the same, when expanded or contracted, substantially as set forth.

Second. Providing the oval tie band to the hook or eye straps of the opening and closing hoop, with a lever or handle arranged to cross the oval band, at points intermediate to the intersections therewith of the transverse and conjugate axis of the band, and secured to the band on its one side, but projecting freely through it on the opposite side, essentially as specified.

No. 25,801.—CHARLES G. BLOOMER, of North Kingston, R. I.—*Improvement in Operating Window Blinds*.—Patent dated October 18, 1859.—To produce a device which, when attached to one of the slats of a window blind, shall render the blind capable of being adjusted and held at any angle, and also secure the slats when closed from the danger of being changed from the outside, is the object of this invention.

Claim.—The segmental disk *D* or its equivalent, and the spring *F* or its equivalent, in combination with one of the slats of a blind, when arranged to operate in the manner substantially as described for the purposes set forth.

No. 25,802.—M. S. BRINGIER, of New Orleans, La.—*Improved Steam Boiler*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

Claim.—The arrangement of a series of horizontal tubes or pipes, connecting two cylindrical chambers or reservoirs of water and steam, in combination with the steam cylinder *C*, connecting the same chambers, substantially as described.

No. 25,803.—WILLIAM M. BRYANT, of Washington, D. C.—*Improved Smoking Tube*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

Claim.—A tubular tobacco pipe which contains the supply of tobacco within it, and is furnished with a spring and follower or their equivalents, that force up the tobacco to the burning point or chamber, as fast as it is consumed, substantially in the manner and for the purpose set forth.

No. 25,804.—S. N. CAMPBELL, of Elgin, Ill.—*Improved Churn*.—Patent dated October 18, 1859.—On the lowermost part of the rod *F*, under the crosspiece *J*, is fixed a button *K*, which can be revolved with the rod. The object of this button is to regulate the distance between the slats *H*, through which the cream passes according to its consistency, and this is effected by having two inclosed surfaces *b* on either side of said button, which project



from its sides and incline up in opposite directions, so that by turning this button in one direction the slats are kept open, and by turning it half around the slats close, when the dasher is pushed down upon the cream.

*Claim.*—The arrangement and combination of the button K, dasher rod F, movable slats H H<sup>1</sup>, pieces L, and bar J, as and for the purposes set forth and described.

No. 25,805.—JOHN H. CARTER, of Cincinnati, Ohio.—*Improvement in the Construction of Hydrants for Filtration.*—Patent dated October 18, 1859.—This invention is an improvement in hydrants, by means of which water is filtered as it is received from the pipes, and is discharged as required for use, properly filtered and freed from sediment.

*Claim.*—The cylindrical inner vessel g within the case A, and made removable as represented, in combination with the receiver B, for receiving the sediment, as described, and the cap e<sup>1</sup>, for favoring the direction of the sediment downward, in the manner and for the purpose set forth.

No. 25,806.—ASA L. CASWELL, of Lansingburgh, N. Y.—*Improvement in Operating Gun Carriages.*—Patent dated October 18, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, returning the gun up to the port hole after being discharged by means of a roller and cords or chains, operated by a lever or its equivalent, when the same are arranged in the manner, and dispense with the use of gun tackle, as set forth.

Second. I claim the manner described, or equivalently the same, for securing the gun and carriage in a fixed position upon the truck, so as to maintain a given range for any number of discharges, as set forth.

No. 25,807.—LEVERETT CLARK, of Monticello, N. Y.—*Improvement in Hem Folders.*—Patent dated October 18, 1859.—This invention consists of a folder of a novel character, for the purpose of folding cloth or other material preparatory to hemming, which provides for folding hems of different widths and for turning the hem either over or under the main portion of the material as may be desired, said guide being suitable for use in a sewing machine or for turning a hem for sewing by hand.

*Claim.*—The hem folder, composed of a straight gauge a and adjustable plate C, constructed as described, and a bar h, the whole combined as described, either arranged as shown in Figs. 1, 3, and 4, or as in Figs. 2, 5, and 6, and operating substantially as described.

No. 25,808.—R. R. COLE, of Geneva, N. Y.—*Improved Method of Opening and Closing Gates.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the bar G<sup>2</sup> to the levers G<sup>3</sup> and G<sup>4</sup>, at such points as to give their lower ends the same motion inward or outward at the same time, substantially as set forth.

No. 25,809.—JONATHAN CREAGER, of Cincinnati, Ohio.—*Improvement in Machines for Sawing Beveled Curves.*—Patent dated October 18, 1859.—The object of this invention is to make a machine for the rapid, accurate, and varied manufacture of the curved tops and slats of chairs and analogous forms of cylindrical segments.

The inventor says: I *claim*, first, the combination of the inclined rest R with a crown saw, for the production of a crowning cylindrical segment.

Second. The combination of a rocking rest H with a crown saw, for the manufacture of a cylindrical segment having oblique axes.

No. 25,810.—JAMES CUMMING, of Boston, Mass.—*Improved Try Cock for Steam Boilers.*—Patent dated October 18, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination with an ordinary try cock E of a straight hollow tube D moving vertically on axis C, and which is also the indicator at its outer closed end, and extending through the end or side of the boiler, and at certain periods remaining elevated above the level of the water, but capable of being brought below the same whenever necessary, substantially as and for the purposes set forth.

No. 25,811.—WILLIAM P. CURRY, of Vincennes, Ind.—*Improved Feed Water Apparatus for Steam Boilers.*—Patent dated October 18, 1859.—This invention consists in employing for the connection between the float in the boiler and between the stop valve in the feed pipe, double rods, in such a manner that one of the rods always pulls as well when the float rises as when it sinks down, and that the slightest motion of the float affects the valve, no matter what distance between said valve and the boiler.

*Claim.*—The arrangement of the rods G G<sup>1</sup> H H<sup>1</sup> I I<sup>1</sup>, or their equivalents, to operate in



combination with the disks *i e k m*, or their equivalents, and with the float B and stop valve K, substantially as and for the purposes set forth.

No. 25,812.—ANDREW J. CURTIS, of Frankfort, Me.—*Improvement in Operating Field Gates*.—Patent dated October 18, 1859.—This invention consists in a peculiar arrangement of mechanism for opening and closing a gate, the same consisting of a two armed lever and two connecting rods applied to the said lever and the outer vertical parts of the gate; also, in combining therewith a peculiar locking contrivance, whereby the two parts of the gate are firmly maintained either open or closed.

The inventor says: I *claim* the improved arrangement of mechanism described, for opening and closing a gate, the same consisting of the lever G and the connecting rods M N, applied to the said lever and the gate posts H I, substantially as and for the purpose set forth.

And, in combination therewith, I claim the peculiar arrangement of the block *f*, the same operating in connection with the lever G, in the manner and for the purpose specified.

No. 25,813.—J. B. DAGNE, of Ashley, Ohio.—*Improvement in Construction of Evaporating Apparatus*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of the pan F, which is provided with two or more compartments and situated over a furnace, when said pan is used in connection with the slides F and C and damper D, the whole being combined and arranged substantially in the manner set forth, for the purpose of forming a sugar evaporator, as described.

No. 25,814.—JOHN DANNER, of Canton, Ohio.—*Improvement in Sleeping Cars*.—Patent dated October 18, 1859.—Each alternate back is made narrower than the others and is hinged to the seat, while each alternate back is provided with a back *a*, the frame of which is rigidly secured to the seat frame D, while the false backs *d* thereof are so hinged to the back of the seats *c* that they can be let down as shown in the engravings.

The inventor says: I *claim*, first, the combination of the hinged false back *d* with the permanent back *a*, as and for the purposes set forth.

Second. I claim making each alternate back *a* with a false back *d*, in combination with making each alternate back *a*<sup>1</sup> shorter than the backs *a*, and hinged to the seat *c*, substantially as and for the purpose set forth.

No. 25,815.—JOHN EBNER and FRANK LEUTHY, of Lancaster, Pa.—*Improvement in Harvesters*.—Patent dated October 18, 1859.—The double eccentric *c* is used in heavy or thickly standing grain and clears the platform twice in each revolution of the driving wheel A; the single or banded eccentric D is used in thin standing grain, raking but once to each revolution. This change is effected by slipping the forked end *g* of the rod G from one peg 10 to the other peg 11.

*Claim*.—The arrangement of the three eccentrics C C D, revolving shaft of the driving wheel, in combination with the rake connecting mechanism, constructed and operating in the manner described.

No. 25,816.—DAVID ELDRED, of Monmouth, Ill.—*Improvement in Ploughs*.—Patent dated October 18, 1859.—The object of this invention is to obtain a plough that will be capable of turning a furrow from the same side of the land, while moving in either direction across the field, and also to obtain one that may be readily manipulated, and on which the driver may ride while the plough is in operation.

*Claim*.—The arrangement, for joint operation, of the share frames B B, axle H, and coulter L, as and for the purpose set forth.

No. 25,817.—GILMORE EMERY and AARON C. WILSON, of Newfield, Me.—*Improvement in Ploughs*.—Patent dated October 18, 1859.—In the engravings, B is the mould board, connected with the landside A by bolts passing through the projections *n n* on the landside, and through corresponding ones on inside of the mould board; C is the point, D the beam, perfectly straight, bolted on either side; the beam can be elevated or depressed at pleasure to regulate the depth of the furrow.

*Claim*.—The arrangement of the various parts of the plough, when constructed as described for the purposes set forth.

No. 25,818.—FRANK P. GOODALL, of Deering, N. H.—*Improvement in Pruning Knives*.—Patent dated October 18, 1859.—This invention consists in combining with, or applying to the ordinary pruning knife an arm rest or support, for the purpose of aiding in more effectually and easily operating the knife.

*Claim*.—The improved article of manufacture, or combination of pruning knife and arm rest, arranged substantially as specified.



No. 25,819.—MERRITT GOODMAN, of Whitlock, Cal.—*Improvement in Machines for Crushing Quartz.*—Patent dated October 18, 1859.—This invention consists in constructing a stamp and shaft, with an aperture large enough to pass the one from a hopper connecting with said aperture at pleasure anywhere on said shaft, the aperture extending from the hopper through the shaft to the place of stamp L.

*Claim.*—A revolving mortar I, or stamping bed, in combination with a hollow stamp and shaft A, as described.

No. 25,820.—OLIVER C. GREEN, of Dublin, Ind.—*Improvement in Clothes Racks.*—Patent dated October 18, 1859.—This invention consists of a device by which the cords of a folding clothes frame may be tightened at pleasure, without previous loosening and without requiring to be either shortened or changed in position; the same device also allowing the feet of the frame to be adjusted to suit an uneven floor; it also consists in constructing the frame of a rhomboidal shape.

*Claim.*—The arrangement and combination of the centre posts A a, arms B C, and braces D E, operating in the manner and for the purposes set forth.

No. 25,821.—JOEL HAINES, of West Middleburgh, Ohio.—*Improvement in Field Fences.*—Patent dated October 18, 1859.—This invention consists in rounding the upper ends of the braces where they come in contact with the keys that lock the fence, so that the fence may be either set at a right angle with the sill or inclined; and in making one or more notches in the sill, so as to hold the fence at a right angle to the sill or inclined, as may be preferred, to adapt the fence to side hills and uneven ground.

*Claim.*—The peculiar construction of the braces so as to adapt them to the keys, when combined with a sill having one or more notches, so as to hold the fence perpendicular when the sill is inclined substantially as described.

No. 25,822.—WILLIAM HALL, of Indianapolis, Ind.—*Improved Apparatus for Preventing Horses from Running Away.*—Patent dated October 18, 1859.—This invention consists in attaching a frame work to the upper part of a horse's headstall or bridle, which is so constructed as to throw a blind across the horse's eyes in a moment at the will of the rider or driver.

*Claim.*—The apparatus described, when constructed and operated in the manner and for the purpose described.

No. 25,823.—WILLIAM HALL, of Indianapolis, Ind.—*Improvement in Lightning Rods.*—Patent dated October 18, 1859.—The inventor, in describing the mode of manufacturing his improved lightning rod, says: I cut a strip of copper-plate the desired width and any length convenient; I then have a steel rod, about half an inch in diameter, with a groove on one side, coming close to a guard or plate, upon which is placed the strip of copper; I then turn the rod by means of a crank and thus wind the sheet around the rod, afterwards slipping it off, which gives me one section; these sections are slipped into each other, continuously, and fastened together by means of a rivet, until the rod is of sufficient length. In order to get any amount of surface, I cut the strip as wide as I desire, so that I can wind it several times around the steel rod, still leaving the edges open, giving unbroken play to the electricity over both the inside and outside surfaces.

*Claim.*—As an article of manufacture, the construction of a lightning rod presenting a great amount of conducting surface in a compact form, when the same is constructed in the manner set forth.

No. 25,824.—SAMUEL W. HAMSHER, of Decatur, Ill.—*Improvement in Harrows.*—Patent dated October 18, 1859.—This improvement consists in a certain arrangement of the parts, whereby the roller and harrow may be so adjusted as that the roller is the means of defining the extent of the penetration of the frame teeth, whilst either may rise and fall to accommodate itself to the inequalities of the ground without influencing the other.

*Claim.*—The arrangement of the harrow frames, toothed roller, and hinged adjustable arms, as set forth and explained, and for the purpose stated.

No. 25,825.—JOSEPH HARRIS, of Allegheny, Pa.—*Improvement in Railroad Brakes.*—Patent dated October 18, 1859.—The brakes are applied from the rear end of the last car of the train, thereby causing a retarding motion of the train; or they can be applied from the front end of the train, by placing the apparatus for winding the chain or rope on one of the running axles of the tender. In the engravings it is represented on the rear of the truck of the last car of the train.

The inventor says: I *claim*, first, the combination of the winding apparatus, the weight  $w^1$ , lever  $t$ , rod  $r^1$  bent lever  $e^1$ , sliding ring  $d^1$ , sleeve  $r$ , anti-friction ring  $z^1$  and  $z^2$ , conical centre piece  $p$ , collar  $c^2$ , with friction plates  $a^1$  and  $a^2$ , and spring plates  $b^1$  and  $b^2$ ; also screws  $n^1$  and  $n^2$ , arranged in the manner and for the purpose substantially of operating a railroad brake.

Second. The combination of the pawl  $t$  and spring  $u$  with ratchet  $s$  and drum  $l$ , with short chains  $k k$ , and rods  $h h$ , the arm  $m m$ , with pulleys  $q q$ , connected by chains, rods, or ropes,



for applying and maintaining the strain of a railroad brake at the centre of each car, substantially as described and set forth.

Third. The combination of the rod *v*, with the long arm of the pawl *t*, and the cross lever *y*, connecting the shaft of the bunter *x*, to pawl *t*, for the purpose of setting the brakes free; the whole substantially as described and set forth.

No. 25,826.—JAMES HAWKINS, of Wilkins Township, Pa.—*Improvement in Steam Ploughs*.—Patent dated October 18, 1859.—This invention acts on the principle of a lever instead of a screw or inclined plane. It has also a shaft with circular knives *P* on it, to cut or separate the sod before the teeth act upon it.

*Claim*.—The arrangement of the frames *A* and *F*, levers *J* and *E*, caster wheels *G* and *I*, drivers *B*, crank shaft *S*, cutter *P*, toothed cylinders *C* and *H*, levers *D* and *N*, operating conjointly as set forth for the purposes specified.

No. 25,827.—JOSEPH HOLLEN, of Fostoria, Pa.—*Improvement in Knitting Machines*.—Patent dated October 18, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The combination of a needle, the barb of which is pressed by its own spring into its own groove, with a thread carrier, to release the barb and lay the thread therein, and a supporting guide to sustain the needle, when arranged and operated substantially in the manner and for the purpose described.

No. 25,828.—FRANCIS A. HOYT, of Boston, Mass.—*Improved Water Gauge for Steam Boilers*.—Patent dated October 18, 1859.—This invention consists in the peculiar arrangement of a steam whistle, its valve conduit, and valve seat, relatively to the dry steam chamber and the operating lever of the float.

*Claim*.—The described arrangement of the steam whistle, its valve, conduit, and valve seat, relatively to the dry steam chamber and the operating lever of the float.

No. 25,829.—THOMAS J. HUDSON, of Newbern, N. C.—*Improvement in Packing Piston Rods of Steam Engines*.—Patent dated October 18, 1859.—This invention consists in a combination of stuffing boxes and glands, one within the other, with hemp or rubber packing intervening, the first layer of which receiving the full heat of the steam prevents the heating of the second layer, which, being always moist and elastic, preserves the valve stem or piston rod from cutting or rusting, and by this means prevents the escape of steam between the packing and the rod.

*Claim*.—The method of packing the glands *a a* and applying the gland *c*, with the packing in *d d*.

No. 25,830.—WILLIAM H. HUNT, of Brooklyn, N. Y.—*Improvements in the Construction of Vapor Burners*.—Patent dated October 18, 1859.—This invention consists in so arranging a vapor gas burner as to prevent, in a great degree, the deposit of rosin, or other matter, from accumulating within or around and closing the opening. It also consists in the manner of constructing the air and hydro-carbon reservoir and burner separately, and combining them with the conical frustrum of inclined planes and draft holes and with each other, so as to enable any one to clean out from the interior any resinous or other substance which may collect within the reservoir and burner.

*Claim*.—The combination in a vapor burner of a conic frustrum *i* and draft holes *k*, substantially as specified, in combination with the orifice *n* and damper *v*, the whole being constructed and combined substantially as and for the purpose specified.

No. 25,831.—GEORGE P. HUNT, of New York, N. Y.—*Improvement in Oil Cans*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the valve with the point of the tube or spout as described, in combination with the extension of the point of the valve for operating it, by which arrangement, when the point of the valve is relieved from pressure, the further discharge of oil from within the tube is prevented as set forth.

No. 25,832.—J. BURROWS HYDE, of Newark, N. J.—*Improvement in the Construction of Compound Blowpipes*.—Patent dated October 18, 1859.—This invention consists in the employment of inflammable gas for soldering, heating &c., by means of two distinct tubes placed one within the other, the inner tube being slightly less in diameter than the inner diameter of the outer tube, so that the gas may flow through one tube while the atmospheric air is blown through the other.

The inventor says: I *claim* the compound conical nozzle *g*, constructed with the projecting tubes *n* and *k*, as described, combined with the concentric elastic tubes *e* and *f*, as described.

Second. The receiving tubes *a* and *b*, with their projecting tubes *c* and *d*, for attaching thereto the elastic tubes, as described.



No. 25,833.—A. KIRLIN, of New Boston, Ill.—*Improvement in Corn Planters*.—Patent dated October 18, 1859.—This invention consists in arranging on each side of the machine the markers for spacing the ground as the machine proceeds forward, and upon the shaft of these markers a cam, by a peculiar arrangement of which the corn is dropped from the hoppers at desired intervals as the markers rotate.

*Claim*.—The cam I, spring arm J, ratchet and pawl K L, when the same are arranged as set forth and operated by the marker wheels G G, for giving motion to the rotary hopper bottoms for planting the corn, as described.

No. 25,834.—GEORGE H. KITCHEN, of New York, N. Y.—*Improvement in the Construction of Gas Regulators*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of the valve chamber A, having the valve fitted within it, substantially as described, with a series of recesses *d d*, whose width increases in an upward direction, or an equivalent series of passages surrounding the valve and having their area of opening increased by the ascent and diminished by the descent of the valve, as described.

No. 25,835.—ADAM KLAUS, of Belleville, Ill.—*Improvement in Seed Planters*.—Patent dated October 18, 1859.—This invention consists in arranging the dropping apparatus in a particular manner, by means of a valve and a sliding door, which are both operated simultaneously with the seed slide, so that always one throw of the seed or corn is kept in store in the lower part of the discharge to be ready to drop as soon as the sliding door opens.

*Claim*.—The valve *r*, in combination with the sliding door *p*, when the same is operated simultaneously with the seed slide, substantially in the manner and for the purpose described.

No. 25,836.—JESSE S. LAKE, of Smith's Landing, N. J.—*Improved Steering Apparatus*.—Patent dated October 18, 1859.—O is a collar on or near the outer end of the pin F and works in the recess H in the periphery of the barrel C; one end of the braces L L are hinged to the catches I I, the other is hinged or pivoted to the barrel C at X X.

*Claim*.—The arrangement of catches I I, braces L L, collar O, pin F, in combination with the barrel C, substantially in the manner and for the purpose set forth.

No. 25,837.—JAMES LANCELOTT, of South Providence, R. I.—*Improvement in Making Ornamental Chains*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of the fillings *b*<sup>1</sup> in the female die Q, when used in connection with a travelling die *r*, for the purpose of ensuring the proper presentation of the blanks to the latter, and at the same time admitting of a proper cutting edge for the female die Q.

Second. The employment of a forming die J in connection with a rotating or partially rotating die *r*, arranged substantially as shown to ensure, simultaneously with the process of swaging the blanks into the proper shaped links, the proper adjustment of the latter for interlocking of the same.

Third. The decreased diameter of the upper portion of the forming die J, so as to ensure the adhesion of the cap, cup, or link to it, and enable the said die to perform the double function of die and carrier, when said die J is used in connection with the die *r*, to operate conjointly as and for the purpose set forth.

Fourth. Constructing the die *r* with a rod *v*<sup>1</sup> with or without shares or projections *a*<sup>1</sup>, and arranged substantially as and for the purpose set forth.

Fifth. The clearer rod *h* and collar *n*, either or both applied to the forming die J, and arranged to operate in connection with the die *r* and rod *v*, substantially as and for the purpose set forth.

Sixth. The clamps *j* in connection with the swage or clinching tool R or its equivalent, arranged to operate conjointly, as shown, and for the purpose specified.

Seventh. The guide plate *f*, in connection with the swage or clinching tool R, the former serving as a guide to the latter and ensuring its proper action.

Eighth. The swage or clinching tool R, when constructed as shown, to bend or clinch the arms of the links, and at the same time keep the arms of the uppermost link in proper position, so that the latter may readily receive the succeeding link.

No. 25,838.—S. E. LANPHEAR and O. D. BARRETT, of Cleveland, Ohio.—*Improved Washing Machine*.—Patent dated October 18, 1859.—This invention consists in attaching to the centre of the tub A the permanent standard B, on which is placed the sleeve C, having its upper end soldered and square, and having on its lower end a flange for fastening to it the disk D.

*Claim*.—Supporting the disk E, by its stem C, on the standard B, as and for the purpose set forth.

No. 25,839.—EVAN LEIGH, of Manchester, England.—*Improvement in Cotton Spinning*



*Machinery.*—Patent dated October 18, 1859; patented in England, February 26, 1858.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the construction of top rollers and spindles with the arrangement of one or more of the bosses loose revolving thereon.

Second. The application of a journal, or all kinds of shafting spindles, studs, or axles, having the bearing part of the shaft, spindle, or axle, or stud, larger in diameter than the part immediately outside the bearing.

Third. The rounding out or dishing the edges of the steps or bosses, in combination with the tapering of journals or axles, of all kinds, by which I obtain the action of capillary attraction, for the purpose set forth.

Fourth. I also claim the application of a top roller of a spinning machine to its spindle in such a manner as to enable such top roller to rotate on the spindle and to rock in a longitudinal direction, in order that it may properly adjust itself to the under rollers, while the two may be in use.

No. 25,840.—FRANK MAXSON, of San Francisco, Cal.—*Improved Amalgamator.*—Patent dated October 18, 1859.—A is a cast iron pan, with a concave bottom, surrounded by a rim, on one side of which is a discharge spout; this pan is suspended by three rods B, attached to eyes in the top of frame C, the rod on the opposite side of the spout to have a screw for the purpose of raising or lowering the spout D; bolted to C<sup>1</sup> is the wood D<sup>1</sup>, C being arranged with slotted holes to give more or less throw to the pan A, D<sup>1</sup> being in two parts, with part of a hole in each to conform to the size and shape of the projection pin F.

The inventor says: I *claim* the use of the eccentric revolving pan, constructed and operated as described, in connection with the amalgamated plate, as specified.

I also claim the arrangement of the shaft E, projection pin F, with the slotted piece C<sup>1</sup> and wood D<sup>1</sup>, whereby a more or less eccentric motion is imparted to the pan A, as described.

No. 25,841.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in the Composition of Emery for Grinding and Polishing Tools.*—Patent dated October 18, 1859.—The claim explains the nature of this invention.

*Claim.*—My new compound for emery sharpening and polishing tools, the same being made by combining fifteen pounds of emery, one pound of India rubber or gutta percha, and five ounces of sulphur.

No. 25,842.—C. A. McEvoy, of Richmond, Va.—*Improvement in Metallic Seals for Letters, &c.*—Patent dated October 18, 1859.—This invention consists of two metallic concave disks, to be used together, having sharp points projecting from their circumferences, said points having an inclination toward the centre of the disks.

*Claim.*—The use together, in the manner described, of the metallic concave disks, having sharp points projecting from their circumferences, substantially as set forth.

No. 25,843.—THOMAS McQUISTON, of Morning Sun, Ohio.—*Improvement in Cultivators.*—Patent dated October 18, 1859.—This is an improvement in double wheeled cultivators, and consists in a construction and arrangement of parts having for their object the greater manageability and more effective action of this class of implements.

*Claim.*—The described arrangement of the elevated axle D, beam A A<sup>1</sup>, brackets C C<sup>1</sup>, and rods B B<sup>1</sup>, the whole being constructed in the manner and for the purposes set forth.

No. 25,844.—JOHN H. MEARS and GEORGE CAMERON, of Oshkosh, Wis.—*Improvement in Car Couplings.*—Patent dated October 18, 1859.—This invention consists in the construction of car couplings in such a manner that when a car runs off the track it will uncouple itself from the rest of the cars.

The inventors say: We *claim*, first, the tongue G, for retaining link H, constructed and operating as described.

Second. The arrangement of yoke A, lever C, and spring B, and connecting rod F, constructed and operating as described.

No. 25,845.—ADAM MILLER, of Mount Pleasant, Iowa.—*Improvement in Mole Ploughs.*—Patent dated October 18, 1859.—This invention consists in the peculiar arrangement and combination of parts for forming a mode of detaching the mole in drain ploughs.

*Claim.*—The employment of the rod H, in combination with the coulter B, provided with staples *o o*<sup>1</sup>, and the mole J, provided with the hooks *m n* and *s s*, substantially as and for the purposes specified.

No. 25,846.—JOHN MORRISON, of De Witt, Ill.—*Improvement in Mole Ploughs.*—Patent dated October 18, 1859.—This invention consists in a novel means employed for varying the position of the line of draft relatively with the beam and mole, whereby the implement may be guided or moved by the draft alone.

*Claim.*—The draft chain G, bar F, loops H H, and the adjusting screw rods J J, or their



equivalents, combined, arranged, and applied to the plough, substantially as and for the purpose set forth.

No. 25,847.—WILLIAM HENRY MORRISON, of Nottingham, England.—*Improved Machine for Manufacturing Bonnet and Cap Fronts, &c.*—Patent dated October 18, 1859.—These improvements relate to the means of folding goffered or fluted lace, or net, and for the application to the back or folded part thereof of bands or tapes.

The inventor says: I *claim* the application, in apparatus or machinery of the character referred to, of bars or gauges *h h*, operated to move simultaneously towards the lace or other fabric, substantially as explained.

I also claim the adaptation of plates *ff*, operating in manner and for the purpose substantially as explained, when employed in the manufacture of bonnet and cap fronts, ruches, and such like articles of millinery.

No. 25,848.—ENOCH OSGOOD, of Boston, Mass.—*Improvement in Cotton Gins.*—Patent dated October 18, 1859.—This invention relates to an improvement in the roller gin, whereby the advantage attending the use of this kind of gin is obtained, to wit: the separating the seed from the staple without injuring the latter, and at the same time a great speed obtained, so that the work will be done expeditiously and in a perfect manner.

The inventor says: I *claim*, first, the rollers *B B*, plates *C C*, and bands *D*, arranged substantially as and for the purpose set forth.

Second. The combination and arrangement, in a cotton gin or wool burring machine, of the clearer *K*, rollers *B B*, angular plates *C C*, bands *D*, slotted arms or bars *J J d d*, pinion *G*, and wheel *I*, in the manner and for the purpose described.

No. 25,849.—SEWALL PEARSON, of Boston, Mass.—*Improved Cabinet Chair.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Arranging in a bureau, chair, or other piece of furniture *A*, in combination with a perforated seat *B*, and with a self-closing pot *G*, a water tank *C*, which forms the back for the seat, and which communicates with the pot by means of a spout *E*, substantially as and for the purpose specified.

No. 25,850.—GEORGE J. PRENTISS, of Fall River, Mass.—*Improved Polishing Iron.*—Patent dated October 18, 1859.—The object of this invention is to furnish the ironer with a polishing iron of a novel construction, whereby he can apply both hands to the work, and in this manner exert a much greater pressure upon the iron, the result of which is, that the garments receive a much finer polish and in less time, than where one hand is used.

*Claim.*—The polishing cup *A*, as set forth, having two handles *C E*, arranged as represented and described, or in any other manner substantially the same, for the purposes mentioned.

No. 25,851.—HIRAM M. SMITH, of Richmond, Va.—*Improvement in Trusses for Relieving Piles.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, as improvements in the construction of anti-hemorrhoidal pads, first, the manner of sustaining such pads by means of springs passing from the pad to the front of the patient, and in a spiral form along the groin to a point over the hip joint, in combination with the plan of sustaining the instrument by flexible fastenings attached above the hip joints, thus making the instrument self-adjusting and enabling the patient to exercise in any position without inconvenience.

Second. The manner of balancing the instrument by means of flexible fastenings attached over the hip joints, no matter how the arms of the pad may be varied.

No. 25,852.—JOSEPH W. SPRAGUE, of Rochester, N. Y.—*Improvement in the Tubular Connections of Bridges.*—Patent dated October 18, 1859.—This invention consists of a series of clutches of peculiar construction, in combination with tubular sections and with braces for making trussed bridges.

*Claim.*—The described series of clutches *C*, provided with bands *c*, in combination with the tubular sections *B*, for the purposes substantially as set forth.

No. 25,853.—DAVID H. STICKNEY, of Cincinnati, Ohio.—*Improvement in Cocks.*—Patent dated October 18, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The supplementary chamber *D* and stationary stuffing box *C* in combination with a hollow piston *E*, having ingress apertures *G*, adapted to be placed on either side of the said stuffing box by the motion of the piston, as set forth.

No. 25,854.—AUGUSTUS J. THOMPSON, of Malden, Mass.—*Improvement in Bustles.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of a spring bustle of a flat spring or springs *b*, united at their



ends to form the perimeter of the bustle, or its frame work, and spread or divided to establish a base at their bearing surface or surfaces against the body of the wearer, and spiral springs *c* of conical configuration, and arranged to form cross ties to the flat springs with their bases resting against the base formed by the latter, and for action in concert with the latter, and unitedly, essentially as set forth.

No. 25,855.—ELIJAH THORN, of Selma, Ohio.—*Improvement in Portable Crabs for Mole Ploughs*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the frame *F*, as constructed with the boxes *a a*, which are attached to the rear of the frame *A*, and with the axle *I* and wheels *J J*, the several parts being connected together and used, not only for elevating the machine, but for guiding its rear and changing its position, substantially as set forth.

No. 25,856.—EBEN C. TUTTLE, of Naugatuck, Conn.—*Improvement in the Manufacture of Hoes*.—Patent dated October 18, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The construction of a hoe, as a new article of manufacture, by securing the eye in the blade by two projecting swells or beads *a* and *b*, when constructed and fitted for use, substantially as described.

No. 25,857.—BENJAMIN F. WELLS, of Georgetown, D. C.—*Improvement in Naval Architecture*.—Patent dated October 18, 1859.—This invention consists in giving the model or shape to vessels by means of drafts prepared entirely by the compass or slide rule without the use of solid models or moulds, by reason of lines being all arcs of circles, or derived from a solid whose outlines are arcs of circles.

*Claim*.—Deriving the lines of vessels of all kinds and dimensions from sections of a circular spindle of any dimensions or proportions, substantially as described and shown.

No. 25,858.—WILLIAM WHEELER, of West Poughkeepsie, N. Y.—*Improved Carpet Stretcher*.—Patent dated October 18, 1859.—This apparatus, complete, is in three parts, each performing its own function, viz: the spacer, the fastener, and the stretcher; but only the stretcher is claimed in the specification, the other parts being represented and described to show their connection with the use of the stretcher.

*Claim*.—The stretcher *C*, when provided with the notch *r* and the heel points *t t*, for the purpose set forth.

No. 25,859.—J. T. WILDER, of Greensburgh, Ind.—*Improved Horizontal Water Wheel*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, constructing a water wheel with two sets of involute buckets, whose capacity shall be in the relative proportion to each other, as specified, for the purpose set forth.

Second. The combination, with a wheel such as has been described, of a casing provided with two channels of different capacities, and with two gates arranged as described, the whole being constructed and operated substantially as and for the purpose specified.

No. 25,860.—CHARLES A. WILSON, of Cincinnati, Ohio.—*Improvement in Thermostats*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A tubular thermostat, forming a part of the steam or other passage to be regulated and adapted by means of the unequal expansion of the metals of which it is composed, to close the said passage by lateral deflection, as explained.

No. 25,861.—GEORGE W. YERBY, of New York, N. Y.—*Improvement in Bustles*.—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The bustle as described, in which the waistband has a back piece *S*, and a corset or part corset *n* in front, provided with one, two, or more sets of pockets, into which the springs of the bustle are inserted, the whole being constructed and operated in the manner and for the purpose substantially as described.

No. 25,862.—JAMES M. ADAMS, of Canton, Mass., assignor to Himself and ALONZO JOHNSON, of said Canton.—*Improvement in Weeding Hoes*.—Patent dated October 18, 1859.—The object of this invention is to construct a hoe for weeding and cultivating the ground, which, while it presents a large amount of cutting edge, and is of a form that will easily enter the ground to cut the roots of the weeds, will also lighten and loosen up the soil at the same operation.

*Claim*.—The arrangement of the two blades with the bifurcated handle, the whole being constructed in the manner and for the purposes set forth.



No. 25,863.—BENJAMIN L. AGNEW, of Indiana, Pa., assignor to G. P. REED, of said Indiana.—*Improvement in Preserve Cans.*—Patent dated October 18, 1859.—This invention consists of a preserve jar constructed with an inner rim or flanch of less depth than the outer rim forming the mouth proper of the jar, whereby the V groove between the two flanches or rims and also the entire top of the stopper can be supplied with cement in a manner to render the jar air tight.

*Claim.*—The combination in a preserve jar of a deep outer flanch or rim E with a shallow inner flanch B, in the manner and for the purpose described.

No. 25,864.—JOHN G. BAKER, of Washington, D. C., assignor to Himself and ASA L. CARRIER, of said Washington.—*Improvement in the Rods of Window Blinds.*—Patent dated October 18, 1859.—This invention consists in using thin, cheap, sheet metal, such as zinc, tin, sheet iron, or other metal, forming it into small tubes, the edges coming together in such a manner as to leave small ears at suitable distances, with a hole through each, to connect with the slats by staples, or in any suitable manner.

*Claim.*—The peculiar construction of thin metallic tubes, the two edges so forming the ears or rings *e e e*, in combination with wire staples or rings, to connect wood slats for movable blinds, substantially as set forth.

No. 25,865.—BARRON DAVIS, of Brooklyn, N. Y., assignor to OSBORN & VINCENT, of New York city.—*Improvement in Bustles.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Attaching the hoops *c d e*, &c., to the extension B, by fixed and immovable connections, so that the hoops cannot be thrown forward or outward, when the hoops are connected to the band A by means of the cross bands *g g*, in combination with the back point or extension C, as and for the purposes set forth.

No. 25,866.—J. BURROWS HYDE, of Newark, N. J., assignor to PHEBE BANNAN, of said Newark.—*Improvement in the Method of Making Gas from Peat.*—Patent dated October 18, 1859. The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, exposing such peaty matter to thorough desiccation by artificial heat, and conveying it to the retort without permitting it to absorb moisture from the air.

Second. Granulating or powdering such peaty matter, distilling and cooling it in closed cases, as described.

Third. Employing the heat evolved in cooling the carbonized material to aid in desiccating the peaty matter, as described.

No. 25,867.—JOHN MACLURE, of Newark, N. J., assignor to Himself and SAMUEL E. TOMPKINS and SAMUEL C. NORTHRUP, of said Newark.—*Improved Machine for Covering Saddle Trees.*—Patent dated October 18, 1859.—The object of this invention is to facilitate and expedite the covering of the seats of saddle trees, work which has hitherto involved time and manual labor at considerable expense.

The inventor says: I *claim* the employment of an elastic bed or cushion D in combination with the cover and seat J, substantially as and for the purpose described.

Second. The arrangement and combination of the box B, adjustable sliding bars E, elastic cushion D, seat J, clamp K<sup>1</sup>, and pressing lever G, as and for the purpose shown and described.

No. 25,868.—S. W. PALMER and J. F. PALMER, of Auburn, N. Y., assignor to S. W. PALMER, N. PALMER, and JOHN PATTY, of said Auburn.—*Improved Clothes Frame.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, hinging the arms of a clothes frame to the sliding hubs by means of the pins *d*, which are supported by the open lugs C, when the said arms are constructed and the several parts arranged substantially in the manner and for the purpose described.

We also claim, in combination with the shaft and its grooves, the sliding catch ring F with its spring *h* and projection *i*, for retaining the frame in its position, substantially as described.

We also claim, in combination with the central post or shaft and sliding frame, the hoisting apparatus, consisting of the clutch rings *k* and *m* with their springs *o*, lever *p*, and link *q*, substantially in the manner and for the purpose described.

No. 25,869.—CONRAD RODER, of Ceralvo, Ky., assignor to Himself and J. T. ILER, of said Ceralvo.—*Improvement in Fancy Looms.*—Patent dated October 18, 1859.—This invention consists in the construction and arrangement of the hooks from which the harnesses are suspended, in combination with an adjustable bed plate and elevating sash, by means of which said hooks are rendered self-adjusting with reference to said sash, without the aid of springs or catches of any kind.



*Claim.*—The combination and arrangement of the double catch hooks  $h h^1$ , adjustable guide plate  $j$ , the sash  $E$  and  $J$ , with the lifting bar  $k$ , in the manner and for the purpose described.

No. 25,870.—WILLIAM DAVID SLOAN, of New York, N. Y., assignor to A. B. CHAPMAN, of said New York.—*Improved Clasp for Skeleton Skirts.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The clasp  $c$  for uniting the tapes or galloons to the hoops in skeleton skirts; said clasp being formed with a narrow ribbed or V shape back piece 2, for the purpose specified.

No. 25,871.—JAMES SPEERS, of West Manchester, Pa., assignor to Himself and ALEXANDER POSTLEY and JOHN WIBLE, of Allegheny county, Pa.—*Improved Paddle Wheel.*—Patent dated October 18, 1859.—This invention consists in arranging two or more buckets or floats of paddle wheels of steamboats, ships, and other vessels, in a zigzag position; said buckets or floats being twisted or curved for the purpose of giving to each bucket or float, and to each series of buckets or floats, a double action, viz: to throw the water from right to left and toward each series of buckets, thereby giving to the wheel or wheels a sculling action.

*Claim.*—The arrangement of the flanges  $a$  and  $a^1$ , the arms  $b$  with points  $x$ , the braces  $c$ , and floats  $d$ , when used for the purpose of constructing a propeller, substantially in the manner set forth.

No. 25,872.—STEPHEN F. VAN HAGEN, of Albany, N. Y., assignor to GEORGE KILBOURN, of said Albany.—*Improvement in Banjos.*—Patent dated October 18, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination in one instrument of the banjo parchment covered open body, with the neck and fretted finger board of the guitar; the thumb string of the banjo being added to the usual strings of the guitar, substantially in the manner and for the purpose set forth.

I also claim the formation of the front part of the body of the instrument, of an acute oval or lancet form, in the manner and for the purpose set forth.

No. 25,873.—BENJAMIN F. AVERY, of Louisville, Ky.—*Improvement in Moulding Ploughs.*—Patent dated October 25, 1859.—This invention consists in constructing the pattern for the short landside of the plough, patented by this inventor January 8, 1856, in two parts, so that they may be drawn at opposite angles from each other, and in this manner forming the holes or depressions and ridges or depressed squares upon the outer surface of the short landside.

*Claim.*—The peculiar construction of the patterns  $B C$  of the short landside, as set forth, so that they may be drawn at opposite angles from each other, for the purpose and in the manner specified.

No. 25,874.—G. H. BABCOCK, of Westerly, R. I.—*Improved Bronzing Machine.*—Patent dated October 25, 1859.

The inventor says: I *claim*, first, in combination with mechanism for conveying the sheet, the use of rubbing cylinder  $E$  and brush  $F$ , one or more of each, for the purposes, and operating substantially in the manner described.

Second. I claim the use of one or more stationary rubbers  $H$  or their equivalents, for the purpose specified.

Third. I claim the wires  $x x x x$ , or their equivalents, for freeing the brush from the powder.

Fourth. I claim constructing the griper, in the manner described, whereby I obtain the advantages set forth.

Fifth. I claim the rubbing and brushing cylinders in a case, for the purpose of retaining the powder and preventing waste.

No. 25,875.—JOHN W. BARCROFT, of Friendship, Va.—*Improvement in Ditching Machines.* Patent dated October 26, 1859.—This invention consists in a combination of a revolving wheel with buckets or scoops set in rectangular form, with a stationary circular guard and an adjustable scraper; also in having the buckets or scoops hung on an axis at the centre of their length and adjustable at both ends; and also in providing sharp cutters projecting at right angles from the centre of the scoop.

The inventor says: I *claim*, first, the combination of a revolving wheel  $B^2$  having its buckets or scoops  $C$  set tangentially, with a stationary circular guard  $I$  and an adjustable scraper  $G$ , substantially as and for the purpose set forth.

Second. Having the buckets or scoops hung on axis  $D$  at the centre of their length, and adjustable at both ends, substantially as and for the purposes set forth.

Third. Providing sharp cutters  $a$  projecting at right angles from the centre of the scoop, substantially as and for the purpose set forth.

No. 25,876.—WILLIAM T. BARNES, of Buffalo, N. Y.—*Improvement in Sewing Machines.*



Patent dated October 25, 1859.—This invention consists in the arrangement and peculiarities of devices named in the claim.

*Claim.*—The arrangement of the threaded elastic looper H, as constructed, with a receiving and transferring spring G, when the two are secured on opposite sides of the needle, and operated to and from the needle by means of levers E and F, connecting rods D and D<sup>1</sup>, and frames C C, the several parts being combined and connected substantially as and for the purpose specified.

No. 25,877.—MELLEN BATTEL, of Albany, N. Y.—*Improvement in Coal Sifters.*—Patent dated October 25, 1859.—This invention consists in the employment in the vertical section of an upright or vertical shaft turning on a pivot below, fastened to a cross bar attached to the side of the box A. On the top of said vertical shaft is a bevel or mitre wheel, together with four arms, upon which the sieve revolves. Connected with this shaft is a horizontal shaft and bevel wheel working into the bevel on the upright shaft hanging on a cross bar fastened to the outside shell of the box, on the end of the horizontal shaft is a crank for the purpose of putting the sieve in motion.

*Claim.*—The stationary ploughs and brushes and rubbers in combination with the horizontal revolving sieve, as described and set forth and made to operate.

No. 25,878.—C. F. E. BLAICH, of Elyria, Ohio.—*Improved Apparatus for Operating Rudders.*—Patent dated October 25, 1859.—This invention consists in the arrangement of one or more spiral ribs on the rudder shaft, and having a sliding tube fitted to said ribs by means of spiral grooves formed in its eye, said tube having ears and being dovetailed to a plate on the stern of the ship so as to slide up and down on said plate and on the shaft within a groove or space provided in the back of the rudder.

*Claim.*—The combination of the rudder B C, spiral ribs D, and spirally grooved sliding tube E, substantially in the manner and for the purpose set forth.

No. 25,879.—C. C. BOMBERGER, of West Carlisle, Ohio.—*Improved Method of Elevating Water.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangements of the air tight boxes C F, connected by the pipe G, and communicating respectively with the pipes A D, in connection with the open vessel E, tube H, and the valves *b o* placed in the tube H and pipe P, and operated automatically as shown, or in an equivalent way, for the purpose set forth.

No. 25,880.—W. NEWTON BROWN, of New York, N. Y.—*Improvement in Mechanism for Converting Rotary into Reciprocating Motion.*—Patent dated October 25, 1859.—This invention consists in the use of an oblong swivelled ring, in combination with the hub of a rock shaft and cam of a rotating axis passing through the opening of the oblong ring and hub, so that as the cam is rotated the upper and lower sides of the ring are alternately depressed and raised; as the axis of the ring is supported in car pieces on the end of the hub it allows of a swivel like motion in the sides of the ring to accommodate itself to the throw of the cam, which pressing either up or down, as the position of the cam may indicate, causes the hub of the rock shaft to rock on its axis, and thus through an arm attached to its upper or lower sides, communicate a reciprocating motion to any desired piece of mechanism.

*Claim.*—Rock shaft D, having a hollow hub F, substantially as described, in combination with the oblong ring H, and rotating cam J, the said parts being made to operate in the manner set forth and for the purposes specified.

No. 25,881.—MARTIN I. BUTLER, of Nashville, Tenn.—*Improved Floating Safety Cabins.* Patent dated October 25, 1859.—The inventor says: In the operation of this invention, in the case of a fire in the lower hold of the ship, the water can be let into the hold by a person on the deck of the ship, withdrawing the plugs from the holes in the bottom. By the operation of the floating cabin the crew and passengers can be saved in case of a vessel sinking from springing a leak. This floating cabin is navigated by the propeller shown in the engravings.

*Claim.*—The arrangement of the detached boat shaped cabin A, gate propeller I J K M, jointed hinged straps D D, wedge E, rudder F, windlass G, ordinary vessel O, valve S R Q, passage P, and stairs N, all in the manner and for the purpose set forth.

No. 25,882.—MORTIMER M. CAMP, of New Haven, Conn.—*Improved Surf Life Boat.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the water ballast chamber D, with the aperture E, and air pipe H, for the purpose of ballasting the boat when she enters the water, and of lightening it when she touches and reaches the shore, as set forth.

Second. The combination of the valve F with the ballast chamber D and aperture E, for the purpose specified.



Third. The combination of the floors C and G, for the purpose of forming the air chamber E beneath the working floor and between the two floors, as described.

Fourth. The combination of the divisions I I, with the working floor G, to form receptacles between said divisions and the sides of the boat, as and for the purpose set forth.

No. 25,883.—JOHN R. CANNON, of New Albany, Ind.—*Improvement in the Construction of Glass Coffins*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing a coffin of glass, the body of which is provided with a groove  $x x$ , and the lid with a flange  $a a$  and a pump B, the lid being secured to the body by means of metallic bands D D, substantially as and for the purpose specified.

No. 25,884.—M. H. COLLINS, of Chelsea, Mass.—*Improvement in Machines for Bolting Flour, &c.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a curved frame, in which are placed one or more bolting sieves  $d q$ , this frame being open at each end for the discharge of bran or other coarse material, substantially as and for the purposes set forth.

Second. The combination with the curved frame and sieves of a corrugated rubber  $t$ , the frame and sieves having a vibrating motion in the path of a circle, while the rubber remains stationary, substantially as and for the purposes set forth.

Third. The arrangement of sieves of different sized meshes, and having the same vibrating motion on the circular vibrating frame, and in the relation shown to a fan wheel, which causes a draft at the back of the machine, substantially as and for the purposes set forth.

No. 25,885.—CHAUNCEY O. CROSBY, of New Haven, Conn.—*Improvement in Sewing Machines*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the rotary bobbin case H (armed with the inclined loop spreader  $H^1$ , and supporting on a pin  $w$ , in its centre, the bobbin G which holds one of the threads) in combination with the loop detainer  $x$ , when the whole is constructed and arranged and made to operate substantially as and by the means described.

Second. I claim the method of detaining the loop of the needle thread after the loop has passed the full diameter of the bobbin case, by the projection and inclined plane terminating in a point on the buffer.

Third. I claim the frame, or form composed of the curved bar O, bar R, and foot  $k$ , in combination with the bolt  $D^1$ , elbow shaped lever  $i$ , (carrying the pieces  $g$ ,) and friction cap  $a^1$ , when the whole is constructed, arranged, connected, and made to feed the material, substantially as described.

No. 25,886.—JAMES CUMMINGS, of Boston, Mass.—*Improvement in Drilling Machines*.—Patent dated October 25, 1859.—This invention consists in the employment of two interlocking slides, moved by two right and left screws, in combination with four gear wheels, a transverse shaft, a horizontal bed plate, and a vertical drill; also, in the manner of allowing vertical play in the connecting rod between the swivel of the drill and the weighted or counterpoised lever, whereby, at every elevation of the drill by the counterpoised lever, said rod rises from its seat and allows oil to flow into the same.

The inventor says: I *claim* the arrangement of the notched interlocking slides H  $H^1$ , right and left screws G G, pinions E E  $d d$ , shaft D, bed plate C I, and upright drill J, all for operation together in the manner and for the purpose described.

Second. The combination of the drill arbor J, hollow swivel oiling cap K L, independently rising and falling rod  $j$ , and disk  $k$ , attached in the manner and for the purpose described.

No. 25,887.—R. C. CYPHERS, of Milledgeville, Ga.—*Improved Washing Machine*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the elastic suspended concave B, with slats  $f$ , pivoted to elastic strips  $g$ , in combination with the jointed spring rubber C, substantially as and for the purpose described.

Second. In combination with the jointed spring rubber C, I claim the employment of a flexible band or rope  $m$ , for the purpose of securing the clothes to the rubber, substantially as specified.

Third. The arrangement of the central slat  $f^1$ , in combination with the elastic suspended concave B and grooves  $n$ , substantially as and for the purpose set forth.

No. 25,888.—HORACE L. EMERY, of Albany, N. Y.—*Improvement in Harvesters*.—Patent dated October 25, 1859.—This invention consists in attaching a small adjustable wheel to the outer end of the cutter bar of mowing machines.

The inventor says: I *claim*, first, combining with the cutter bar an adjustable arm or lever,



provided with a roller or other means of sliding easily upon the ground, for the purpose of sustaining the cutter bar at any required distance from the ground, or allowing it to rest upon the ground at pleasure, for the purposes set forth.

Second. I also claim placing said arm directly in rear of the shoe, in order that it may be prevented by said shoe from clogging, as described.

Third. I also claim connecting said arm by a rod along the back of the cutter bar with a lever near the frame of the machine, so that the attendant may elevate and depress the cutter bar at pleasure.

No. 25,889.—GEORGE M. EVANS, of Pittsburg, Pa.—*Improvement in Seed Planters*.—Patent dated October 25, 1859.—This invention consists in the combination and arrangement of ratchets, ratchet wheels, springs, cranks, and connecting rods, with the hoppers, seed drums, pulleys, endless conveyor, and plough.

*Claim*.—The combination and arrangement of the seed drums *x*, elevators *e* on the belt *f*, with the compartments 1 2 3 of hopper *d*, the cranks *i* and *j*, the connecting rods *k*, the ratchet wheels *g* B and B<sup>1</sup>, and wheel *b*<sup>1</sup>, as described and for the purpose set forth.

No. 25,890.—H. B. FAY, of New York, N. Y.—*Improvement in Coffee Pots*.—Patent dated October 25, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The arrangement of the tube *d* in combination with the adjustable double strainer D that is arranged in a pot A between the spout and the liquid, substantially as and for the purpose specified.

No. 25,891.—FELIX A. FINN, of New York, N. Y.—*Improvement in Studs and Sleeve Fasteners*.—Patent dated October 25, 1859.—This invention consists of a mode of fastening buttons to shirt sleeves and other like articles of dress, and in the construction thereof.

The inventor says: I *claim*, first, the swivel bar and arm, arranged and operating as specified, for the purpose set forth.

I also claim, in combination therewith, the dovetail stud *m*, to confine the front end of the arm *f* when closed upon it, as and for the purposes set forth.

I also claim the projecting screw *c* against which the spring acts, as described.

I also claim, in combination with the above devices, the spring, constructed and arranged as set forth.

No. 25,892.—FREDERICK O. DEGENER, of New York, N. Y.—*Improved Automatic Fan*.—Patent dated October 25, 1859.—This invention consists in the peculiar construction and combination of an automaton fan, which is arranged in such a manner that part of the machine will set the air in motion and thus cause a current of air which will be sent or thrown in different directions by another movable part or parts of the machine or fan.

*Claim*.—The arrangement and combination of a rotary fan blower, with the hollow vibrating or distributing fan, for the purpose of producing a current of air, and causing it to be distributed, substantially as and for the purpose specified.

No. 25,893.—B. WELLS DUNKLEE, of Boston, Mass.—*Improved Valve for Stoves, Furnaces, &c.*—Patent dated October 25, 1859.—This invention has reference to a double action valve and damper, for regulating the entrance and exclusion of air from the smoke flue, by which the quantity of air admitted into the stove is regulated, and also the draft of the fire.

*Claim*.—The side plates *a c* projecting from and connected with the hoe valve *b*, as related to each other, and in respect to the openings *h h* and flue F, substantially in manner and for the purpose specified.

No. 25,894.—WILLIAM FRIDLEY and FREDERICK CORNMAN, of Carlisle, Pa.—*Improvement in Preserve Cans*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of a perforated cover B in combination with a gasket C and mouth *b b*, as shown and described, so that the gasket constitutes virtually a portion of the cover, and an index to the condition of the contents of the vessel.

No. 25,895.—W. C. GEER, of Rockville, Conn.—*Improvement in Machines for Cleaning and Opening Flock*.—Patent dated October 25, 1859.—This invention consists in the employment of a toothed cylinder and concave fan and a cone provided with projecting toothed ledges and fitted within a corresponding shaped shell, also provided with teeth.

*Claim*.—The employment or use of a revolving cone or cylinder C, provided with toothed lugs *a*, and placed within a correspondingly shaped toothed shell B, in combination with the toothed cylinder I, concave J, and fan G, arranged for joint operation.

No. 25,896.—DANIEL GORDON, of Evansville, Ind.—*Improvement in Implements for Boring Earth*.—Patent dated October 25, 1859.—The peculiarity of this invention consists in the form and arrangement of the parts of the lower portion of the boring cylinder.



The inventor says: I *claim* arranging the blades *c* on the convex surface of the bottom of the auger, and extending to the cut beyond the periphery, as represented.

I also claim arranging the valves in the concave sides of the bottom of the auger, as set forth.

No. 25,897.—DANIEL HESS, of West Union, Iowa.—*Improvement in Machinery for Cleaning Cotton*.—Patent dated October 25, 1859.—In the operation of this invention the duster is made to stand in close proximity to the cotton gin, the flues which convey the cotton from the gin carrying it up against the bolting cloth at *x x*. The bolting cloth being set in motion by turning the rollers *B B*, it is made to revolve, while at the same time the blast from the cotton gin drives the cotton with a force against the bolting cloth.

The inventor says: I *claim*, first, the curved metallic division *F*, in combination with the front rollers *B B*, and the bolting cloth, substantially in the manner and for the purpose set forth.

Second. The combination of the fan *C*, and case *E*, with the back rollers *B B*, and the bolting cloth *D*, for the purpose of cleaning the cloth from fibres of cotton, substantially as specified.

No. 25,898.—SILAS HEWIT, of Seneca Falls, N. Y.—*Improvement in Pumps*.—Patent dated October 25, 1859.—The inventor says: To prepare the frame of the plunger *I*<sup>3</sup>, I make it just to fill the cylinder, and so that it will work freely without friction, I then turn in a groove to receive the packing *H* to any desired thickness; having done this, I sink another groove still deeper, this last groove serves as a chamber for the water which enters through the holes *H*<sup>2</sup>, formed in the sides of the frame *I*<sup>3</sup>, for the purpose of pressing and expanding the packing *H* out against the cylinder, as the piston or plunger rises, thereby forming a complete packing.

*Claim*.—The plunger or bucket when constructed in the manner and for the purposes set forth.

No. 25,899.—ISAAC HOSKINS and JOSIAH HOSKINS, of Wilmington, Ohio.—*Improvement in Ditching and Grading Machines*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* making the side wheel adjustable so as to raise and lower the side of the frame, to bevel or adjust it, as desired.

We claim a bell made of bars, with projections or flanges at each end arranged to travel under cleats on the sides of the frame or trough, substantially as described.

No. 25,900.—ANTHONY ISKE and JACOB TEUFEL, of Lancaster, Pa.—*Improved Door Latch and Lock*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement and combination of the curved swivel lever *D*, bolt *H*, with its peg *f* and projecting end, to answer both for turning, pulling, and pushing, as shown, together with the revolving lever *s* for operating the lock, when the several parts are made for the purpose, and in the manner described or specified.

No. 25,901.—EDWARD H. JONES, of Albany, N. Y., and ROBERT STEVENSON, of Schenectady, N. Y.—*Improvement in Furnaces of Steam Boilers*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the hopper shaped grate box *B D*, so constructed as to be adjustable in height, combined with the grate *E E*, having means attached for rocking or agitating them in their relation to each other and to the boiler fire box *A*, in the manner and for the purpose set forth.

No. 25,902.—SAMUEL F. JONES, of St. Paul, Ind.—*Improvement in Mole Ploughs*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of the ball *a*, not generally, but when said ball is secured in such a manner, upon the top of the rear of the mole, that it will revolve when the mole is in motion for the purpose of arching the top of the drain and closing an opening left by the coulter, substantially as and for the purpose set forth.

Second. The combination of the nose *E*, mole *D*, ball *a*, rod *d*, and wheel *F*, when the same are used for the purpose of forming and arching the drain and closing the opening of the coulter, substantially as and for the purpose set forth.

No. 25,903.—LOUIS KOCH, of New York, N. Y.—*Improvement in Moving Tread Power*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the described mechanism, or its equivalent, when operated by the feet of man or animal in stepping on the ends of bands or cords during the act of walking.



Second. I claim using the weight of man or animal in stepping on bands, or their equivalents, as a cause of resistance against the propelling of the machine, and giving motion by the walking of said man or animal to said mechanism, or its equivalent, independently of the motion of the wheels on which the whole mechanism is supported, substantially as described.

No. 25,904.—CHARLES N. LOVEJOY, of Columbia, S. C.—*Improvement in Cotton Presses.*—Patent dated October 25, 1859.—This invention consists of the follower I, connected to toggle levers by block J, so as to be slid therefrom and from the cotton box when raised and made self-parallel by cords V, operated by windlass T and Z to adjust this parallel, and in guides Y for effectually retaining the chains in grooves of fusee wheels.

*Claim.*—The guides Y for guiding the chains W and X upon fusee wheels S, and the follower I, block J, and windlass T and Z, arranged and operated with each other and in the manner as described and for the purposes fully set forth.

No. 25,905.—JOHN McNEVEN, of Brooklyn, N. Y.—*Improvement in Skirt Supporters.*—Patent dated October 25, 1859.—This invention consists in a certain novel form and arrangement of short bows with a semi-circular bow of cane, whalebone, metal, or other material in which stiffness, flexibility, and elasticity are suitably combined, covered with suitable material and furnished with a waistband and strings; the whole used as a supporter for skirts.

*Claim.*—The described dress supporter consisting of a hoop A and stiffeners C branching off from said hoop A, the waistband G, and tapes J J, when the same are arranged and combined and applied to the body, substantially in the manner and for the purposes described.

No. 25,906.—L. H. MILLER, of Baltimore, Md.—*Improvement in Doors for Iron Safes.*—Patent dated October 25, 1859.—This invention is designed to render the joint or crevices between the side, top, and bottom of the door, water, dust, steam, fire, smoke, and powder proof, as far as practicable, without the use of packing, and at the same time avoid the inconveniences from bind between the sides, top, and bottom of the door and front plate.

*Claim.*—The combination of the tongue *f*, groove *d*, flanges *b b<sup>1</sup> b<sup>2</sup> b<sup>3</sup>*, V shaped mouldings *c c*, and V shaped grooves *e e*, in the construction of a fireproof safe or bank vault, substantially in the manner and for the purpose described.

No. 25,907.—THOMAS MOORE, of Minneapolis, Minn.—*Improved Apparatus for Generating Steam.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, in combination with a steam-engine or other apparatus in which steam is used and the boiler which supplies it, of a system or arrangement of one or more condensers and heaters, with connecting pipes and a tank, whereby the exhaust steam, after passing along a pipe running through the boiler itself, is condensed by delivering up its remaining latent heat to water, which, after having been previously condensed in the same manner, is on its way back to the boiler, and whereby the water obtained by the condensation of the exhaust steam is heated on its way back to the boiler and partly converted into steam again by the combined agencies of the latent heat it absorbs from the escaping steam, and by the heat it absorbs from the escaping waste production of combustion, substantially as described.

No. 25,908.—JAMES W. NEFF, of Sacramento, Cal.—*Improvement in Wind Mills.*—Patent dated October 25, 1859.—The inventor says: My invention allows the sails to regulate themselves by the pressure of the wind, for the harder it blows the further open the sails become, so that my windmill will make the same number of revolutions in a high or low wind.

*Claim.*—The arrangement of the sails D, arms or spokes G, and hub E, as described, and placing them in rear of the spiral spring A and flange B and connecting flange B<sup>1</sup>, with sails D, by rods F; the whole operating as described and for the purposes set forth.

No. 25,909.—GEORGE NEILSON, of Boston, Mass.—*Improvement in Coffee Pots.*—Patent dated October 25, 1859.—Within the vessel A there is a deep filtering biggin or long box B, whose bottom and sides are foraminous, as shown at *x y*; the biggin is supported by the vessel A by means of a lip *f* extending from the upper edge of the biggin and resting upon a corresponding lip *g* projecting from the inner surface of the upper part of the vessel A; a foraminous cap or strainer C fits closely upon the top of vessel A, or within the same.

The inventor says: I claim the reversible cafetiere, as composed of the boiler A, the filtering biggin B, the foraminous cap or strainer C, and the condensor or coffee pot D, having a spout *h* and cap *i*, the whole being arranged in manner and so as to operate as explained.

I also claim the combination of the air and tell-tale pipe *c* with the boiling vessel A, the condensing vessel D, the biggin B, and the strainer or cap C, the object or purposes of the said pipe being as explained.



No. 25,910.—ADRIAN V. B. ORR, of Lancaster, Pa.—*Improvement in Nail Machines.*—Patent dated October 25, 1859.—This invention consists in so arranging and constructing the machine that the fibres of the iron, which are necessarily separated in the act of cutting the nail from the plate, shall be again condensed together by the action of the cutting die in its descent.

The inventor says: I *claim*, first, combining in a simple pair of dies, constructed as described, the operation of cutting, pressing, and gripping the nail or spike substantially as specified.

Second. I claim the slide point *g*, operating as described, in combination with the slide *h*, arranged as specified and for the purpose set forth.

No. 25,911.—GEORGE F. OUTTEN, of Norfolk, Va.—*Improvement in Car Brakes.*—Patent dated October 25, 1859.—The inventor says: The brake itself is simply a lever *G*, with a long handle or continuation *F*; attached to the upper end of this is the chain *I*, running over the irons placed between the ratchet wheels *B B*, for that purpose; this chain *I* is then attached to the spring end of the slide plate *H*; by means of this slide plate direct motion is given to the brake lever *G*.

*Claim.*—The combination and arrangement of slide *H*, pawl *g*, spring *a*, ratchet wheels *B* and chain *I*, levers *d* and *b*, and spring *h*, operating automatically or by hand, as may be desired, as set forth and described.

No. 25,912.—ELHANAN PUFFER, of Oxford, N. Y.—*Improved Apparatus for Raising Water from Wells, &c.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* producing and controlling the movements of the windlass roller *A*, upon and with its actuating shaft *B*, in such a manner as to prevent the necessity of ever imparting a reverse rotary movement to the windlass shaft whilst operating said apparatus, and by means substantially the same as those represented and described.

I also claim combining the valve *j*, which closes the discharging aperture in the bottom of the bucket *C*, with the inner end of the lever *h*, which is pivoted to the after edge of the mouth of said bucket, when a rod *l*, or the equivalent of the same, is so situated within the curb as to be taken hold of by the hooked-shaped outer end of said lever just before the bucket reaches its highest position, for the purpose of causing the further upward movement of said bucket to throw forward its bottom and discharge its contents, substantially as set forth.

No. 25,913.—T. J. W. ROBERTSON, of New York, N. Y.—*Improvement in Sewing Machines.*—Patent dated October 25, 1859.—When the under needle has reached the position shown in Fig. 3 the plug *Q* advances, as shown also in Fig. 3; as the needle *C* again descends, the under needle *N* retreats, and the projection *o* on the carrier *M* coming in contact with the plug *Q* causes the needle *N* to cross the path of the vertical needle *C* so as to open the loop of the under thread; as the needle *N* continues to recede, the carrier *M* slips off the plug *Q*, and is carried back to its original position by the spring *P*.

*Claim.*—The arrangement and combination of the carrier *M*, spring plug *Q*, and vibrating arm *L*, substantially for the purposes shown and described.

No. 25,914.—ALFRED ROSE, of Penn Yan, N. Y.—*Improved Churn Dasher.*—Patent dated October 25, 1859.—*A* is the centre piece with a hole in the centre to receive the dasher staff; the outer ends are made into breakers, oval in shape, or with the upper and lower edges nearly sharp as a cutting instrument; there are two parallel holes bored horizontally through it in which to put rods that hold the other breakers.

*Claim.*—The churn dasher, when made in the manner substantially as specified and set forth.

No. 25,915.—ALBERT W. ROBERTS, of Hartford, Conn.—*Improved Disengaging Hook.*—Patent dated October 25, 1859.—These improvements consist in its construction, management, and adaptation for attaching and detaching a chain or cable to or from a boat, &c., when necessary, by means of a jointed ring, hook link, crank, or lock pin, and trip lever; said hook link being provided with a bearer on one side thereof, which rests on the collar of the crank or lock pin, all combined to produce a more sure and speedy detachment of the crank or lock pin from the lock when the lever is pulled.

*Claim.*—As a new article of manufacture a hook, consisting of a hook link *E*, with bearer *G* on its side, in combination with the jointed ring *A*, lever *D*, crank pin *c*<sup>1</sup>, and collar *c*, substantially as described.

No. 25,916.—F. M. ROBINSON, of Conneautville, Pa.—*Improvement in Mills for Crushing Sugar Cane.*—Patent dated October 25, 1859.—This invention relates to certain improvements in that class of mills in which three rollers are employed, the first or main roller being somewhat further from the first of the secondary rollers than from the other, with a scraper



between the two last named rollers, which is so arranged that the cane has to pass from the first pair of rollers under the main roller, and between the second pair of rollers.

*Claim.*—The combination of flange journal boxes D, with the flanged sockets *e*, in connection with the flanges *g h* of the above parts, all as and for the purpose shown and described.

No. 25,917.—SAMUEL SAMUELS, of Brooklyn, N. Y.—*Improvement in Reefing Fore and Aft Sails.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* supporting the rolling boom in two bearings; one of which is in a truss connected with the mast by a hoop or its equivalent, and the other in a ring which is held by the lift and braces, substantially as specified.

And I further claim the combination with the rolling boom of the gipsey purchase as described.

No. 25,918.—IRVIN B. SAWYER and T. ALSOP, of Springfield, Ill.—*Improvement in Sewing Machines.*—Patent dated October 25, 1859.—The wheel F has cam grooves upon each side and upon its edge, and is fastened upon a shaft F<sup>1</sup>; upon this is fastened the shaft wheel H, by which the machine is moved. Upon the same shaft is a cam *g*, which, in turning, raises the lever *c* and the rod *d*<sup>1</sup>, turning the ratchet wheel *f* by the pawl *e*, from which the motion is communicated to the cylinders A and B.

The end of the shaft carrying the crank *e*<sup>1</sup> has bearing *t* in the plate *l*<sup>1</sup>, the bearing for the other end is fast to the plate D at a point vertical with the point of the needle, and on a level with the bottom of the shuttle race, the hook *q* lying close to the plate D, so that its point, when moved forward, shall pass close to the needle.

*Claim.*—The use of the hook *q*, formed and moving substantially as described, combined with the shuttle and needle, substantially as described and for the purpose specified.

No. 25,919.—THOMAS S. SEABURY, of Stony Brook, N. Y., assignor to R. B. GORSUCH, of New York city.—*Improved Piano Forte Action.*—Patent dated October 25, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, pivoting the hammer but to a post, or its equivalent, carried by its respective key, substantially as specified, for the purpose of enabling it to be drawn from the instrument along with the key.

Second. The suspended jack or fly lever E, attached to the hammer but, and provided with a notch *e*, operating in combination with stationary rail F, substantially as described.

Third. The arrangement of the regulating screw in the suspended jack or fly lever, in combination with the inclined plane *f* on the post erected upon the key, to carry the hammer substantially as described; but I wish to be understood as not claiming, generally, either the placing of the regulating screw in the jack, or the employment of an inclined plane or wedge, to act in combination with an inclined or wedge like surface.

Fourth. The check H applied to the bottom of the key, and operated in combination with the suspended jack or fly lever, substantially as described.

No. 25,920.—ISAAC M. SINGER, of New York, N. Y.—*Improvement in Carriages.*—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement, in the main body of the carriage, of the low seats, in combination with the elevated seats, arranged in manner substantially as described and for the purposes set forth.

I also claim, in combination with the back, depressed and elevated seats, as described, the arrangement of the hinged partition to answer the threefold purpose of a step to get to the elevated back seats, and back to the middle depressed seat, and to separate the feet of persons sitting on the elevated seats from the persons sitting on the depressed seats.

I also claim, in combination with the front elevated seats, as described, the arrangement of hinged step leading to the elevated seats, together with its dirt-flap, as described, for the threefold purpose of a step to the elevated seats, a dirt protector, and of a seat in case of necessity.

I also claim the arrangement of the boot for baggage in the space between the bottom and the front elevated seats, with doors at the sides, as described, thus placing the weight below, and concentrating it on the front axle, as described.

I also claim the combination with the main body of the carriage, the placing the coupe at the rear thereof, and communicating therewith by a door-way through the back, as described.

I also claim depressing the coupe at the back of the main body, that the bottom of both may extend below and leave the required open space for the rear axle and its connections; and that the top of the coupe may form a foot board to the seats at the back edge of the main body, as described.

I also claim, in combination with the coupe, the open spaces under the back elevated seats of the main body opening into the coupe, as described and for the purposes set forth.



No. 25,921.—GEORGE A. STONE, of Roxbury, Mass.—*Improvement in Thrust Bearings for Rotating Shafts*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of these four things, namely: a collar or collars on the shaft; washers, provided with grooves on their faces, extending from their outer to their inner edges, made substantially as described; a reservoir of oil or other lubricating material; and a pillow block or stationary resistance; all being and acting in combination, as described, and for the purposes set forth.

Second. In combination with washers provided with grooves on their faces, a reservoir of lubricating material, a pillow block or its equivalent, and a collar on a shaft, all as specified in my first claim, I claim grooves extending from face to face of the washers, made substantially in the manner and serving the purposes described.

No. 25,922.—F. SWIFT, of Hudson, Mich.—*Improvement in Grain Separators*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment or use of a supplemental shoe C placed within the shoe B, provided with screws *c*, and having an independent longitudinal shake movement given it, while the shoe B, with its screens *b*, has the usual lateral shake movement imparted to it, substantially as and for the purpose set forth.

No. 25,923.—PETER VAN ANTWERP, of New York, N. Y.—*Improvement in Keys for Locks*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing the stems of keys with a hole near the end, instead of the usual permanent bow or ring handle, and to be fitted loosely to the usual ring for connecting a series of keys, and in such manner, substantially as described, that said connecting ring shall answer the further purpose of the usual bow or fixed ring for turning the keys when inserted in the lock, as set forth.

No. 25,924.—JOHN L. WHIPPLE, of Detroit, Mich.—*Improved Spring Bed*.—Patent dated October 25, 1859.—This invention consists in constructing and arranging the several parts of the bedstead in a peculiar form and position, by which the slats are sustained in their proper relative connection, while they have the yielding elasticity required for their easy play upward and downward.

*Claim*.—The general arrangement of the slat S, spring W, and the strap L, when constructed in the form described and combined for the purpose in the position, as set forth.

No. 25,925.—JOHN L. WENTWORTH, of Spread Eagle, Pa.—*Improvement in Field Fences*.—Patent dated October 25, 1859.—This invention consists in the peculiar manner of constructing the sections of a fence.

*Claim*.—Constructing each section of a fence of the two end posts A and B, the upper and lower longitudinal rails C and D, any suitable number of intermediate rails E and F, and the vertical bar G, when the several parts are arranged in respect to each other, substantially as and for the purpose set forth.

No. 25,926.—FRANKLIN WESSON and NATHAN S. HARRINGTON, of Worcester, Mass.—*Improvement in Breech Loading Fire-Arms*.—Patent dated October 25, 1859.—This improvement relates to that class of breech loaders in which the breech of the barrel is elevated to receive the charge, and in which the cartridge used is made with a projecting flange around its base.

The inventors say: We *claim*, first, the arrangement of the mechanism for locking and unlocking the barrel and the arrangement of the trigger, substantially as described.

Second. We also claim in combination with the locking and unlocking mechanism the spring *k*, arranged substantially as described for elevating the breech.

Third. We claim in combination with the barrel the wedge shaped recess in the recoil plate, arranged substantially as described for the purpose set forth.

No. 25,927.—J. S. VOORHEIS, of Catlettsburg, Ky.—*Improved Portable Shelves*.—Patent dated October 25, 1859.—This invention consists in the manner of folding and removing shelves, &c., of stores, street stands, book cases, &c., for security from thieves and fire.

*Claim*.—Constructing portable box shelving for stores, book cases, and all similar purposes, in the manner described, and for the purposes set forth.

No. 25,928.—DUTEE WILCOX, of Providence, R. I.—*Improvement in Shirt Studs*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The described new or improved mode of making a shirt stud or button, viz: of the two parts or plates A B, and the two hooks or curved plates C D, constructed and applied, or arranged together, substantially in the manner and to operate as described.



No. 25,929.—JOSEPH ADAMS, of Cleveland, Ohio, assignor to Himself and B. BARKER, of said Cleveland.—*Improvement in Cannon*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the use and application of a piston for the purpose of loading, cleaning, and cooling a cannon, the stem or end G of which passes through the breech or rear end of the gun, and is attached to a head or metallic piston, the circumference of which is equal to that of the bore of the cannon, and is made to fit the same exactly, and which piston head, when drawn back, rests upon the main shoulder or substance of the breech at the point where the rod G connects therewith, and is of sufficient length to cover and serve as a valve to close the lateral opening at the breech end of the cannon, through which water is admitted to fill the bore of the gun when said piston is forced forward towards the muzzle, and which piston plays forward and backward, the entire length of the bore of the gun, so as to protrude sufficiently at the muzzle when forced forward, thus carrying out any substance of the exhausted cartridge after firing, and to which piston head or bulb the new cartridge is attached and drawn back to the breech or but of the gun by the force applied to said rod, and in which condition the gun is loaded and ready to be again discharged.

Second. I claim the construction and employment of a lateral opening from the main chamber or bore of the gun, either passing through the breech pin or otherwise, at or near the rear end thereof, and where the same will be closed and covered by the piston head, when the same is fully drawn back into, (or by means of a tube or pipe connecting with a water sack or vessel,) and by means of which arrangement water is admitted and drawn into the gun by the same force which carries the piston forward to receive the charge at the muzzle and is returned to the vessel again by the same force which carries in the charge, thus washing and cooling the gun at every discharge, without any other movement than that necessarily employed in the act of loading alone.

No. 25,930.—M. C. CRONK, of Auburn, N. Y., assignor to WILLIAM BOYNTON, Jr., and ALBERT H. GOSS, of said Auburn.—*Improved Mode of Feeding Fuel to the Fire Boxes of Cooking Stoves*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, in combination with a stationary upper fire box, a rocking or swinging fire box underneath it, having a flange or cut off *c* connected thereto, substantially as described.

I also claim in combination with the rocking or swinging fire box and cut off a rising and falling grate H, substantially as described.

I also claim in combination with the rocking or swinging fire box and rising and falling grate a single rod or shaft with its cams for operating both, substantially as described.

No. 25,931.—D. W. C. FARRINGTON, of Lowell, Mass., assignor to TUTTLE & MUDGE, of Boston, Mass.—*Improvement in Stoves*.—Patent dated October 25, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A parlor stove having an oven, which is opened by raising the top, in the manner substantially as set forth.

No. 25,932.—CHARLES YOUNGLOVE HAYNES, of Philadelphia, Pa., assignor to C. Y. HAYNES & Co., of said Philadelphia.—*Improvement in Razor Straps*.—Patent dated October 25, 1859.—This invention consists in attaching an oval, elastic or flexible cushion to one side of the strap, constructed in such a manner that it will adjust itself to the edge of the instrument used upon it without any chance of becoming uneven, or danger of rounding the edge when used.

*Claim*.—The strap, when constructed in the manner and for the purposes described.

No. 25,933.—W. H. HOWLAND, of San Francisco, Cal., assignor to Himself and JOHN O. HANSCOM, of said San Francisco.—*Improved Amalgamator*.—Patent dated October 25, 1859.—This invention consists in the employment of a conical grinder, in connection with a horizontal oscillating disk, provided with annular chambers.

*Claim*.—The combination of a pair of grinding cones F G<sup>1</sup>, revolving in different directions, with a horizontally oscillating disk G, substantially as and for the purposes shown and described.

No. 25,934.—JOSEPH IVES, of Bristol, Conn.—*Improvement in Watches*.—Patent dated October 25, 1859.—The spring lever and cam are for the purpose of producing an equalized power to watch movements at all times.

*Claim*.—First. The combination of the spring B, lever C, and cam D, substantially in the manner and for the purpose described.

Second. The substitution of ribbed or corrugated, planished or unplanished, tin plate for running gear, &c., (for other metal,) when used in combination with the rolling pinion, substantially as and for the purpose described.



Third. Making a crown wheel with rollers instead of teeth to prevent slide and friction upon the verge of palate, in the manner as and for the purpose described.

No. 25,935.—GEORGE W. SLAGLE, of Washington, D. C., assignor to Himself and O. A. DAILEY, of said Washington.—*Composition for Mixing with Paints.*—Patent dated October 25, 1859. The inventor says: My improved oil is intended as a substitute for linseed oil, and to make one gallon of it I take of linseed or other vegetable oil possessing similar qualities one part, of water two parts, of sal soda or other similar suitable alkali about one two hundred and fortieth part, and, after dissolving the sal soda in the water, mix the whole together in a vessel.

*Claim.*—Making melanaline oil, or a substitute for linseed oil, by mixing together linseed oil, or other vegetable possessing similar qualities, water and sal soda, or other similar suitable alkali, substantially in the manner set forth.

No. 25,936.—EDWARD R. ARNOLD, of Providence, R. I.—*Improvement in Cut Off Valves of Steam Engines.*—Patent dated November 1, 1859.—In this invention the valves are opened by a cam or tappet having a curvilinear motion operating upon valve rods having a rectilinear motion, when the cam or tappet passes by the rods in opening the valves; the valves are closed by their gravity, by weights or springs connected therewith, or by other suitable means to enable them rapidly to close their parts.

The inventor says: I *claim*, first, making the tappet C, Fig. 4, and the ends of the jointed valve rods D D<sup>1</sup>, Fig. 3, inclined in a direction at right angles to their lines of motion, and combining and arranging them substantially as set forth.

Second. The combination of the regulator with a tappet, constructed and operated substantially as described and for the purpose specified.

No. 25,937.—L. S. BALLOU, Jr., of New York, N. Y.—*Improvement in Shirts.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A shirt, formed by having its yoke made of two pointed projections *c c* extending down from the shoulders, or inclined front ends *a* of the yoke on the shoulder blades of the wearer, in such a manner as to leave a recess *d* between the projections, which recess extends upward nearly to the neckband, substantially as and for the purpose set forth.

No. 25,938.—HENRY A. BARNES, of Milwaukie, Wis.—*Improvement in Railroad Car Couplings.*—Patent dated November 1, 1859.—In this invention by a quick and simple act of the hand or foot upon the lever or treadle G, in case of an emergency, the connection will be severed by the joint action of the cam C and the lever or treadle G.

*Claim.*—The arrangement of the latch in the draw head A, in combination with the cam D, latch or hook connection B, lever or treadle G, substantially in the manner and for the purpose described.

No. 25,939.—E. F. BARNES, of Brooklyn, New York.—*Improved Method of Protecting Telegraphic Instruments against Atmospheric Electricity.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the application and use in a telegraphic line, or in connection with telegraphic instruments, of a vessel A, containing acidulated water or fluid, as described, and having a platinum or other metallic wire B of better conductability than the contents of such vessel passing through such vessel, and connecting by one end with the main wire and by the other with the telegraphic machine, the whole arranged substantially as and for the purposes set forth.

I *claim*, also, in combination or connection with such vessel of fluid A and wire B, the arrangement of the metallic points *b c d*, on the wire of the main line, and extending into the fluid in A, substantially as and for the purpose set forth.

No. 25,940.—J. BARTHOLOMEW, of Union, N. Y.—*Improvement in Machines for Packing Flour in Barrels.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination with the packing screw or its equivalent, of a cylinder or its equivalent, so that the flour will be first packed within the said cylinder or its equivalent, and then discharged therefrom, in a packed state, into a bag, barrel, or other receptacle, as set forth.

Second. The arrangement of the rod L, levers Q K, block *l*, connected with the shaft J, by the cord or chain *u*, and the hub or boss *k*, on screw shaft F, for the purpose of automatically discharging the packed flour from the cylinder or measure M.

Third. The arrangement of the lever D, with pinion E, attached block *l*, hub or boss *k*, levers O P, and spring *t*, for the purpose of automatically discharging the pinion E from the wheel *d*, and thereby stopping the rotation of the screw G, at the proper time.

No. 25,941.—RICHARD L. BATE and JARVIS CAULKINS, of Adrian, Mich.—*Improved Coffee Roaster.*—Patent dated November 1, 1859.—This invention consists of a vertical stationary



inner cylindrical chamber, having escape passages at its sides and a movable top, in combination with a revolving skeleton or open stirrer, and a vertical cylindrical outer casing which is open at its bottom, and arranged around the inner chamber so as to form a circulating passage for the heated current, and for the gases escaping from the coffee being roasted.

*Claim.*—The combination of the stationary cylindrical chamber, revolving skeleton stirrer, and outer vertical cylindrical casing, all constructed in the manner and for the purposes set forth.

No. 25,942.—G. W. R. BAYLEY, of Brashear, La.—*Improvement in Rails for Railroads.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the reversible Z rail for railways, that is to say, I claim the rail with its stem placed inside of the vertical centre of its head outside of the vertical centre of its base, with the inner and outer portions of its head and of its base of different thickness and form, with its head and its base similar in transverse section as to outline, though reversed as to relative position and connection to the rail stem; the stem being nearest to the inside thick lip of the rail head, and to the outside thick lip of the rail base, while the thin lip of the rail base is inside, and the thin lip of the rail head is outside, substantially as described and specified.

No. 25,943.—BENJAMIN G. BEADLE, of Memphis, Tenn.—*Improvement in Cotton Gins.*—Patent dated November 1, 1859.—The object of this invention is to prevent the pods from passing the ribs and to separate from the cotton such minute pieces of the pods or other impurities as will unavoidably be carried past the ribs and not allow them to pass out with the cotton, but to take them to another delivery.

*Claim.*—Uniting the knuckles or projections *b* on the ribs, by a back or brace *c*, extending through the series, for the purpose of strength, and for keeping them in proper position, substantially as set forth.

No. 25,944.—T. G. BEECHER, of Beaver Dam, N. Y.—*Improved Farm Fence.*—Patent dated November 1, 1859.—This fence is designed for permanency, and is adapted to those regions where stones abound.

*Claim.*—The improved method of construction, as shown, namely, combining with the posts *A*, arranged as described, the rails *B*, made removable and replaceable by means of the locking device *e f g*, substantially as specified.

No. 25,945.—WILLIAM H. BITZER, of Muscatine, Iowa.—*Improved Shingle Machine.*—Patent dated November 1, 1859.—This invention relates to an improvement in that class of shingle machines in which the shingles are cut in taper form from the bolt by a circular saw, and at the same time placed at one side.

*Claim.*—The arrangement of the frame *Q* and planer *R* upon the self adjusting swinging bar *P*, and the combination of the parts thus arranged with the pivoted lever *U* and reciprocating carriage *F*, as and for the purpose shown and described.

No. 25,946.—WILLIAM G. BUDLONG, of Hartford, Conn.—*Improvement in Sewing Machines.*—Patent dated November 1, 1859.—This improvement consists in the peculiar construction and arrangement of the movements underneath the bed.

*Claim.*—The combination of the adjustable groove segment with the looper bar *J* fitted loosely therein, feeder arrangement *P Q R*, operating rod *X*, having cams 1 2 3 secured thereto, and connected by arms *c d e G*, the whole being arranged and operating substantially in the manner and for the purpose described.

No. 25,947.—SAMUEL F. BURDETT, of Keokuk, Iowa, and HENRY STILL, of Leavenworth City, Kansas.—*Improved Scale for Cutting Boots and Shoes.*—Patent dated November 1, 1859.—The nature of this invention is explained by the claim and engravings.

The inventors say: We *claim*, first, the lines of average ankle, heel, instep, and ball measures, running from the point "A" (in Fig 1 "A"), or any other given point that will produce the same result, with the lines of increase and decrease intersecting them at such an angle and at such a distance from each other as will produce the purpose set forth.

Second. We claim the device of so arranging the heel and instep measures, as in Figs. No. 1 B and No. 2 B, that any required size of said heel and instep may be marked at one stroke, with or without the combination of the average measures of the same.

Third. We claim the one third of an inch increase and decrease of average heel measures upon the different lengths of lasts, or such portions of an inch as will produce the same effect, substantially as set forth.

No. 25,948.—LEVI BURNELL, of Milwaukie, Wis.—*Improvement in Water Meters.*—Patent dated November 1, 1859.—This invention consists in arranging the induction pipe, which also forms a gudgeon or arbor, around which the bucket wheel rotates, with a narrow slot, in combination with lips formed by the inner edges of the buckets, in such a manner that



when one of the buckets is filled to the required height, the water is cut off instantaneously and made to flow into the next succeeding bucket; and it further consists in the arrangement of a counterpoise, in combination with stops on the outside of the bucket wheel.

*Claim.*—The arrangement of the hollow arbor B, with a narrow slot *j*, in combination with the lips *h*, formed by the inner edges of the buckets D, substantially as and for the purpose specified.

No. 25,949.—ROBERT H. CHAMPLIN, of East Greenwich, R. I.—*Improved Washing Machine.*—Patent dated November 1, 1859.—In operating this machine, the clothes, water, &c. are put into the cylinder and the opening C closed, when a rotary motion is given to the cylinder by means of the crank M; the clothes R resting on the slats depress them and they are carried up the side of the cylinder by its motion, until the pressure of the springs overcomes the weight of the clothes, when they are thrown from the side towards the centre and fall at the bottom of the cylinder; this suddenly depresses the slats at that part, which has the effect of driving the water that is between the slats through the clothes and removing the dirt from them.

*Claim.*—The combination of the rounds or slats and springs with the cylinder, when constructed and operating substantially as described.

No. 25,950.—EDWARD C. CLAY, of Malden, Mass.—*Improved Electro-Magnetic Burglar's Alarm.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination, in an electric burglar's alarm, of a galvanometer, with a resistance coil and an automatic switch, for the purpose of indicating the point where a burglar is attempting to effect an entrance, substantially as described.

I claim, also, the combination, in an electric burglar's alarm, of a galvanometer and a bell, with suitable mechanism to ring it, for the purpose of simultaneously giving an alarm and of indicating the place of attack.

I claim, also, the use, in a burglar's alarm, of a regulating coil, in combination with the resistance coils, substantially as described, for the purpose of maintaining a constant relation between the strength of the current and the varying resistance of the circuit, when the respective resistance coils are included.

No. 25,951.—JOHN WEBSTER COCHRAN, of New York, N. Y.—*Improvement in Projectiles for Ordnance.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Constructing and combining the body of the projectile and its shirt or case of soft metal, substantially as described, to wit: so that the passages for the gases of the exploded powder are formed partly in the body of the projectile, and partly in the shirt or case with their entrances in the shirt or case, without perforating the body of the projectile, and that the shirt can be carried separately from the body, and slipped on when required for use, in such manner as to remain secured thereon during the flight of the projectile, as set forth.

No. 25,952.—NATHAN COPE, of Cincinnati, Ohio.—*Improvement in Slide Valves of Steam Engines.*—Patent dated November 1, 1859.—In the operation of the valves B and C, the steam which enters between them from the cylinder, after the supply from the steam chest to the latter has been cut off, forms a cushion to prevent concussion between the ends of the valves. To prevent too much steam being confined at either end, grooves *g* are provided in the interior of the main valve B, such grooves extending nearly to the ends of said valve, so that steam may pass freely from one end to the other of valve B.

*Claim.*—The combination with the valves B C of the grooves *g g* and notches *h h*, as and for the purposes set forth.

No. 25,953.—THOMAS CROSSLEY, of Rockville, Conn.—*Improvement in Electrotpe Printing Blocks.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—An electrotpe printing block for printing fibrous and textile fabrics, which is prepared from a mould formed of at least three different lengths of type, as represented at *c d e*, so as to have a highly raised printing face, composed of metal margins surrounding a felt or other equivalent ductile or plastic substance, to lift and carry the color, substantially as represented.

No. 25,954.—BRADFORD DEAN, of Clayville, N. Y.—*Improved Meat Slicer.*—Patent dated November 1, 1859.—A is a board with a pair of legs C attached to one end by a hinge at J, for the purpose of raising up and supporting one end. In board A are set one or more knives D and D<sup>1</sup>, in a beveled and angular position, secured by screws passing through slots at G G<sup>1</sup>, allowing the knives to be varied; also one or more knives, as shown at I and I<sup>1</sup>, in an upright position.



*Claim.*—The arrangement of the knives I and I<sup>1</sup>, knives D and D<sup>1</sup>, and the adjustable guide B, as shown and described, substantially as and for the purpose specified.

No. 25,955.—JAMES CUMMING, of Boston, Mass.—*Improvement in Steam Engines.*—Patent dated November 1, 1859.—This invention relates particularly to horizontal stationary engines, and oscillating engines, but may be used on upright or oblique engines.

The inventor says: I *claim*, first, the combination with a square piston chamber A of a square piston, which is constructed of a series of angular sections of packing D, joined loosely together by lap joints, and made adjustable and kept steam tight, substantially in the manner and for the purpose set forth.

Second. In combination with the above, the use of a square piston rod C and a square stuffing box F F, substantially in the manner and for the purpose set forth.

No. 25,956.—JOHN K. DERBY, of Jamestown, N. Y.—*Improved Stave Jointing Machine.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of two conical cutter heads B B, provided with suitable knives C, connected by teeth *d*, or other means, so as to insure a simultaneous rotation, and placed on frames A A connected by hinges or joints *a a*, substantially as and for the purposes set forth.

Second. The attaching of the knives C C to the cutter heads B B in reverse positions, so that they will cut from the centres of the staves outwards, for the purpose specified.

No. 25,957.—GEORGE DIEFFENBACH, of New York, N. Y.—*Improved Method of Making a Hard Compound of Rubber.*—Patent dated November 1, 1859.—This invention consists in curing or hardening a composition of matter containing sulphate of alumina as an indispensable ingredient, by subjecting the said composition to the action of artificial heat.

*Claim.*—The application of artificial heat to a composition of matter consisting of sulphate of alumina and other ingredients, substantially as described, for the purpose of curing and hardening the said composition, substantially as specified.

No. 25,958.—WILLIAM DOULIN, of Youngstown, Ohio.—*Improvement in Hanging Carriage Bodies.*—Patent dated November 1, 1859.—This invention consists in combining with the springs at the ends of the carriage body an elliptic spring on the reach, which latter has its segments hinged to the plate and its leaves reversed, that is, placed within the ellipse, instead of on the outer side thereof.

*Claim.*—In combination with any of the ordinary springs of a carriage an elliptic spring G on the reach of the wagon, said elliptic spring being constructed and arranged in the manner and for the purpose set forth and explained.

No. 25,959.—C. DUCKWORTH, of Hartford, Conn.—*Improvement in Locks.*—Patent dated November 1, 1859.—This invention consists in the employment of a series of tumblers, arranged with a slotted arm attached to the bolt, and used in connection with a key of peculiar construction.

*Claim.*—The tumbler E, slotted arm D, attached to the bolt B, lever G, or its equivalent, and the key F, provided with lever H, combined and arranged substantially as and for the purpose set forth.

No. 25,960.—I. A. DUFIELD, of McHenry, Ill.—*Improvement in Harvesters.*—Patent dated November 1, 1859.—Motion being given to shaft D by the driving wheel B operating the wheel C on the end of said shaft, a reciprocating motion is at once imparted to the cutters by pins *c*, which operate alternately at the ends of diamond shaped plates F F.

The machine may be thrown either in or out of gear or regulated to any pitch by means of lever H.

*Claim.*—Wheels *a a* provided with pins *c c*, and diamond shaped plates F F, in combination with cutter bar P, shaft D, wheel D, and lever H, the whole being combined and arranged in relation to each other, substantially as and for the purposes set forth and described.

No. 25,961.—AARON EAMES, of Kalamazoo, Mich.—*Improved Fly Traps.*—Patent dated November 1, 1859.—This invention consists in the employment of a wire cloth fly receptacle, register bait board, annular gate, and rotating clearer, arranged, whereby a proper article is obtained for the intended purpose.

*Claim.*—The combination of the fly receptacle B, register C, rotating clearer F, bait board H, and gate G, arranged substantially as and for the purposes set forth.

No. 25,962.—THADDEUS FAIRBANKS, of St. Johnsbury, Vt.—*Improvement in Platform Scales for Railroads, &c.*—Patent dated November 1, 1859.—This invention consists in an arrangement of the supporting standards and the loops or supports of the longitudinal levers and



platform, with respect to each other, and so as to extend within the space between the side timbers of the platform.

*Claim.*—The arrangement of the supporting standards and the loops or supports of the longitudinal levers and platform, with respect to each other, and so as to extend within or into the space between the side timbers of the platform, substantially as specified.

No. 25,963.—WILLIAM A. FOSKET and ELLIOT SAVAGE, of Meriden, Conn.—*Improvement in Sewing Machines.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the presser-foot in combination with the spring and with the needle stock, when so arranged that by the operation of the latter, the force of the spring will be taken from the presser-foot at the time the feed of the cloth is to be given—that is, when the needle is out of the cloth, but without raising the said presser-foot from the cloth, in the manner and for the purposes substantially as described.

Second. The needle guard constructed and operating substantially as set forth, in combination with the needle and with the thread carrier or looper.

Third. We claim so combining and arranging the double jointed stock of the thread carrier with the two levers *o* and *r*, as that the said parts shall vibrate in the same plane, and also that the said stock shall form a link between the two levers which are operated to have their arcs of vibration opposed to each other, whereby, with the least throw of the said levers, the greatest vibration of the thread carrier is produced.

No. 25,964.—JAMES P. GAGE, of New York, N. Y.—*Improvement in Mills for Crushing and Pulverizing Quartz, &c.*—Patent dated November 1, 1859.—This invention consists mainly in the construction and arrangement of the rolls, their axles, journals and journal-boxes, and of the hopper feed box, and of guard and distributing guide plates within the feed box or chamber, and in combining and arranging these parts together, so that the feed or supply to the rolls is distributed over the whole width of the rolls as nearly in an equable amount as can be obtained, and the material acted upon by the rolls is kept over the line of contiguity of the rolls, and not permitted to fly or scatter so as to obstruct or injure the journals and other parts of the mill, and so as to maintain the work or strain upon the rolls equably and steadily across their faces.

The inventor says: I *claim*, first, the combination of cast rolls upon wrought-iron shafts (the rolls cast solid upon the shafts) with the wrought-iron box or frame the conicals upon the shaft, and the sliding cast-iron journal boxes, arranged and operating for the purposes and in the manner described.

Second. The combination of the rollers, the case or frame *D*, the box, and the wide shoe, and the diagonal plates, operating in the manner and for the purposes described.

No. 25,965.—WILLIAM HALL, of St. Louis, Mo.—*Improvement in Bran Dusters.*—Patent dated November 1, 1859.—This invention consists in constructing a machine for separating flour from bran. The object is to do it more perfectly than it has hitherto been done and at less cost.

*Claim.*—The combination of the flange *M* with its arms *t*, and the head *o*, with the scuppers *N*, with the brushes and fans *K* and *P*, substantially as described for the purpose specified.

No. 25,966.—C. A. HARPER, of Fort Worth, Texas.—*Improvement in Converting Rotary into Reciprocating Motion.*—Patent dated November 1, 1859.—This invention consists in having two vertically moving racks with a cog wheel on a small shaft between them, which gears into the teeth of the racks and thus produces the reciprocating motion.

*Claim.*—Producing the rotary motion of shaft *S*<sup>1</sup> and saw *C* by the reciprocating racks *R* *R*<sup>1</sup>, in combination with the gear wheel *a*, spring pawls *p*, drum *D*, shafts *S*, and wheels <sup>1</sup>*B* and *W*, substantially as described.

No. 25,967.—JOHN HOLROYD, of Washington, D. C.—*Improvement in Projectiles for Fire-Arms.*—Patent dated November 1, 1859.—This invention consists in having an elongated conical shell with a flat base, on the rear end of which are six or more curved grooves, running inward from the point *a*, about one fourth the length of the shot; also in having reversed curved grooves running from point *a* toward the point of the shell, and in cutting away the body of the shell toward the front grooves, so as to allow the air to act upon them.

*Claim.*—Constructing the projectile with the reversed curved grooves *A* and *B*, on the rear and front, substantially as and for the purpose set forth.

No. 25,968.—HENRY HUDSON, of Three Springs, Pa.—*Improvement in Sewing Machines.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The carrying of a self feeding automatic stitch forming device, like that shown and



described, or its equivalent, over the surface of the stretched or stationary fabric, substantially as and for the purpose set forth.

No. 25,969.—WILLIAM IAMS, of Baltimore, Md.—*Improvement in Hydrants*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The movable cylinder B and tube C, when combined with the fixed piston E, upon the supply pipe A, and so constructed and arranged in relation to the supply pipe that its elevation shall open a direct communication with the main, in the manner and for the purposes specified.

No. 25,970.—A. LIVINGSTON JOHNSON, of Baltimore, Md.—*Improvement in Machines for Preventing Engines and Railroad Cars from Being Thrown from the Track*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, in combination with a locomotive and a pioneer safety car in advance of it, the bars A, fastened to one and extending into loops or mortises in the other, to prevent the lighter car from leaving the track, or one from mounting or riding on the other, in case of accident or sudden stoppage, substantially as described.

I also claim, in combination with the locomotive and pioneer safety car, an advance of the link or drag bar B, so connected thereto as that the propelling force transmitted through it shall tend to hold the forward part of the safety car to the track, substantially as described.

No. 25,971.—GEORGE W. LA BAW, of Jersey City, N. J.—*Improved Life Boat*.—Patent dated November 1, 1859.—The sides of the boat are constructed so that the top and bottom are the same, and which contain the air chambers; the ribs are arranged in their proper places by means of pivots at the ends of each rib, the pivots resting on the sides of the boat, and made to turn freely. The keel is secured in its proper place by means of the ribs passing directly through it.

*Claim*.—The arrangement of ribs D, with the main rib K, and keel E, and cutwaters I I, the whole being constructed substantially as and for the purpose specified.

No. 25,972.—SYLVESTER LITTLEFIELD, of Alfred, Me.—*Improvement in Sawing Machines*.—Patent dated November 1, 1859.—This invention consists in combining with a circular saw, on a vibrating adjustable arm, an auxiliary saw, in such a manner that the same can readily and instantaneously be adjusted to the varying thickness of the log. It also consists in arranging an arm with two guides in such a manner that it vibrates on the arbor of the saw, so that it can be raised and lowered instantaneously, and that it, together with the guides, can be adjusted according to the diameter of the saw.

The inventor says: I *claim*, first, combining with a circular saw A, on a vibrating adjustable arm D, an auxiliary saw G, substantially as and for the purpose described.

Second. Arranging an arm B, with two guides C, in such a manner that it vibrates on the arbor of the saw, and that it can be raised and lowered instantaneously, substantially as and for the purpose described.

No. 25,973.—I. I. MAGEE, of Fernandina, Fla.—*Improved Machine for Unloading Vessels*.—Patent dated November 1, 1859.—This invention consists in arranging in two hinged frames a series of rollers, to which a rotary motion is imparted by an endless screw that gears into worm wheels which are firmly secured on the axles of the rollers, and these screws are connected by a universal joint, so that when one part of the frame is turned down into the vessel, and the other part towards the car, by imparting motion to one of the screws the several rollers are caused to rotate, bringing the bale or package that is placed on one end to the other end by the motion of the rollers.

*Claim*.—The arrangement of the frames A and H, with rollers C and I, and with screws G and J, or their equivalent, substantially as and for the purpose specified.

No. 25,974.—C. K. MARSHALL, of Vicksburg, Miss.—*Improved Apparatus for Printing Addresses on Newspapers, &c.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a chain of plates or solid links, having characters of the description substantially as described, placed, cut, or set into the face of its links, and arranged to wind in scrolls upon one pulley or roller from another, substantially as and for the purposes set forth.

Second. The combination of the above with an inking device that supplies the characters made on the faces of the links with ink, and with a stamping device, which will cause the respective links of the chain, as they come into play, to produce a clear impression upon the article being directed or superscribed, substantially as and for the purposes set forth.

Third. The employment of an inclined hopper having openings in its bottom and furnished with a spring stop, in combination with the revolving bulk feeding arms, substantially as and for the purposes set forth.



Fourth. The combination with the features embraced in the third claim, of the raking, single feeding device, substantially as and for the purposes set forth.

Fifth. The use of the scroll winding, post office indicating belt, with the superscribing chain or other superscribing device, substantially as and for the purposes set forth.

Sixth. The manner, substantially as described, of effecting a combination between said belt and chain.

Seventh. The combination of the features embraced in the fifth claim with the "mail" assorting box, substantially as and for the purpose set forth.

Eighth. The use of the State indicating belt with the post office indicating belt, and with a superscribing device, substantially as and for the purposes set forth.

Ninth. The organization of an apparatus, by means substantially as described, for accomplishing, by one continuous operation, the several results specified.

No. 25,975.—JOHN MAYRHOFER, of New York, N. Y.—*Improvement in the Process for Preparing Paper Pulp*.—Patent dated November 1, 1859.—The claim explains the nature of this invention.

*Claim*.—In making paper impervious to water, mixing the alkaline solution of rosin with the pulp, and then adding what is known as English sulphuric acid, and after the sheets have been formed, drying them by contact with heated metallic surfaces, all substantially as and for the purposes specified.

No. 25,976.—CÆSAR NEUMANN, of New York, N. Y.—*Improvement in Skeleton Hoop Skirts*.—Patent dated November 1, 1859.—The inventor says: My invention consists in cheapening the construction of skirts by the employment of strands of cord so twisted as to retain the hoops of spring steel, or other material forming the hoops, in their places, by which great facility and cheapness of construction is obtained.

*Claim*.—Combining a series of spring hoops, as set forth, by means of a series of twisted cords, and thus forming a skeleton skirt, as specified.

No. 25,977.—JOHN S. McCLURE, of Mobile, Ala.—*Improved Method of Mounting Ambrotypes*.—Patent dated November 1, 1859.—The picture is secured in the usual frame C<sup>1</sup> of thin sheet brass, which is pressed or raised so as to have an ornamental appearance, and which leaves an oval or any other shaped opening *c* for the picture. Secured to a concave surface D is the back ground *d*, namely, a landscape or other design, drawn in perspective on a piece of paper, which is fastened to the surface D.

*Claim*.—The employment of a concave background or surface D in combination with an ambrotype picture, substantially as and for the purposes shown and described.

No. 25,978.—I. E. PALMER, of St. Louis, Mo.—*Improved Tackle Block*.—Patent dated November 1, 1859.—This invention consists in the peculiar formation of the block and pulley, and in a certain relative position of said forms, when the two are so combined that a rope or fall may be jammed in any required position.

*Claim*.—The form of the block in the inside and the form of the pulley, when the two are combined and arranged substantially as described and for the purposes specified.

No. 25,979.—JOHN W. PALMER, of Port Republic, Va.—*Improvement in Beehives*.—Patent dated November 1, 1859.—The hives consist of oblong boxes marked C C<sup>1</sup> C<sup>2</sup>, and the separating boxes contained in these boxes are marked D. When the separating box D is placed in the box C the division *i i* divides the box C into two feeding apartments. The side J of the hive which is presented to the box is provided with two long apertures *g g*.

*Claim*.—Providing the described beehives with one or more partitions I, with opening *a m e<sup>1</sup> c* and *g g<sup>1</sup>*, and with feed boxes *c*, which contain separating boxes D, constructed substantially as described, the whole being arranged and used in the manner and for the purpose set forth.

No. 25,980.—WALTER RALSTON, of Manchester, England.—*Improvement in Embossing and Finishing Woven Fabrics*.—Patent dated November 1, 1859; patented in England, November 23, 1858.—The claim explains the nature of this invention.

*Claim*.—The employment of grooved, fluted, engraved, milled, or otherwise indented rollers of metal, wood, or other suitable material, driven at a greater speed than the bowl or bowls connected with them, so as to exert a rubbing or friction upon the fabric submitted to their action, and thereby produce an indefinite variety of pattern as well as a bright finish or lustre, and also reversing the operation by giving the bowl a quicker motion than the pattern roller.

No. 25,981.—CHARLES E. ROWAN, of New York, N. Y.—*Improvement in Machines for Polishing Rice*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the conductors H H<sup>1</sup>, when constructed



substantially as described, and secured within a loose wire cloth cylinder A, with the scouring disks G G<sup>1</sup> G<sup>2</sup>, constructed substantially as shown, and secured to the driving shaft B, as set forth, so that the friction of the grain will cause the cylinder A to revolve and lift and deliver the grain through the machine, all as specified.

Second. In combination with the parts described, I claim the tubes *k*\*, and openings *l m*, arranged as shown, so that the dust may escape, and air may enter to cool the contents of the cylinder A during the scouring operation.

Third. I claim placing the feeding screw E upon the same shaft B that carries the scouring disks G G<sup>1</sup> G<sup>2</sup>, as set forth.

No. 25,982.—WILLIAM R. SATTERLY, of Setauket, N. Y.—*Improvement in Reefing Fore and Aft Sails*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of the invention.

*Claim*.—The combination with and above the triangular sail G of another triangular sail H, which has a boom C attached to it, so that when the two sails and boom are put together they form the ordinary fore and aft sail, operating in the usual manner; but when the sail H and its attached boom C are removed, as described, the small triangular sail G remains, all substantially as set forth.

No. 25,983.—NATHANIEL SNOW, Jr., of Boston, Mass.—*Improved Steering Apparatus*.—Patent dated November 1, 1859.—A is the deck of a vessel, B the rudder head, to which is attached a yoke C; to the end of each arm of this is pivoted a stout rod D. A knob *a* is placed on top of the rudder head, the shank of this knob serves as one bearing for a shaft E, which carries the steering wheel F and a pinion G; the other end of this shaft has its bearing in a stanchion H.

*Claim*.—The described steering apparatus, consisting essentially of the wheel I, pinion G, rods D, and yoke C, arranged and operating substantially as described.

No. 25,984.—N. SPOFFORD, of Haverhill, Mass.—*Improved Bit Stock*.—Patent dated November 1, 1859.—This invention consists in arranging the socket of a brace with a slot that extends a certain distance into the arm of the brace, dividing said socket into two parts, which are forced together by means of a thumb screw, so that the same accommodates itself to different sizes and different bevels of the shanks of bits.

*Claim*.—Arranging the socket A of a brace with a slot *a*, as described in combination with a thumbscrew *b* and projections *d*, or their equivalents, substantially as and for the purpose specified.

No. 25,985.—E. N. SPRINKLE, of Marion, Va.—*Improved Churn*.—Patent dated November 1, 1859.—The perforated dashers C are attached to a shaft D by which they are rotated. To the side of the churn, just below the lower end of the dashers C, is attached an inclined guard F, the end next the bottom of spindle D being the highest.

*Claim*.—As an improvement on the churn patented to Hatfield & Goldsmith, on July 13, 1858, the combination of the perforated obliquely arranged dashers C C C, with the single inclined stationary guard F, substantially as and for the purposes set forth.

No. 25,986.—ROBERT STEEL, of Philadelphia, Pa.—*Improvement in the Construction of Burners for Vapor Lamps*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of a metallic gas generating chamber and burner, applicable to a lamp, chandelier, or other gas fixture, for the purpose of generating vapor or gas from burning fluid and consuming the same as fast as it is generated, thereby producing a superior artificial gas light, as is described and particularly set forth in the specification.

No. 25,987.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Stoves*.—Patent dated November 1, 1859.—The object of this arrangement of the different parts is to give more or less ventilation to a room by means of the door H, without opening the damper D. The door does not operate the damper until it is almost closed, at which time it is desirable to close the ventilation, and at the same time give more draft to the fire.

*Claim*.—Providing the door H with an inclined projection *a* on one side, and a hinged rack bar *d* on the other, when said door is used in connection with the cross bar *c*, and with the damper D, as constructed, the whole being arranged and operated substantially as and for the purpose described.

No. 25,988.—GEORGE WHITCOMB, of Springfield, Ohio.—*Improvement in Mole Ploughs*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of a flexible mole, by the combination of sections which are not attached to each other, but by being held in place by the chain J, or its equivalent, as set forth.



No. 25,989.—LUKE H. WOOD, of Marlborough, Mass.—*Improvement in Pegging Machines*. Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The particular arrangement and combination of the feeding apparatus, consisting of the levers R Q and O, spring P, and wheels N L, in connection with the lever U and its stud I, and the awl and driver operated by the levers W and X, in connection with the peg feeding apparatus and pointed saw for cutting off the pegs, when constructed and operating as set forth and described.

No. 25,990.—SIMEON WOOD, of Worcester, Mass.—*Improved Auger*.—Patent dated November 1, 1859.—This invention consists in surrounding the chipping cutters of an auger, or other instrument for boring holes, with a band or hoop having a tooth or teeth, or a cutter or cutters on its bottom edge, to cut the circumferences of the hole.

*Claim*.—The combination of the chipping bit or bits with a band or hook, having teeth or cutters on its bottom edge, substantially as and for the purpose set forth.

No. 25,991.—R. F. WOLCOTT, of Claremont, N. H.—*Improvement in Platform Scales*.—Patent dated November 1, 1859.—The object of this invention is to enable the platform to adjust itself properly to the levers on which it rests; also, to make suitable provision against difficulties attending the winding or twisting of the platform timbers, and to facilitate the movement or adjustment of the weight of the beam and the noting of the weight of the articles counterpoised on the platform.

The inventor says: I *claim*, first, the combination of the two graduated wheels Q R, screw s, and bar r, arranged substantially as and for the purpose set forth.

Second. Attaching the lever I to the platform B, levers H H, and rod J, when the above parts are arranged to operate as described.

Third. The construction and arrangement of the fulcrum arms g of the shaft D, projections b, and plates e, of the hangers C, and the plates G l of the beams F F, substantially as and for the purpose set forth.

No. 25,992.—JEAN LOUIS BAUDELLOT, of Harancourt, France, assignor to HENRY MIGEON, of Wolcottville, Conn.—*Improvement in Apparatus for Cooling Liquids*.—Patent dated November 1, 1859; patented in France, April 13, 1856.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a cooling apparatus for liquids, composed of a vertical range of pipes passing the liquid successively from the lower to the upper pipes in said range, in combination with the perforated trough d, or its equivalent, supplying the other liquid which trickles over the surface of said range of pipes, as set forth.

I also claim, in such a cooling apparatus, a series of teeth or projections on the underside of the horizontal pipes, for the purpose of conducting or distributing the liquid falling successively from one pipe to the other, substantially as specified.

No. 25,993.—EDWARD BEHR and L. FROELICH, of New York, N. Y., assignors to EDWARD BEHR, aforesaid.—*Improvement in Skate Straps*.—Patent dated November 1, 1859.—This invention consists in a novel arrangement of parts, whereby both the toe and heel straps may be adjusted and the skate secured to the foot by the turning of a single rod, and the straps relaxed on the foot, and the skate consequently detached therefrom, by the simple pressing of a button at the side of the stock near each strap.

*Claim*.—The rod F, fitted longitudinally in the stock A, provided with screw sections c f, with cylinders E H fitted thereon, and one end of the heel and toe straps D G attached to said cylinders, the latter being provided with the ratchets d k, into which the pawls e l catch, substantially as and for the purpose set forth.

No. 25,994.—THOMAS BISHOP, of Plainville, Conn., assignor to Himself and JAMES H. BISHOP.—*Improvement in Tea and Coffee Pots*.—Patent dated November 1, 1859.—This invention consists in constructing an area around the upper and inside portion of the pot, and providing or forming the lid of the pot, one or more projecting rims extending therefrom nearly to the bottom of the area, and also providing a tube or nozzle, or a portion thereof, conducting from the area into the nozzle proper, which nozzle has a cap fitting closely thereto.

*Claim*.—The arrangement of the area E, flanges X upon the lid G, with the apertures F and D, in the manner and for the purpose described.

No. 25,995.—D. G. CHASE, of Boston, Mass., assignor to GEORGE PARR, of Buffalo, N. Y.—*Improved Shank Laster*.—Patent dated November 1, 1859.—This invention relates to a new and improved shank laster—an implement or tool used by shoemakers in drawing leather over lasts. The object of it is to enable the leather to be drawn over on the last and be tacked thereto with greater facility than usual.

*Claim*—The jointed crossbars A A, provided with the swivel jaws E E and swivel nuts a



*a*, in connection with the right and left screw shaft *C*, the whole being arranged substantially as and for the purpose set forth.

No. 25,996.—JOHN COLVILLE, of Wilmington, N. C., assignor to Himself and T. L. COLVILLE, of said Wilmington.—*Improved Method of Adjusting Circular Saws*.—Patent dated November 1, 1859.—This invention relates to a novel mode of adjusting circular saws upon their arbors or shafts, so that they may be set up and made to run perfectly true before the operation of sawing commences, or when the saw has worked out of a true line.

*Claim*.—The expansion ring or plate of copper *G*, or any other suitable metal capable of being expanded, for setting or adjusting the saw properly upon the shaft at any given point or points, when the same is interposed between the saw and the fixed collar, as set forth.

No. 25,997.—WILLIAM ELWELL, of Gardiner, Me., assignor to Himself and N. O. MITCHELL, of said Gardiner.—*Improved Fly Trap*.—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The two boxes *A A*<sup>1</sup> of a quadrangular or other shape, provided with sliding glass tops and sliding bottom *G*, in combination with the perforation *B*, surrounded with projecting pins, for the purposes and when the same are all arranged in the manner set forth.

No. 25,998.—JOHN A. EVARTS, of West Meriden, Conn., assignor to HOMER CURTIS, of said West Meriden.—*Improved Cast Metal Pulleys*.—Patent dated November 1, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Forming the core *D* of the shell *B* by covering the wheel *A* with the sand *b*, and having the hole *c* made through the core, so that, in casting the shell, the pintle or axis *E* of the wheel will be cast simultaneously with the shell, and the wheel, when the sand *b* is removed, be properly adjusted with the shell, substantially as described.

No. 25,999.—JOHN JEWELL FLANDERS, of Manchester, N. H., assignor to Himself and E. G. W. BARTLETT, of said Manchester.—*Improvement in Rotary Pumps*.—Patent dated November 1, 1859.—This invention consists of a revolving annular inverted gear in combination with a pinion and stationary stop or crescent, arranged to operate in a case.

*Claim*.—The combination of the revolving annular inverted gear, the pinion *S*, and stationary crescent *U*, the whole being arranged to operate in the case, substantially as described for the purposes set forth.

No. 26,000.—H. K. SYMMES, of Newton, Mass., assignor to Himself and R. W. HOLMAN, of said Newton.—*Improvement in Apparatus for the Manufacture of Coal Oil*.—Patent dated November 1, 1859.—This invention consists in drawing the gas from the oil retort by means of a pump, and in forcing the same through a gas retort, in which it is exposed to the influence of better gas, obtained by heating resin, pitch, or some other bituminous substance in this gas.

The inventor says: I *claim* first, an oil retort *A* in combination with the gas retort *D*, or its equivalent, for the purpose of saving the gas which escapes from the oil retort, and to improve its quality, substantially as specified.

Second. In combination with the two retorts *A* and *D*, I claim the pump *G*<sup>1</sup>, or its equivalent, for the purpose of imparting to the gas the necessary pressure, substantially as set forth.

No. 26,001.—ISAAC GOODSPEED, of Norwich, Conn., assignor to Himself and GEORGE A. MANSFIELD, of Boston, Mass.—*Improved Pocket Alarm*.—Patent dated November 1, 1859.—The object of this invention is the production and manufacture of a pocket alarm, which consists of a shell or case of such form and size as to be conveniently carried about the person, with suitable mechanism inclosed therein for causing the explosion of a percussion cap upon the removal of any article to which the alarm is attached.

The inventor says: I *claim* the pocket thief and burglar alarm, constructed in the form and manner represented and described.

I also claim the combination and arrangement of the independent lever *K*, adapted to cap and cock the alarm, and while both the cap tube and hammer are arranged within, and do not project outside the shell or case.

No. 26,002.—STEPHEN H. HEAD, of Boston, Mass., assignor to Himself and WILLIAM P. PARROTT, of said Boston.—*Improvement in Steam Boilers*.—Patent dated November 1, 1859.—*A* is the boiler, *B* and *C* fire spaces, which are separated by the water space or partition *D*<sup>1</sup>, and are fed alternately by fuel introduced through the doors *b* and *c*.

*Claim*.—In combination with the furnaces *B C*, and the lateral passage *E*, and damper *e*, chamber *F*, located at the front of the furnaces, and between them and flues, for the purpose and in the manner substantially as set forth.

No. 26,003.—GEORGE M. PHELPS, of Troy, N. Y., assignor to the AMERICAN TELE-



GRAPH COMPANY.—*Improvement in Telegraphic Machines.*—Patent dated November 1, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, producing from a magneto-electric battery the momentary electric currents required for actuating the printing mechanism by giving momentary motion to the armature or other current inducing part of the magneto-electric battery, by means of a set of finger keys, which, when depressed, are controlled in their action upon the current inducing part of the magneto-electric battery by a mechanical contrivance which constantly moves in harmony with the unintermittingly revolving type wheel, substantially as described.

I also claim increasing the capability of the instruments for telegraphing by so increasing the speed of the transmitting device and type wheel, in relation to the motion of the parts which perform the printing, that two or more types shall pass the platen while the printing mechanism is acting once, as described.

I also claim turning the cylindrical platen while each impression is being made, by means of rings of teeth R and T, upon the type wheel and platen, as and for the purpose set forth.

And, finally, I claim making a revolving wheel or shaft U or *i*, turn the corrector M, armature C, or another wheel or shaft, a certain fixed distance, with the same speed as itself, at any time and any desired number of times, by the use of a ratchet wheel V or *h*, catch W or *f*, guide X or *k*, and detent K or *e*, all arranged together, and with the said driving and driven wheel or shaft, for conjoint operation, as set forth.

No. 26,004.—CHARLES A. GALE, of Boston, Mass., assignor to ALBERT S. HALL, of Malden, Mass., and A. R. DAVIS, of Cambridge, Mass.—*Improved Clothes Dryer.*—Patent dated November 1, 1859.—This invention consists in combining with a portable shelf or mantle a series of folding slats, so that when said slats are unfolded or turned out they may be used as a clothes dryer, and, when not wanted for that purpose, may be folded up under the shelf out of the way while the shelf is ready for use.

*Claim.*—The combination, substantially as described, of the mantle or shelf and the folding slats, arranged and operating as set forth for the object specified.

No. 26,005.—CORINTHA ALDEN, of Cassadaga, N. Y.—*Improved Clothes Ironing Apparatus.* Patent dated November 8, 1859.—This invention consists in arranging a box with a follower that can be forced down by means of screws, or by other suitable means, in combination with a tank provided with a grate to sustain the bottom of the box in such a manner that the clothes can be compressed in the box and heated by filling the tank with water and placing it on a stove, thus rendering the clothes smooth.

*Claim.*—The arrangement of the box A with the follower B, or its equivalent, in combination with the tank D, substantially as and for the the purpose specified.

No. 26,006.—EPHRAIM C. ALLEN, of Le Roy, N. Y.—*Improvement in Corn Planters.*—Patent dated November 8, 1859.—When the machine is in operation, as the main wheel revolves, the cam wheels at the ends of the shaft, with the pins or screws on the outer edges, catch the pitmans on the ends of the slides and draw them through a partition on the seed boxes, when and where the cavities are filled; then as the slides are drawn back through the partition, the brush sweeps off the superfluous seed, and the seed is dropped through the hole in the timber and tube.

*Claim.*—The arrangement of the various parts of the seeding machine described, when the whole are constructed and combined for operation conjointly, as and for the purposes in this specification set forth.

No. 26,007.—JOHN ASPINALL, of London, England.—*Improvement in Refining Sugar.*—Patent dated November 8, 1859; patented in England February 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The method described of effecting the blowing up or melting of raw sugars; that is to say, by so supporting or upholding the sugar that successive portions will be brought into contact with the water, whereby the sugar will be melted at or near the surface, for the purposes and substantially in the manner set forth.

No. 26,008.—MERRICK BEMIS, of Ashburnham, Mass.—*Improved Compensating Pendulum.* Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The improved mode of making a compensating pendulum, namely, by arranging a part of the rod in the form of a bow or sectoral bend, and applying to such bend or part a clasp or bow of metal having a different expansive ratio, the whole being substantially as specified.

No. 26,009.—ROBERT BLAIR, of Malugin Grove, Ill.—*Improved Device for Applying Steam as a Motor.*—Pated November 8, 1859.—This invention consists in placing a traction steam engine in an annular way, and having said engine attached to a radius frame, the centre shaft



of which is provided with a toothed wheel or pulley, from which the power is taken as the engine passes around the annular way.

*Claim.*—The combination with a radial lever or frame D, and circular railway A, and central revolving power transmitting shaft C, of a traction steam engine B, when the crank axes of said engine radiate from the central shaft C, and the inner traction wheels are made of smaller diameter than the outer one, the whole arranged and operated substantially in the manner and for the purpose set forth.

No. 26,010.—NELSON BURR, of Batavia, Ill.—*Improvement in Corn Shellers.*—Patent dated November 8, 1859.—This invention consists in a peculiar arrangement of the shell, the latter being provided with a door and wing, whereby a corn sheller and cob grinding mill is obtained, which can be used in either capacity by proper adjustment.

*Claim.*—The peculiar arrangement of the section *e*, provided with the ring *j*, and placed relatively with the cylinder A, and adjoining sections *d f*, to effect the object set forth, substantially as described.

No. 26,011.—THOMAS CARPENTER, of Battle Creek, Mich.—*Improved Shoe Making Table.* Patent dated November 8, 1859.—The bench A has a firm bed *a* and sides a few inches high all around. Over the bed *a* is situated a movable bottom D, on the middle of which is secured a revolving block E for receiving the shoe last *c*, and there are holes *b b* in the movable bottom and bed for the holding strap *d* to extend down through.

*Claim.*—The movable bottom D, arranged in combination with the bench A and compartment box B, constructed as described, substantially in the manner and for the purpose specified.

No. 26,012.—R. CARKHUFF and B. CHALFANT, of Lewisburg, Pa.—*Improvement in Steam Valves.*—Patent dated November 8, 1859.—This invention consists of a peculiar means employed for regulating and applying the power of the driving wheels of the engine, whereby the latter may be turned or guided and placed under the control of the engineer more readily than usual.

*Claim.*—The peculiar arrangement of the slide T, and transverse bar *t*, which form the valve of the steam chest K, the bar U, and the cross arm *r* of rod S, whereby said valve is allowed a lateral as well as a longitudinal movement within the chest, for the purpose set forth.

No. 26,013.—LUCIUS C. CHASE, of Boston, Mass.—*Improvement in Girth Buckles.*—Patent dated November 8, 1859.—This invention consists in constructing the buckle with wings B B, or their equivalents, and furnished with holes *b b* for the reception of rivets or screws, by means of which the buckle can be confined to the girth or strap.

*Claim.*—Constructing a buckle with wings B B, or their equivalents, and furnished with holes *b b*, substantially as set forth and for the objects specified.

No. 26,014.—B. S. CHURCH, of Manhattanville, N. Y.—*Improvement in Water Meters.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the partitions *g g*<sup>1</sup>, in the trough G, as described, in combination with the air tight chamber D, chamber F, and tubes 1, whereby that portion of the water which does not pass through the measuring buckets is prevented carrying off any of the air in the chamber D.

Second. Arranging in the air chamber D, a float *j*, in combination with a valve *h*, or its equivalent, substantially as and for the purpose described.

No. 26,015.—GEORGE CLAY, of New York, N. Y.—*Improvement in Packing for Sliding Gas Lights.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination, with the pipe D, shell A, and pipe B, of the elastic tube C, when the latter is fitted so that its central portion will contract and press upon the burner or upon the sliding pipe so as to form a gastight joint, all as shown and described.

No. 26,016.—J. W. COCHRAN, of New York, N. Y.—*Improvement in Projectiles for Rifled Ordnance.*—Patent dated November 8, 1859.—The object of this invention is to prevent windage between the bore or rifle grooves of the gun and to obtain a rotary motion of the projectile, and to keep the front portion steady during its passage out of the gun, without meeting with either of the two great difficulties which generally attend the firing of rifled ordnance, viz: the tearing or rapid wearing off of the edges of and the "leading" of the rifled grooves.

The inventor says: I *claim*, first, the band C, of copper or other wire, applied substantially as described, in combination with the cup or cup like frame B attached to the rear of the projectile, for the purpose described.



Second. The expanding ring D, applied substantially as described, in combination with a conical surface *f*, formed behind a shoulder on the front part of the projectile, for the purpose set forth.

No. 26,017.—J. W. COCHRAN, of New York, N. Y.—*Improvement in Projectiles for Rifled Ordnance*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application to a projectile for rifled ordnance of a covering or of one or more bands, composed of a coil or coils of copper or other wire wound upon its exterior, substantially as described, for the purpose specified.

No. 26,018.—D. W. COMSTOCK, of Chicago, Ill.—*Improvement in Railroad Gates*.—Patent dated November 8, 1859.—This invention consists in placing the ends of two pairs of adjoining rails on a rising and falling platform that is suspended from the short arms of crank levers, to the long arms of which the two panels of the gate are secured, so that a slight depression of said platform causes the gate to swing open.

*Claim*.—Placing the ends of two pairs of adjoining rails B<sup>1</sup> on a rising and falling platform C, when the latter is suspended from the short arms *d* of crank levers *d e*, the long arms *e* of which carry the panels F of a gate, substantially in the manner and for the purpose described.

No. 26,019.—WILLIAM F. CONVERSE, of Harrison, Ohio.—*Improvement in Railroad Car Springs*.—Patent dated November 8, 1859.—This invention consists in a method of clamping steel disk springs in such manner as to insure their effective action; and also in the combination of a series of concentric disks of unequal diameter.

The inventor says: I *claim*, first, the combination of a clamp *f g h* with a disk spring, in the manner and for the purpose explained.

Second. In connection with the above, I claim the series of annular steel disks of unequal diameter, arranged in manner and for the purpose described.

No. 26,020.—N. B. COOPER, of Gratis, Ohio.—*Improved Churn Dasher*.—Patent dated November 8, 1859.—The inventor says: The operation of the levers and agitators is of such a character as to force the cream rapidly from one side of the churn to the other, and such currents are forcibly interrupted by the agitators upon either side, thereby securing a rapid churning operation.

*Claim*.—The arrangement of the arms *d d* on the two points *b<sup>1</sup> b<sup>1</sup>*, one on each side of the upright B, when the upright B is made removable by means of the ways *x x*, substantially as set forth.

No. 26,021.—EDWARD CRANE, of Dorchester, Mass.—*Improved Steam Boiler*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* a fire box surrounded by a water jacket, the combination of the tubes in the fire box, with the boxes or chambers, as described, so that a number of tubes shall have the same connections through the said boxes or chambers with the water jacket and steam chamber, and shall also be capable of being put in and taken out of the boiler at the same time.

I claim the use of tubes coiled or folded into the fire box, and connected with the water jacket and steam chamber through the boxes or chambers *a* and *b*, and *a<sup>2</sup>* and *b<sup>2</sup>*, as described, of such length in proportion to their diameter that all the water entering them at the lower end as shall be converted into steam in the lower portion, and the steam be superheated in the upper portion before it is discharged into the steam chamber.

I claim the use of tubes in the steam chamber for discharging the steam generated in the tubes in the fire box, so bent that the superheated steam issuing therefrom shall be discharged into a drum around the chimney and against the chimney, in the first instance, and then against the surface of the water, as described.

I also claim the use of the drum around the chimney in the steam chamber for securing the discharge from the tubes, and checking the disturbance of the water through the whole extent of the steam chamber, arranged and constructed as described.

I claim the combination of the blow off cocks *e* with the stop cocks *g*, for the purpose of blowing off each section of tubes separately, as described.

I claim the use of the tube coiled around the chimney, for the purpose of taking the steam from the steam chamber, at the point where it has the highest temperature.

No. 26,022.—EDWARD CRANE, of Dorchester, Mass.—*Improvement in Railroad Car Wheels*.—Patent dated November 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—A wheel having its rim and tire secured together by India rubber vulcanized in place, as set forth.



No. 26,023.—MUNSON C. CRONK, of Auburn, N. Y.—*Improved Clothes Dryer*.—Patent dated November 8, 1859.—This invention consists in the arrangement of devices for closing up or bringing together the radial arms of the dryer so as to make them portable and easily moved from place to place.

*Claim*.—The combination and arrangement of the hollow post A, the sliding piece R, brace cords M N O P Q, the hub B, the stands W X Y Z, the radial arms C D E F G, and the ring V, substantially in the manner and for the purpose specified.

No. 26,024.—CHARLES A. DESOBRY, of Plaquemine, La.—*Improvement in Pans for Evaporating Cane Juices*.—Patent dated November 8, 1859.—This invention consists of a system of heaters arranged within an evaporating pan, in combination with a suitable system of connections, with two series of pipes arranged below the pan for supplying steam to the said heaters and conveying away the water of condensation.

The inventor says: I *claim* the heaters B B of inverted cup form, applied within the pan, in combination with the system of connections E E F F and the two series of pipes S S and W W below the pan, substantially as described.

And in combination with the said heaters, connections, and two systems of pipes, I claim the pipes *b b* passing through the said heaters, substantially as described.

No. 26,025.—JACOB EDSON, of Boston, Mass.—*Improvement in Pumps*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the peculiar manner in which I support the cylinder upon the flanges L, in combination with the vacuum chamber H, for the purpose of insuring an unobstructed passage between the said chamber and the induction pipe below the valves, in the manner and for the purpose substantially as set forth.

Second. I claim the manner described of securing the induction pipe to the pump by means of the projecting bearing points *m*, operating in the manner substantially as set forth.

Third. I claim the described combination and arrangement of the division plate K and the cylinder I, whereby the body of the pump is divided into two distinct chambers, the one serving as an air or water-chamber, and the other as a vacuum chamber, as set forth.

No. 26,026.—THADDEUS FAIRBANKS, of St. Johnsbury, Vt.—*Improvement in Letter Scales*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my improved manufacture of letter scale as made, not only with its pendulous weight K connected with the scale pan F by a forked arm H H I<sup>1</sup>, provided with bearings *h i* for receiving and resting on knife edges of a bar I extended from the steelyard, as specified, but with a bar steelyard E made without any fork, and extended into a stationary staple or stop *g*, the whole being arranged in manner to operate as specified.

No. 26,027.—JOHN M. FORREST, of Norfolk, Va.—*Improved Sash Fastener*.—Patent dated November 8, 1859.—A is the window frame, B the outer sash strips, *b* the inner sash strips, C the spring catch and lock, D the operating lever or thumb piece for catch C, C<sup>1</sup> and D<sup>1</sup> catch and operating lever for upper sash; E the sashes, G the metallic ratchets firmly attached to the sashes, F a cord attached to the sashes and passing over a pulley.

*Claim*.—The springs C and C<sup>1</sup>, and the ratchets G and G<sup>1</sup>, as constructed in combination with the levers D and cord F, operating as described, for the purposes set forth.

No. 26,028.—LEONARD D. GALE, of Washington, D. C.—*Improvement in the Manufacture of Gas*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The treatment of bitumen, bituminous coal and their distillates, or their equivalent, by first converting the volatile portions to a state of vapor, at a temperature below a cherry red heat, and then forcing the vapor so generated into contact with a red hot surface in such a manner that the gas generated may be instantaneously removed from the said heated surface, and thus be prevented from further decomposition.

No. 26,029.—THADDEUS A. GRANGER, of Wilson County, N. C.—*Improvement in Machines for Hoisting Marl, &c.*—Patent dated November 8, 1859.—This invention consists in the simplified construction and arrangement of the framework and the attachment of the pulley blocks, so that the marl can be conducted to any distance and discharged at any point, either in carts or around the pit.

*Claim*.—The construction of the cap timber C, in combination with the supporting timber D, which forms the swivel, to allow the beam D to be moved to any point desired.

No. 26,030.—LEONARD D. GALE, of Washington, D. C.—*Improvement in the Manufacture of Gas*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The treatment of all woody, resinous, and fatty bodies, as well as all tarry



matter, except bitumen, bituminous coal, and other distillates, by first converting the volatile portions to vapor at a temperature below a cherry red heat, and afterward forcing the vapor so generated into contact with a red hot surface, in such a manner that the gas generated thereby may be instantly removed from said heated surface, and thus be prevented from further decomposition.

No. 26,031.—NOAH E. HALE, of Nashua, N. H.—*Improvement in Applying Pressure to Top Rollers of Drawing Machinery.*—Patent dated November 8, 1859.—At the middle of the length of the parallel bars G G, a hole is bored in each to receive one of the two journals provided at the ends of a short shaft I, which carries a lever J, one end of which is bent upward, so that its point may bear under the top piece A, and the other end of which has suspended upon it a weight K. This weight will, by its action through the lever J, the bars G G, and stirrup rods H H, press equally upon the saddles at both ends, and serve to apply the necessary pressure to all the rolls.

*Claim.*—The arrangement and combination of the drawing rolls C<sup>1</sup> D<sup>1</sup>, straps H, attached at the ends of said rolls, adjustable bars G, lever J, weight K, rod N, bell crank lever L, and hanger O, as and for the purpose shown and described.

No. 26,032.—E. H. HARRIS, of Palmetto, Ga.—*Improvement in Carriage Seats.*—Patent dated November 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Attaching the seat B to the body A of the vehicle, by means of the bars *a* and rods *c*, or their equivalents, so as to permit of a certain degree of play of the seats, or movement thereof, independent of the body A, for the purpose specified.

No. 26,033.—I. P. HARRIS, of Byhalia, Miss.—*Improvement in Ploughs.*—Patent dated November 8, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The combination of the separately adjustable and removable mould board E, with a subsoil share C situated behind and below it, the said subsoil share being also separately removable, to allow the separate use of said mould board, substantially as specified.

No. 26,034.—HORATIO F. HICKS, of Grand View, Ind.—*Improvement in Machines for Pulling and Cutting Cotton and Corn Stalks.*—Patent dated November 8, 1859.—This invention consists in an automatic provision for uprooting standing cotton stalks and reducing them to fragments suitable for tillage and manure.

*Claim.*—The combination of the reel D, paddle H, drum G, and cutter I, operating substantially as and for the purpose set forth.

No. 26,035.—WILLIAM CLEVELAND HICKS, of Boston, Mass.—*Improvement in Sewing Machines.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my method of controlling needle thread in sewing machines, by a combination of mechanism, substantially as described, by which a bar or wire, through which the thread passes, and by which the thread is tightened and loosened, shall have the described motion combined, first, to be drawn up by the needle bar, or its equivalent, during its entire upward motion; second, held at rest until the needle eye is at or near the material to be sewed; and third, to be disengaged and allowed or caused to fall by its own gravity, or by the assistance of a spring, for the purpose of gaining the amount of motion lost by remaining at rest during the first part of the downward motion of the needle bar, all substantially as described and specified.

No. 26,036.—N. E. HINDS, of Cooperstown, N. Y.—*Improved Horse Shoe.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of these improvements.

The inventor says: I *claim*, first, the wider and thicker enlargement of the toe or fore part of the shoe.

Second. I claim the trough like concave form of the underside of the shoe and the raised edges B B and C, that ensue, as a consequence of the construction of said concave form.

Third. I claim the construction of caulks made in a V or double V form, all of which is constructed and claimed substantially as and for the purposes set forth and specified.

No. 26,037.—A. D. HOFFMAN, of Belleville, Mich.—*Improvement in Cider Mills.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the crushing rollers B B<sup>1</sup>, pressure rollers E F, and endless apron G, when the crushing rollers B B<sup>1</sup> are provided respectively with teeth *a* and recesses *b*, and the pressure roller E, provided with the yielding bars *c* and canvass covering *g*, substantially as and for the purpose set forth.

No. 26,038.—S. F. LEWIS, of San Francisco, Cal.—*Improvement in Pulley Blocks.*—Patent dated November 8, 1859.—This invention consists in the employment or use of an eccentric



and shoe placed within the block and arranged relatively to the pulley, whereby said parts, when used in connection with stops on the pulley and a stop on the shoe, enable the attendant to control the movement of the rope, checking or stopping it entirely when the article to be elevated is at the proper height and the power is to be detached, and regulating the descent of the article as may be required.

The inventor says: I *claim*, first, the arrangement and combination of the pulleys C, shoe D, and eccentric E, within the block A, as and for the purpose specified.

Second. The teeth or projections *b*, and stop *c*, formed respectively on the pulley C and shoe D, to operate as and for the purpose set forth.

No. 26,039.—JAMES M. McLEAN, of New York, N. Y.—*Improvement in Abdominal Corsets*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A corset or belt with cork brackets or projections B B B<sup>1</sup> on its zone, the upper or top edge of such brackets being beveled, as shown in the drawings, in combination with the abdominal pads A<sup>1</sup> A<sup>1</sup> A<sup>2</sup> A<sup>2</sup>, which form a part of the lower section of the corset or bandage and are held in their places by the same, in the manner and for the purpose set forth in the drawings.

No. 26,040.—JAMES McNAMEE, of Easton, Pa.—*Improved Knife Cleaner*.—Patent dated November 8, 1859.—This invention consists of an upper socket containing a pad and operated by a lever, a lower socket with a pad, and a reservoir, containing the polishing material, the lower pad being rendered adjustable in respect to the reservoir, and the several parts being arranged so as to form an apparatus for cleaning knives and forks.

*Claim*.—The upper socket D with its pad I, operated by the socket F with its pad, and the reservoir B, when the pad of the lower socket is rendered adjustable, in respect to the reservoir, and when the several parts are arranged in respect to each other, as and for the purpose set forth.

No. 26,041.—ALLEN N. MERRILL, of Batavia, Ill.—*Improvement in Seeding Machines*.—Patent dated November 8, 1859.—This invention consists in a peculiar arrangement and combination of parts, whereby different kinds of seed may be planted with one and the same machine, and at different distances apart as may be required.

The inventor says: I *claim*, first, the employment or use of a longitudinal adjustable shaft H, provided with cylinders J, having different sized seed cells in connection with perforated bars *g*, slides *i*, and plate *k*, arranged to operate substantially as and for the purpose set forth.

Second. The arrangement and combination of the spout *l*, conductors K, shoe spouts L, and elevating arms E on shaft D, connected to the conductors K, the whole being arranged substantially as and for the purpose set forth.

No. 26,042.—JOHN H. MILLER and SAMUEL ALBRIGHT, of Grafton, Va.—*Improvement in Portable Gas Apparatus*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A portable gasometer C, furnished with a central gas discharge pipe E, a central guide rod S, a flexible connecting pipe F, and one or more ratchet bars H H, and arranged in a frame A A B B, which is provided with one or more spring pawls I I, for use in a railroad car, or other travelling apparatus, which is subject to a jolting or vibrating motion, for the purpose of supplying gas to a series of gas burners, substantially as and for the purposes set forth.

No. 26,043.—CHARLES MINZISHEIMER, of New York, N. Y.—*Improvement in Shirts*.—Patent dated November 8, 1859.—This invention consists in the employment of an expansible joint and strings at the back of the shirt, in combination with perforations in the collar, whereby it is secured without affecting the working of the joint.

*Claim*.—The expanding joint D D, and strings E E, or their equivalents, at the back of the shirt, in combination with the openings *m m* in the other, substantially as and for the purposes specified.

No. 26,044.—OLIVER P. MORAN, of Haynesville, Mo.—*Improvement in Corn Planters*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the curved concentric aperture *o*, in the bottom of the seed box G, with the sliding strike N, and measuring holes *m m*, for the purpose of charging said holes from the seed box with the least possible weight upon and impediment to the motion of the dropping wheel D, as specified.

I also claim the combination of the concentric vibratory arm *h*, and projecting pin *l* thereon, with the measuring holes *m m*, substantially as specified, for the purpose of imparting the proper movement to the dropping wheel D.

I also claim the arrangement of the instant valve M upon the curved weighted hinge *t*,



which is pivoted to the sides of the chamber G, in a position nearly vertically over the valve, in combination with the slotted connecting rod S, for the purpose of producing a superior quickness and delicacy of action on the valve, substantially as specified.

No. 26,045.—AUSTIN W. MOSES and JOSEPH H. SPRINGER, of Philadelphia, Pa.—*Improvement in Casting Car Wheels*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The described method of casting railroad car wheels by pouring the central portion of the wheel, independently and in advance of the tread, to allow said central portion to cool and contract to any desired degree before adding the metal forming the tread of the wheel; when said end is accomplished by the employment of a ring, composed of any convenient number of segments F F, or their equivalents, and arranged to operate in combination with the annular part D of the flask, substantially in the manner and for the purpose specified.

No. 26,046.—JACOB H. MUMMA, of Harrisburg, Pa.—*Improvement in Straw Cutters*.—Patent dated November 8, 1859.—This improvement consists in the employment of feed rollers of such form, when arranged and combined with a hawk bill cutter and bar, that in chaffing corn-stalks, they can be split lengthwise by said rollers; and in cutting hay or straw, said rollers divide it into separate and distinct parcels, and more perfectly retain the material to be cut by the revolving knives.

The inventor says: I *claim*, first, the employment of a hawk bill cutter *a a*, constructed and arranged as described, in connection with a cutter bar *c* of a straw cutter, operating in the manner as and for the purposes set forth.

Second. I claim the slat bed *h* for the purposes of not only cleaning the material from dirt, but also as a feed to the rollers, substantially in the manner and for the purposes set forth.

Third. I claim the employment of the rib *d<sup>2</sup>* feed rollers for crushing and dividing the sheet of material to be cut, when arranged and combined with a hawk bill cutter *a a* and bar *c*, substantially in the manner set forth.

No. 26,047.—ADRIAN V. B. ORR, of Lancaster, Pa.—*Improvement in Sawing Machines*.—Patent dated November 8, 1859.—This invention consists in combining the alternate action of two saws, so as to divide a cordwood stick into three pieces in the time and with less power than is used at present to divide into two; and, also, in so arranging the attachments of these saws, by means of bifurcated extremities to oscillating levers, as to do away with the necessity for guides and make them self feeding.

*Claim*.—The oscillating lever D B in combination with the spring T and feed lever *ll*, when constructed as described, and operating either a single saw or a pair of saws, as specified.

No. 26,048.—GEORGE R. OSBREY, of Providence, R. I.—*Improvement in Heating Apparatus*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination of the alcohol reservoir and vaporizer with a lamp for heating the same, when such vessels are connected by a liquid pipe E and a vapor pipe F, said pipes acting in such connection to maintain a constant level within the vaporizer, in the manner and for the purpose substantially as set forth.

I also claim, combining with such device for vaporizing, a conical disseminator I and a convex deflector K, arranged substantially as specified and for the purpose set forth.

No. 26,049.—GEORGE W. PARROTT and CHARLES K. BRADFORD, of Lynn, Mass.—*Improved Machine for Cutting Boot and Shoe Soles*.—Patent dated November 8, 1859.—This invention consists of the oscillating and reciprocating stock, conveying the knives and the feeding presser clamps.

*Claim*.—The combination and arrangement of an automatic feed, sole by sole, with the cutting knives, substantially as described.

No. 26,050.—HERMAN G. C. PAULSEN, of Flatlands, N. Y.—*Improvement in Clarifying and Refining Sugar, Juices, &c.*—Patent dated November 8, 1859.—The claim explains the nature of this invention.

*Claim*.—The application of alcohol, in combination with water, in all the proportions as stated, and at the temperature of boiling of said combined liquids to the melting or dissolving, boiling or treating raw sugars or juices of saccharine substances, as described, for the purpose and to the effect of producing the intended making and refining of said sugars.

No. 26,051.—WILLIAM PETTET, of New York, N. Y.—*Improved Cooking Range*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination, with a central fire grate having openings in its side and with the side roasting chambers or spits, of dampers which can be adjusted so that the roasting may either be effected in the side chambers, by direct action of the burning coals, or by the



heat radiated from the sides of the fire chambers, substantially as and for the purposes set forth.

No. 26,052.—EDWARD R. PYE, of New York, N. Y.—*Improved Sweat Knife for Cutting Hat and Cap Linings.*—Patent dated November 8, 1859.—This invention relates to a tool for simultaneously cutting out and perforating for sewing the trimming of hats and caps, technically termed "sweats."

*Claim.*—The employment or use of the knife on the projection C of the bar B, and secured thereto by the set screw c, in connection with the pointed wheel E attached to the projection C; the whole being arranged substantially as and for the purpose set forth.

No. 26,053.—JOHN ROBINSON of Eli, of Sharptown, Md.—*Improvement in Portable Turntable.*—Patent dated November 8, 1859.—The inventor says: My invention designs the construction of a simple and effective railroad, which can not only be quickly laid down in low or marshy grounds for the hauling of timber and other similar purposes, but can also be easily shifted in its parts so as to admit of renewing the trucks in any and all directions desired.

*Claim.*—The adjustable sliding turntable E E G; the whole constructed and operating substantially as specified and for the purpose set forth.

No. 26,054.—JOSIAH M. READ, of Boston, Mass.—*Improvement in Stoves, Ranges, &c.*—Patent dated November 8, 1859.—The flue G, at its entrance into the outer atmosphere, is provided with a sliding door h for the purpose of supplying fuel to the same and regulating the draft thereof, which is provided with a clamp, screw, or handle o, to hold it in place in any desirable position.

*Claim.*—The application and construction of the flue G with its door h, substantially in the manner as and for the purposes described.

No. 26,055.—PETER REYNARD, of New York, N. Y., and VICTOR VARIN, of Brooklyn, N. Y.—*Improved Insect Powder Blower.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We claim, first, the ball c, attached directly to the chamber or neck b, and acting to blow the powder out of the neck or chamber, as set forth, and either with or without the valves 1 and 2, for the purposes and as specified.

Second. We claim the holder, composed of the rod e and ring f, when provided with the rod g, or its equivalent, and the button h, to act on the elastic ball c, for the purposes as described and shown.

No. 26,056.—C. BIRD PATE, of Moore's Hill, Ind.—*Improvement in Stump Extractor.*—Patent dated November 8, 1859.—This machine is operated by placing hook chain R in a notch in the front end of lever L, and fastening the hooks into the roots of the stump or tree to be extracted, lever E being in a horizontal position, and placing the point of spar H against the stump or tree, then applying at the link in the end of the chain P, causing lever F to approach a perpendicular position, and, raising the end of lever E, spar H is thrown forward and the front lever L is raised; thus combining the double action of lifting and pushing at the same time, and throwing the stump or tree from the machine and team.

*Claim.*—The arrangement of levers E F and L and spar H; the whole being for operation conjointly as and for the purpose set forth.

No. 26,057.—ISRAEL M. ROSE, of New York, N. Y.—*Improvement in Sewing Machines.*—Patent dated November 8, 1859.—This invention consists in a mode of combining and operating two needles and a shuttle, or their equivalents, to make a stitch of a novel character with three threads.

*Claim.*—The combination of two needles and a shuttle, or their equivalents, to operate substantially as set forth, for the purpose of producing a stitch of the structure described and represented.

No. 26,058.—CHRISTIAN CHARLES SCHIEFERDECKER, of Baltimore, Md.—*Improvement in Stoves.*—Patent dated November 8, 1859.—The inventor says: I construct a stove, of any suitable form, in such manner that it shall contain a central space or chamber, through which the air passes to be warmed, surrounded by a series of ascending and descending flues, the said chamber being fitted with lumps or pieces of some material refractory to heat, such as lumps of fine clay, broken pieces of sandstone, cannon balls, &c., for the purpose of accumulating and retaining the surplus heat, whilst the fire is active, and gradually imparting it to the air of the apartment as it passes through its interstices, and thus preserve an almost uniform temperature.

*Claim.*—The combination of the central air space f, containing material refractory to heat, with the series of surrounding ascending and descending smoke flues n o p, when arranged substantially as set forth, for the purposes described.



No. 26,059.—CHARLES SCOFIELD, of Adams, N. Y.—*Improvement in Sewing Machines.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the auxiliary feeding plate Q, with pins or teeth on its surface, in combination with the perforated slotted main feeding plate N, when said plate Q combines in itself the properties of a spring and of a feed bar, and is otherwise constructed and arranged so as to operate in the manner described.

Second. The arrangement of the pivoted lever S, adjustable collar *q*, pressure pad F F<sup>1</sup>, and needle lever D, in the relation shown to one another and for united operation in the manner and for the purpose set forth.

Third. The lever S, when made elastic, laterally pivoted at *n*, provided with a pin *p*, and coupled to the pressure pad F F<sup>1</sup>, by an adjustable collar *q*, in combination with the needle lever D, and the recess S in the standard C, substantially as and for the purpose set forth.

Fourth. The looper W x U T, when the part U T is made rigid and attached to the horizontal rock shaft V, and the part W x is made yielding or with a spring and formed or arranged on one side of part U T, and in the relation shown to a projection on the peripheral surface *x* of the actuating cam, in the manner and for the purpose described.

Fifth. The combination of the adjustable intermediate plate 13, with the jaws T x of the looper, substantially as described, for the purpose of adapting the same looper, without removing it from the machine which is used, for sewing either in the double looped or other stitch made with two threads, for sewing in the chain stitch, as set forth.

No. 26,060.—JAMES STIMPSON, of Baldwinsville, Mass.—*Improved Machine for Making Box Joints.*—Patent dated November 8, 1859.—This invention consists of a machine for making an improved joint for jointing or putting together boxes, &c., which is shown in the engraving, where A represents the front and B the side of a drawer; on the piece A is formed a series of round tenons *a*, which enter corresponding holes *c* in the piece B; a lap or rebate *b* is formed on the piece A in the thickness of the stuff, which laps over the end of the piece B when in place, the whole forming a joint.

The inventor says: I *claim*, first, the combination of the hollow bit *r*, the cutters *w* and *d*<sup>2</sup> or their equivalents, operating as set forth, to form the tenons *a*.

Second. In combination with the above, I claim the augur bit 12, operating as described, to form the holes *c* to correspond with the tenons *a*, as set forth.

No. 26,061.—CHESTER W. SYKES, of New York, N. Y.—*Improved Carving Knife.*—Patent dated November 8, 1859.—This invention consists in the combination of shears with the ordinary carving knife, so that the advantages of each instrument are attained.

*Claim.*—The combination of a knife and shears, substantially as described, as an instrument especially adapted for carving meats.

No. 26,062.—HARVEY TRUMBULL, of Central College, Ohio.—*Improvement in Straw Cutters.*—Patent dated November 8, 1859.—The inventor says: My present improvement is more or less immediately connected with the feed of the material in the hopper, and for this purpose I employ an automatic rake to urge forward the straw under a rising and falling pressure cap or piece, that coming down retains the straw fed by the rake, and holds it firm and compact for the action of the knife.

*Claim.*—The combination of a self adjusting spring pressure clasp L to or with an automatic rake, for the purpose of feeding the material to the knife, substantially as specified.

No. 26,063.—NATHANIEL WATERBURY, of Fond-du-Lac, Wis.—*Improvement in Gates.*—Patent dated November 8, 1859.—The rod J and weight K constitute a pendulum swinging at right angles to the axis and movement of the gate. By this arrangement, the gate may be turned entirely down level with the ground; but, by the attachment of a weight to a lever extending from the rear part of the gate, it cannot be turned down level; the levers also present an obstruction by their lateral projection.

*Claim.*—The arrangement and combination of the pendulous rod J and weight K, with the axis of the pulley H, as and for the purpose shown and described.

No. 26,064.—JAMES WHITEHILL, of Frederick, Md.—*Improvement in Hot Air Furnaces.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a furnace constructed with two separate fire chambers and grates, with an air passage between the chambers closed at their sides, but open at the bottom and top, substantially as and for the purposes set forth.

Second. The combination of the peculiar labyrinthian air passage described and the peculiar furnace described, in the manner and for the purpose set forth.

Third. The combination, with the peculiar furnace and peculiar labyrinthian air passage described, of the curved cold air pipe M, substantially in the manner and for the purpose set forth.



No. 26,065.—FERDINAND WUTRICH and JACOB KOERBER, of New York, N. Y.—*Improvement in Cotton Gins*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the finger shafts C and D, operating and constructed in the manner described, and acting together so that, while the fingers of the shaft C, during its revolution, pull the cotton out of the hopper, the fingers of the shaft D take the cotton from the former, and deposit the same upon the guiding rollers, substantially as specified.

No. 26,066.—WILLIAM C. ALLISON, of Philadelphia, Pa., assignor to Himself and JOHN MURPHY, of said Philadelphia.—*Improvement in the Mode of Confining the Seat of the Driver on City Railroad Cars*.—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the board D, rod E with its collar *f*, and the catch *h*, when the said rod serves the double purpose of supporting the seat, and, in conjunction with the catch *h*, of maintaining the seat folded up out of the way, and when the several parts are arranged in front of the car as and for the purpose set forth.

No. 26,067.—HENRY C. BROWN, of Buffalo, N. Y., assignor to CHARLES O. BROWN, of Dalton, Mass.—*Improved Handle for Smoothing Irons*.—Patent dated November 8, 1859.—A is a hollow metallic cylinder of a convenient size and length to be grasped by the hand; B are heads inserted in the ends of cylinder A; a rib *c* fits into a groove *c*<sup>1</sup> and holds the head firmly; D are the legs which connect the handle to the smoothing iron.

*Claim*.—A ventilated smoothing iron handle, constructed for the purposes substantially as described.

No. 25,068.—WILLIAM E. COOPER, of Dunkirk, N. Y., assignor to CHARLES D. GIBSON, of New York city.—*Improvement in Railroad Car Springs*.—Patent dated November 8, 1859. This invention consists in the manner and means of arranging and operating such springs in groups or series of four or more springs placed in double lines vertically, so as to possess the length of elastic action, which two series of the springs would have if placed the one above the other, while the space which they occupy vertically is less than if the springs were placed in pans one above the other.

*Claim*.—The combination and arrangement of groups of four springs by and with the suspension bracket or stirrup B B, &c., constructed, arranged, and operating in the manner above described.

No. 26,069.—JOHN DANNER, of Canton, Ohio, assignor to J. M. JAY, of said Canton.—*Improvement in Sleeping Cars*.—Patent dated November 8, 1859.—The frames D of the backs B<sup>1</sup> are rigidly attached to the seats C C<sup>1</sup> and B, and are also provided with false backs *d* hinged to the backs of seats C, and capable of being let down so as to rest on the bottoms *f* attached to the underside of seats C<sup>1</sup>.

*Claim*.—The combination of the hinged back *d*<sup>1</sup> with the hinged and reversible frame D<sup>1</sup>, and removable piece E, constructed and arranged to operate in relation to seat C<sup>1</sup> and false backs *d* of the back B<sup>1</sup>, substantially as and for the purposes set forth.

No. 26,070.—PEARSON B. KITCHEN, of Philadelphia, Pa., assignor to WILLIAM M. MARSHALL, of said Philadelphia.—*Improvement in Apparatus for Heating Hydro-Carbon Liquids*.—Patent dated November 8, 1859.—This invention consists in the use of an air chamber or bellows and a generating tank, said air chamber to have a conical or other shaped bottom, with the application of a heating frame to heat the air when necessary before coming in contact with the chemicals, and said air chamber to have one or more pipes passing from it into the generator, to be partially submerged in the liquid; all for the purpose of thoroughly producing evolution and a perfect commingling of other gases and the atmospheric air, and also producing a steady and uniform light.

*Claim*.—The application to gas generators of a hot air chamber, as previously described, and the submerging of one or more air pipes therefrom into and upon the chemicals, for the purposes set forth and described, or any other substantially the same and which will produce the intended effect.

No. 26,071.—A. H. KNAPP, of Newton Centre, Mass., assignor to Himself, E. H. BARTOW, and A. R. TROWBRIDGE, of said Newton Centre.—*Improvement in Lamps*.—Patent dated November 8, 1859.—The inventor says: I employ a wick protector I placed around the projecting part of the wick, and at a little distance therefrom, sufficient to allow room for the combustion to take place, and extending upward about as high as the wick ordinarily extends. It is secured on the upper end of the wick holder G.

*Claim*.—The wick portion I, arranged and operating substantially as and for the purpose described.

No. 26,072.—AMBROSE LOVIS, of Boston, Mass., assignor to Himself and CHARLES E.



HODGES, of said Boston.—*Improvement in Composition for Detergent Purposes.*—Patent dated November 8, 1859.—This invention consists in the employment of silicate of soda or silicate of potash impregnated with chlorine, the silicate cleansing the fabric, while the chlorine disinfects and whitens it.

*Claim.*—The above described cleansing, bleaching, and disinfecting liquid, consisting of an alkaline silicate combined with chlorine, for the purpose specified.

No. 26,073.—JAMES A. WHIPPLE, of Boston, Mass., assignor to Himself and GEORGE A. STONE, of Roxbury, Mass.—*Improvement in the Method of Driving Piles.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The method or process of driving piles by exploding charges of gunpowder, or its equivalent, between the pile and a fulcrum of resistance, so that the force of the explosion shall wholly or partially act to drive the pile in the direction of its length, or nearly so.

No. 26,074.—JOSEPH BARRANS, of County of Surrey, England.—*Improvement in Portable Traction Locomotives.*—Patent dated November 8, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the method herein described of supporting the front portions of traction or portable steam engines, by means of a spring or elastic beam or lever at or near the middle thereof; the said beam or lever being arranged constantly to occupy a position in a vertical plane passing through the axis of the boiler, and by having its rear and front ends applied and jointed respectively to the bottom of the barrel of the boiler and to the fore carriage, substantially as and for the purpose set forth.

Second. The application and use, in traction engines, of tension rods or bars for retaining the driving wheel centres at the proper distance asunder from the axis of the ground driving wheels.

Third. The application and use, in traction and portable steam engines, of ground driving wheels, in two or more sections capable of being put in and out of working action for the purpose described, and such wheels having teeth holding projections upon their peripheries of the form and arrangement described.

No. 26,075.—JAMES ALBRO, of Elizabeth, N. J.—*Improved Method of Printing Floor Cloths.* Patent dated November 15, 1859.—This invention consists in a novel way of charging the blocks with color, so that the latter may be distributed on the face of the block in such a manner that it will be transferred, under suitable pressure of the block, direct to the cloth, and produce the desired effect.

*Claim.*—The production of grained or variegated designs upon oil cloth, by applying the printing blocks to cushions or pads upon which the colors have been previously "grained" or "combed," as herein set forth.

No. 26,076.—WILLIAM H. ARNOLD, of Washington, D. C.—*Improvement in Breech Loading Fire-Arms.*—Patent dated November 15, 1859.—This fire-arm is designed to be used with the inventor's tail guide projectile.

The inventor says: I *claim*, first, the combination of the cap lever L, shackle piece C, pin e, and grooves i, with the breech piston P, for operating the same, substantially as described.

Second. The combination of slide piece k, joined as described, with the pin a, and hammer H, operating substantially as and for the purpose set forth.

Third. The cavity m in the piston P, for the reception of the rear projecting tail piece of the projectile, as set forth.

No. 26,077.—J. M. BAIRD, of Wheeling, Va., and LEVI F. SMITH, of Stonington, Conn.—*Improved Reclining Chair.*—Patent dated November 15, 1859.—The object of this invention is to effect a more convenient, easily adjusted, and comfortable reclining chair than any now in use, being so constructed that by a simple and self-adjusting arrangement the occupant may by his own specific gravity, control and operate the chair at will, placing himself permanently at any angle or inclination desired, the foot board at the same time adjusting itself to the position of the feet and the desired length of the legs.

The inventors say: We *claim*, first, the combination and arrangement of the oscillating pedestal A, vertical lever B, the sliding seat frame C, and stand D, substantially as and for the purpose described.

Second. We claim, in combination with the fall L, the vibrating foot board P, the oscillating bars H, and pitman F, or their equivalents, operating in the manner and for the purposes described.

No. 26,078.—WILLIAM H. BAKER, of Tamaqua, Pa.—*Improvement in Mechanical Movement.*—Patent dated November 15, 1859.—The object of this invention is to obtain a simple mechanism for applying the power of a weight to a reciprocating driving shaft. The inven-



tion is more especially designed for operating light machinery, such as churns, washing machines, &c., and save the labor required by the manual operation of them.

*Claim.*—The drum B, placed loosely on the shaft C, and having ropes or chains *l m*, and a weight or weights attached to it as shown, in connection with the toothed spring L, toothed wheel E, train of wheels *i*, fly wheel G, and cam H, fitted between the friction rollers *j* of the shaft I, the whole being combined and arranged to operate as and for the purpose set forth.

No. 26,079.—WILLIAM C. BAMBERGER, of Washington, D. C.—*Improved Gauge for Iron Axles.*—Patent dated November 15, 1859.—The inventor says: To set the gauge for the “gather,” proceed as follows: Lay off upon arm C a distance equal to twice the length of the arm or journal; then move the arm inward, at the point just ascertained, equal to the whole taper of the journals, and clamp it; now measure off upon arm C a distance equal to half the diameter of the wheel, and at this point move the arm outward a distance equal to half the “gather,” previously determined; clamp it, and it is ready for use.

*Claim.*—An axle gauge, constructed and operated substantially in the manner described.

No. 26,080.—JACOB W. BANTA, of Buffalo, N. Y.—*Improvement in Ship Building.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Extending the planking upon both sides of the bow, and uniting their contiguous ends forward of the dead wood, the planking and dead wood being chamfered to admit of such extension and union, substantially as described.

No. 26,081.—JAMES BIDWELL, of New York, N. Y.—*Improved Burr Cylinders.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Securing the toothed plates D in place by providing them with projections or recesses to fit to corresponding recesses or projections provided in or on the interposed packing rings fitting to the body of the cylinder, substantially as described.

No. 26,082.—AARON BOWERS, JACOB H. GRIGGS, and JOHN WILSON, of Monmouth, Ill.—*Improvement in Mole Ploughs.*—Patent dated November 15, 1859.—As the mole or plough is drawn along, the front of the mole A raises up the earth and the ridge G separates it so as to pass it on each side of the coulter and up the inclined groove F to be packed up into the cut made by the coulter, by the rounded end near the mole part A, while at the same time the scrapers *a a* scrape any loose earth thrown out above into the cut made by the coulter, where it is closely packed down by the presser D.

*Claim.*—The combination of the peculiarly constructed mole A, with the scrapers *a a* and presser D, arranged and operating in relation to each other, as and for the purpose set forth.

No. 26,083.—ADOLFUS BRASS, of Newark, N. J.—*Improved Tool for Cutting Corks.*—Patent dated November 15, 1859.—This invention consists of a cutter adapted for the purpose of cutting conical corks, consisting of two curved blades, two spring or hinged arms, and a sliding ring with extensions, the latter being fitted to grooves of the arm, and as the cutter progresses through the block, sliding longitudinally on the arms by reason of the ring coming in contact with the cork block, and consequently causing the arms and blades to gradually approach nearer together and thus give the proper taper to the cork.

*Claim.*—A cutter consisting of two curved blades *z z*, two spring or hinged arms *x x*, and a sliding ring *c<sup>l</sup>*, with extensions, substantially as and for the purposes set forth.

No. 26,084.—ISAAC A. BROWNELL, of Providence, R. I.—*Improvement in Machines for Packing Starch, &c.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the tunnel T, as constructed for the purpose, substantially as described.

Second. I claim attaching the cans *i i* to upright strips of wood or metal, which receive and transmit to the said cans the motions which reduce in bulk the commodity placed therein.

Third. The wheel F, or its equivalent, for holding and carrying the blocks *h h*, in combination with the cam wheel G, or its equivalent, and the studs *l l*, &c., for imparting the motions which reduce the commodity in bulk, and also the intermittently rotary motion to the wheel F, for the purpose set forth.

Fourth. I claim the arrangement of the foot lever *u*, and the rod *v*, and the punch S, with the rod and plate *j*, for the purposes specified. I also claim, in combination with the punch S, the pawl *w*, rod *y*, and sliding hub *x*, for liberating the wheel F, at the proper time.

Fifth. I claim the rail *a a* and studs *r r*, &c., with the stop O, for withholding motion, in the manner and for the purpose specified.

No. 26,085.—JOSEPH BULLOCK, of Cohoes, N. Y.—*Improvement in Knitting Machines.*—



Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, in combination with such a circular series of stationary needles of a series of lever like jacks F, applied substantially as described, and having a movement between the needles in a direction radial to the centre of the machine, as described, but no rotary motion.

No. 26,086.—GEORGE T. BUSHNELL, of Birmingham, Conn.—*Improved Martingale Ring.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—As a new article of manufacture, a martingale ring whose exterior edge is thinner than the interior, in combination with an exterior band, whose edges extend down upon the sides of the ring, forming a hollow or corrugated band on its surface, substantially as described, for the purposes as aforesaid.

No. 26,087.—JOHN T. BUTLER, of Natchez, Miss.—*Improvement in Fastening Metal Hoops on Cotton Bales.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the buckle frame A, when made without any opening in the border of it, with the hooks C C<sup>1</sup>, when the latter are received through the former and held in place by the pressure of the bale against them, substantially as described and represented.

No. 26,088.—LYSANDER BUTTON and ROBERT BLAKE, of Waterford, N. Y.—*Improvement in Nozzles for Fire Engines, &c.*—Patent dated November 15, 1859.—This invention consists in a certain improvement in the nozzles or adjustages of fire engines and other hydraulic machines.

*Claim.*—The removable ring B, constructed and combined with the adjustage, substantially as set forth.

No. 26,089.—WILLIAM L. CARTER, of Marietta, Pa.—*Improved Ore Washer.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A double conical shaped vessel, provided with teeth or cutters inside at the end where the ore is received, and the grinders G, with the means described for supporting and adjusting the same, substantially as specified.

No. 26,090.—CYRUS CHAMBERS, Jr, of Philadelphia, Pa.—*Improvement in Machines for Folding Paper.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, so arranging the drop roller that it shall coöperate with one of the feeding rollers in feeding in the sheet.

Second. Forming grooves in the folding rollers for the reception of the adjustable guides, as described.

Third. The combination of the carrying roller with the folding roller for carrying in the sheet.

Fourth. Giving the curved bars a projection beyond the surface of the rollers, for the purpose of raising or bearing off the sheet from the folding roller, substantially in the manner described.

Fifth. Moving the folding knife in an arc around one of the folding rollers, as and for the purpose specified.

Sixth. Placing the centre of the arc in which the folding knife moves, near and within the periphery of the roller around which it moves, substantially as and for the purpose set forth.

Seventh. Corrugating the sheet as it passes from one folding mechanism to a position to be acted upon by the next, for the purpose described.

Eighth. Turning or conducting the paper by means of the bent bars 13 or 22, or their equivalents, substantially in the manner specified.

Ninth. The combination of the bent bars with the straight bars and adjustable stop, arranged substantially in the manner described.

Tenth. The combination of the bent bars with the tapes and stop, for the purpose specified.

Eleventh. The oscillating packer or plunger R, having its centre of motion below the point of contact with the folded sheets, as set forth.

Twelfth. The yielding catches for preventing the return of the packed sheets, constructed and operating substantially as described.

Thirteenth. Making one or more notches in the plunger for cleaning the yielding catches, as set forth and shown.

No. 26,091.—GEORGE E. CHENOWETH, of Baltimore, Md.—*Improvement in Harvesters.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—The described arrangement and combination of the finger bar and main frame, whereby the bar can be folded forwards to the side of the machine with its front downwards, so that the platform can remain attached to the bar, and occupy a vertical plane therewith when folded to this position, all as described and represented.

No. 26,092.—PHILIP L. CLOW, of Cohoes, N. Y.—*Improved Churn.*—Patent dated November 15, 1859.—This is an improvement on such churns as have within a tub-like cream vessel, two upright plate like dishes, running in contrary directions with equal speed on vertical axes at their centres, which are so separated that the paths of the dashers in their horizontal revolutions cross each other, as indicated by the dotted circular lines marked Z Z<sup>1</sup>.

The inventor says: I *claim*, first, hanging the outer parts *a a a<sup>1</sup> a<sup>1</sup>* of two contrarily revolving dashers B B<sup>1</sup> to the central portions *c c<sup>1</sup>* by hinges *d*, in the manner and for the purposes set forth.

Second. The arrangement of the air pump E and water reservoir F, with the revolving dashers B B<sup>1</sup> and cream vessel G, as and for the purpose described.

No. 26,093.—AARON L. CORNELL, of New York, N. Y.—*Improved Rotary Churn.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the rotating shafts armed with the concave or recessed crags or dashers within the two concave or half-cylinder chambers, placed back to back, as described.

No. 26,094.—HUNTER DAVIDSON, of the United States Navy.—*Improved Apparatus for Working Ships' Boats.*—Patent dated November 15, 1859.—This invention consists in lowering the boat by means of a reel placed inside the ship, by which one man can by the means of a single rope and chain lower a boat with its crew; also of a detaching apparatus, by which both ends of the boat may be simultaneously detached, and if need be by one man; and also of an attaching apparatus by which the boat is again attached in a proper manner.

*Claim.*—The boat apparatus, consisting of the reel, the attaching and detaching hooks, constructed and operating substantially as specified.

No. 26,095.—THOMAS H. DODGE, of Washington, D. C.—*Improvement in Mowing Machines.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement and combination of the levers, standards, and cords *i i*, or their equivalents, with shoe C, whereby the driver, from his seat on the machine, can elevate either end of the finger bar independently of the other, or the entire bar, substantially as described for the purpose specified.

Second. I claim the combination of the cutting apparatus with the main frame and mechanism represented in Figs. 2 and 16, or its equivalent, so constructed and arranged that the driver can, without leaving his seat on the machine, fold up and unfold the finger bar without taking hold of it with his hand, substantially as and for the purpose stated.

Third. I claim the combination and arrangement of the levers G G<sup>1</sup> with the driver's seat E and cord or chain *h<sup>1</sup>*, whereby the driver may, when necessary, employ both his hands and his feet, together with the power of the team, to raise the finger bar and cutting apparatus substantially as set forth.

Fourth. I claim so combining mechanism with the machine as that the driver can employ the power of the team to assist to elevate the finger bar and cutting apparatus at pleasure, without changing the horizontal position of the main frame, substantially as described.

Fifth. I claim in a reaping and mowing machine the folding guard F and rein hitch *h*, in combination with the driver's seat, substantially as and for the purposes set forth.

Sixth. I claim the flexible or adjustable draft connection *b<sup>1</sup>* or X, to which the team is attached, in combination with the coupling arm *a* and shoe C, substantially as and for the purposes set forth.

Seventh. I claim the spiral cutters *k*, when constructed and arranged as shown in Fig. 11, and operating substantially as and for the purposes set forth.

Eighth. I claim hinging the track clearer to the extension piece *j<sup>1</sup>*, or its equivalent, by means of the crank *j j*, for the purposes described.

Ninth. I claim so constructing the track clearer that its weight may be adjusted in the manner and for the purposes substantially as set forth.

No. 26,096.—MILES EARNHART, of Cold Water, Miss.—*Improvement in Cotton Scrapers.* Patent dated November 15, 1859.—In this invention, a beam A of ordinary construction is provided, to which are attached handles B B. The principal parts of the scraper consist of a stock or landside C, bottom D, and mould board E. The brace G can be raised or lowered, if desired, to vary the adjustment produced by the holes *f*.

*Claim.*—The arrangement and combination of the double adjustments of the mould board E with the stock C and rigid supporting brace G, substantially as and for the purpose specified.



No. 26,097.—MOSES G. FARMER, of Salem, Mass.—*Improvement in Telegraphic Machines.* Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The use of a key or circuit breaker, which shall close one circuit before or at the same time that it opens another, in connection with an electro-magnet with two sets of helices operating on one and the same armature lever, or two separate electro-magnets operating upon one and the same armature lever, for the purpose of transmitting two messages simultaneously upon a single wire.

No. 26,098.—WILLIAM FROST, of Amenia, N. Y.—*Improved Milk Can.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A milk can provided with tinned iron hoops B, with their ends connected together by rivets *b* and solder *a*, either or both, and secured on the can by solder, to form an improved article of manufacture, as set forth.

No. 26,099.—ROLLIN GERMAIN, of Buffalo, N. Y.—*Improvement in the Construction of Ships and other Navigable Vessels.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, vessels for navigation, when the bow and stern sections shall taper uniformly, and the vessel, below its water lines, be of the form and model substantially as described, and when the relative proportions as to length, breadth of beam, and draft of water, shall be such that, if a right line be drawn longitudinally through the middle, commencing at the water line at the bow, and terminating at the water line at the stern, (when the vessel is loaded,) and another line be drawn at right angles to said line along the water surface, from the water line on one side to the water line on the other side, at the middle of the part of the vessel where a cross section below the water line is greatest, and from every point in this last described line right lines be drawn to each end of the first described line, the average of all the angles made by these last lines with the first described line shall not exceed two degrees.

Second. The combination of the fin like projection V with a vessel, constructed below its water lines, substantially as described.

Third. The combination of the overhanging deck with a vessel, constructed below its water lines, substantially as described.

Fourth. Constructing the pilot house and smoke stacks (separately) in respect to their forward and rear parts, in a tapering or wedge like form, substantially as described.

Fifth. The combination of the notched plates C C, the iron knee D, and rivets E, with a vessel, constructed substantially as described, for the purposes set forth.

No. 26,100.—JAMES GILES, of Dryden, N. Y., and C. B. TOMPKINS, of Ulysses, N. Y.—*Improvement in Cylinders for Smoothing Walks, &c.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* making cylinders for rollers, and other purposes, with grooved metal flanges, into which wood staves are fitted, which form the rolling surface, substantially as described and for the purposes specified.

Also, the mode of making and applying cross bars between rollers, when two or more cylinders are required for smoothing surfaces, as described.

No. 26,101.—GEORGE HAMEL, of Abington, Pa.—*Improvement in Apparatus for Starting City Railroad Horse Cars.*—Patent dated November 15, 1859.—This invention consists in the relative arrangement and combination of certain devices whereby the horse cars used on city railways may not only be readily started from a state of rest with greatly diminished strain upon the horses, but the forward motion of the cars on an upward as well as a level grade will readjust the said devices after each starting, at the will of the driver, and without impeding the said forward motion of the cars.

The inventor says: I *claim* the relative arrangement of the levers E E, the pawls F F, in combination with the rest pins *u* and inclined planes  $u^1 u^1$ , the draw bar D, in combination with the inclined pieces *s s* and the staying pins *p* and *q*, or their equivalents, for holding and releasing the draw bar D; the same being constructed and arranged to operate substantially in the manner and for the purposes specified and described.

I also claim, in combination with the said draw bar D, the devices H, I, K, L, and M, the same being arranged so as to be operated by the cam N for their readjustment, substantially in the manner set forth and described.

No. 26,102.—JACOB E. HARDENBERGH, of Fultonville, N. Y.—*Improvement in Potato Harvesters.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment or use of an adjustable share N in connection with the rotary screen P and with or without the discharging device Q; the parts



being applied to a mounted frame and arranged to operate substantially as and for the purpose set forth.

Second. The rotary discharging device Q, placed eccentrically on the screen P, kept in proper relative position therewith by the plate R, and rotated from the screen P by the projection q, substantially as described.

Third. The combination of the share N, rotary screen P, and discharging device Q, when attached to a mounted frame A and arranged substantially as shown, so that the screen and the discharging device may be adjusted independently of the share, and the discharging device Q rotated by the screen P and kept in an eccentric position thereon, for the purpose specified.

No. 26,103.—ALBERT H. HOOK, of New York, N. Y.—*Improvement in Machines for Grinding Glass.*—Patent dated November 15, 1859.—Before putting this machine into operation, the plate of glass is put upon the bed c, resting against a ledge at the foot of said bed, by which it is held. The machine is put in motion and the bed is drawn up under the cylinder that is in rapid rotation. The grinding sand, &c., is fed in and the work commences, the screws feeding the bed steadily up the inclined plane as the work progresses, and the inclination keeping the work free, while a plentiful supply of grinding material is freshly furnished to do the most efficient execution.

*Claim.*—The combination of the inclined carriage c and cylinder i, arranged and operated in the manner and for the purposes specified.

No. 26,104.—ELISHA G. HOPKINS, of Penn Yan, N. Y.—*Improved Bedstead Fastening.*—Patent dated November 15, 1859.—The inventor says: To use my invention, bore the holes as specified, insert and secure the irons as directed, then put the bedstead together, and turn the rails outward or inward, and the bedstead will be fastened together. If a cord be used, apply it to the pins on the rails, and apply as much force as is necessary to tighten the cord and there will be no risk of pulling out the rings or bolts.

*Claim.*—The construction and arrangement of the parts C, D, E, and F, substantially as specified, and for the purpose set forth.

No. 26,105.—M. G. HUBBARD, of New York, N. Y.—*Improvement in Harvesters.*—Patent dated November 15, 1859.—These improvements consist in combining a universal joint O with the reel G, by means of which a flexible reel is attained that will conform to the position of the platform on uneven ground; also, in combining the flexible platform D with a flexible reel, by means of which the front edge of the platform and the lower reel wing will be kept parallel and the grain laid evenly on the platform, whatever may be the surface of the ground.

The inventor says: I claim the universal joint O in the reel in which the arms and wings are pivoted or flexible and yielding, substantially as specified.

I also claim the combination of the flexible reel G with the flexible platform D, substantially in the manner and for the purposes specified.

I also claim the outer reel arm S, in combination with the flexible reel and platform, as described.

No. 26,106.—DANIEL HUGHES, of Rochester, N. Y.—*Improved Propeller.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the spiral screw propellers C C<sup>1</sup>, so that their blades shall work nearly in contact, and thus present a broad, unbroken, resisting surface, substantially as and for the purposes shown and described.

No. 26,107.—WILLIAM J. INNIS, of Providence, R. I.—*Improved Belt Awl and Punch.*—Patent dated November 15, 1859.—This invention consists in making an awl and punch of one continuous piece of metal, with the awl at one end, and the punch at the opposite end of the bar, and placing the same within a spring handle, so that it may be rotated, and the awl and punch be presented alternately to the belt as occasion requires.

*Claim.*—The combination of the punch, awl, and spring handle, substantially as described.

No. 26,108.—ENOCH JACOBS, of Cincinnati, Ohio.—*Improved Fastenings for Jail Doors.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, making the castings of heavy iron doors of double angle iron, substantially as described.

Second. Fastening iron doors by swinging bars, working in the outside cavity of the double angle iron casing, substantially in the manner and for the purposes set forth.

No. 26,109.—THOMAS A. JEBB, of Buffalo, N. Y.—*Improved Churn.*—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the short dash blades H and long dash blades H<sup>2</sup> relatively to each other and to the segmental stave B, so that the short dash blades will revolve within,



and the long dash blade under the lower beveled end of the segmental stave, substantially as set forth.

No. 26,110.—ARTHUR E. JEROME, of Monroeville, Ohio.—*Improvement in Seeding Harrows*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, making the axis on which the harrows rotate hollow, and in the form of a drill tooth, substantially as and for the purposes set forth.

Second. Combining a corn planter or a broadcast sower with the harrows, substantially as and for the purposes set forth.

No. 26,111.—W. T. JONES, of Joliet, Ill.—*Improvement in Ploughs*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the attaching of the mould board E, landside F, and share G, to the standard C, by means of a joint or hinge, the plates or leaves *e f* of which are provided with screws, and arranged substantially as and for the purposes set forth.

I also claim constructing the standard C with a forked upper end, in connection with the rod D, lug *h\**, and flanch *f*, arranged substantially as shown, to admit of the proper attachment of the beam and handles to the plough.

No. 26,112.—J. G. KAPPNER, of New York, N. Y.—*Improved Billiard Table*.—Patent dated November 15, 1859.—This invention consists in the employment of a half circular guide plate, which is rigidly attached to the under side of the cushion rail, and to which the arm carrying the cup is pivoted; said arm is also furnished with a hook that catches over the inner periphery of the guide plate, thereby steadying the cup in whatever position it may be brought.

*Claim*.—The combination with the cushion rail B of the circular guide plate C, pivoted cross arm E, and hook *c*, as for the purpose shown and described.

No. 26,113.—JOHN KIMBALL, of Boston, Mass.—*Improved Machine for Rabeting Wooden Soles for Shoes*.—Patent dated November 15, 1859.—This invention consists in a novel guide rest, in connection with pressure roller and feed wheel for keeping the sole in its proper position with respect to the cutters during the operation of forming the rebate. It further consists in combining with the rotary cutters a fixed tool, which shall precede said cutters, and prevent the edges of the wooden sole from splintering as the cutters perform their work, and the various curves of the sole are presented to them.

The inventor says: I *claim*, first, the combination of the convex guide rest G with the pressure roller J and feed roller E, when arranged substantially as and for the purposes set forth.

Second. I claim, in combination with the rotary cutters and feed rollers E, the fixed tool P, when used in the manner and purposes set forth.

No. 26,114.—WILLIAM A. KIRBY, of Buffalo, N. Y.—*Improvement in Harvesters*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Locating the raker's seat over the open space at the side of the platform, so that the delivery may be at any point along the whole side of said platform that the raker may desire, substantially as described and represented.

No. 26,115.—WILLIAM S. MATHERS, of Meriden, Conn.—*Improved Beer Pitcher*.—Patent dated November 15, 1859.—This pitcher is arranged with two strainers in a partition behind the spout, one of the strainers being near to the bottom of the pitcher and the other one near to its top, whereby that portion of the liquid which would otherwise accumulate between the bottom strainer and the top of the vessel is enabled to find its way to the spout, without allowing more of the froth to mingle with it than is necessary to give the beer a lively appearance.

*Claim*.—A pitcher A, with two strainers F and G, one at the bottom and the other at the top of a partition E, and otherwise constructed, as specified.

No. 26,116.—LOUIS MEYER, of Columbus, Ga.—*Improved Extension Table*.—Patent dated November 15, 1859.—This invention consists in the employment of beveled or tapering arms, to which the leaves to be extended are fixed, which serve for braces for said leaves when extended, and rest upon the frame of the table in suitable guides, and press against a central cross strip, which strip serves as a central support for the top of the table when the leaves are drawn out.

*Claim*.—The beveled arms or braces G G G<sup>1</sup> G<sup>1</sup>, central cross piece B, and stops *b b b b* on the brace arms, when they are all combined and arranged as and for the purposes set forth.

No. 26,117.—DAVID MUMMA, Jr., of Harrisburg, Pa.—*Improvement in Mode of Operating Brakes on Railroad Cars*.—Patent dated November 15, 1859.—This improvement consists in



the employment of a friction wheel *n* secured on an auxiliary axle placed by the side of the axle of the driving wheel of the locomotive, which also carries a friction wheel *a* as a mate of the other.

The inventor says: I *claim* the employment of the movable plate *E* or its equivalent, provided with a shoe *x*, when in combination with a friction wheel *n*, a lever *D*, and wheel *a*, all so arranged that friction from said shoe and plate may be applied in the manner and for the purposes substantially as set forth.

I claim the arrangement of the brake chain attached to the axle *o*, as described, so the said axle may be employed as a lever, for the purposes set forth.

No. 26,118.—J. D. OTSTOT, of Springfield, Ohio.—*Improvement in Potato Harvesters*.—Patent dated November 15, 1859.—This invention consists in the combination and arrangement of the several parts enumerated in the claim.

*Claim*.—The arrangement and combination of the bent lever *h h*, excavator *d*, rotary rake *k k<sup>1</sup> k<sup>2</sup>*, hopper *l l*, and driving wheels *B B*, substantially in the manner and for the purpose set forth.

No. 26,119.—GEORGE F. PALMER, of Farmington, N. H.—*Improved Machine for Making Wooden Boxes*.—Patent dated November 15, 1859.—This invention consists in arranging on a rotary shaft two cutters for grooving and tonguing, together with two stationary and two movable saws for the purpose of preparing the boards for jointing, and to cut them off the proper width and length; and it also consists in the employment of two expanding sliding platforms, one to determine the width and the other the length of the boards for a box of any given size.

The inventor says: I *claim*, first the arrangement of the cutters *a b*, in combination with the stationary saws *H* and *K*, and with the adjustable saws *J* and *N*, substantially as and for the purpose specified.

Second. The employment of the expanding sliding platforms *I* and *M*, arranged in combination with the saws *H K J* and *N*, substantially as and for the purpose specified.

No. 26,120.—JOHN PATTON, of Arcadia, Ind.—*Improved Washing Machine*.—Patent dated November 15, 1859.—In operating this machine, after the tub is filled with the required amount of water, put the garments to be cleaned into the space between *A* and *B*, pass one end of the garment to be washed into the clamp *I*, secure it fast by means of the hook *K* and by the crank *L*, rotate the cylinder *C* as long as it is necessary to remove the dirt from the garment being washed to the water in the tub.

*Claim*.—The spiral springs *J*, clamp *I*, the hook *K*, in combination with the groove in the cylinder *C*, poles *H*, chains *F*, cross piece *G*, rollers *D*, board *B*, compound wringer and rinser *O* and *O<sup>1</sup>*, cylinder *C*, when operated as described.

No. 26,121.—ISAAC N. PYLE, of Decatur, Ind.—*Improvement in Cultivators*.—Patent dated November 15, 1859.—This invention consists in an improved mode of adjusting the wings of the cultivator, and also the central beam, so that the wings may be spread out or contracted.

*Claim*.—The arrangement and combination of the curved pivoted wing rods *A A*, curved adjustable central rod *C*, looped sockets *F*, vertical movable standards *J*, rods *M*, braces *L*, and handles *E*, as and for the purpose shown and described.

No. 26,122.—J. R. PERRY, of Port Clinton, N. Y.—*Improved Machine for Cutting Tenons*.—Patent dated November 15, 1859.—These improvements relate to that class of machines which cuts tenons the sides of which are parallel planes in use for carpentry and joinery.

The inventor says: I *claim*, first, the combination of the right and left hand screw *L* with the cutter heads *K*, in the manner and for the purpose set forth.

Second. Constructing the cutter bits with lugs to receive the shoulder bits, as specified.

No. 26,123.—JOHN PYNE and WASHINGTON BARR, of Harrisburg, Pa.—*Improved Egg Beater or Ice Cream Freezer*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The ice cream freezer or egg beater, the bottom having corrugated perforated circles, in which the shaft and wires of the dasher revolve, as and for the purposes set forth and described.

No. 26,124.—GEORGE M. RANSOM, of the United States Navy.—*Improvement in Apparatus for Elevating Cannon*.—Patent dated November 15, 1859.—The object of this cannon elevator is to determine the angle of elevation or depression of a gun preparatory to its being discharged.

The inventor says: I *claim* the application of trunnions and bearings, or equivalents, to the nut, in combination with jointing or hinging the upper end of the upper screw to the cascable, or to a saddle attached to or supporting the cascable.



I also claim the combination of the cascable saddle with the elevating screw and cascable of the gun.

No. 26,125.—JOHN H. REDSTONE and ALBERT E. REDSTONE, of Indianapolis, Ind.—*Improved Lath Machine*.—Patent dated November 15, 1859.—B represents an eccentric, operating the yoke A, to which is attached the sliding bar C C; on the end of this is the projection D D, in which is the yoke groove E, the sides serving as bearings for the friction roller F, attached to the knife plate H by the pin G, upon which it revolves; J is the bench under which the knife I is passed when cutting; K K are standards supporting the lumber while it is cut; P P are rests, in which are the slots Q and O, in which the pins L are operated by the rod M, attached thereto. The knife guides or slides V and V operate in the boxing W.

The inventors say: We *claim*, first, operating the knife plate H H by the sliding bar C C and groove or yoke E, in combination with the roller F, when attached to the knife plate H H, substantially as set forth.

Second. The guides Q and Q, roller R, slide S S, pins T L and L, and slots Y O and O, when combined and operated as set forth.

No. 26,126.—NATHAN F. RICE, of New Orleans, La.—*Improvement in Bakers' Ovens*.—Patent dated November 15, 1859.—This invention consists in arranging a series of ovens on the different floors of a bakery, one above another, and heating them in succession by so directing the heat from the furnace, by means of flues, that it shall pass successively under and over each oven, beginning with the lowest and ending with the highest, and in so arranging a series of dampers as to control the supply of heat to the several furnaces at will, according to the requirements of the work to be done.

*Claim*.—The bakery described, constructed, arranged, and operating as specified, the same consisting of a series of ovens placed on different floors of a building, and heated successively by products of combustion, directed and controlled by the described combination of flues, dampers, and air chambers, arranged and coöperating as shown.

No. 26,127.—ALBERT C. RICHARD, of Newtown, Conn.—*Improved Letter Envelope*.—Patent dated November 15, 1859.—This invention consists in constructing a letter envelope in such a manner that the official stamp of the post office, which is usually fixed on every letter before being conveyed through the mails, by one and the same operation of stamping, be likewise impressed on the letter which may be enclosed in this envelope in an indelible manner.

*Claim*.—As a new article of manufacture, a letter envelope, having the properties fully set forth, for the purpose as described.

No. 26,128.—GEORGE D. SHARP, of New York, N. Y.—*Improved Billiard Table Cushion*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the hollow cushion with a square or slightly beveled face for the ball to impinge against, thus producing a spring of greater ductibility than other billiard table cushions have.

No. 26,129.—S. A. SHURTLEFF, of North Carver, Mass.—*Improved Fore-Iron for the Use of Shoemakers*.—Patent dated November 15, 1859.—This invention relates to an improved tool used by shoemakers for burnishing or finishing the edges of the soles of boots and shoes. Its object is to obtain an implement that may be adjusted to compensate for wear, so that it is rendered more durable than those of ordinary construction.

*Claim*.—The adjustable beading plate D applied to a stock B, and arranged substantially as shown, to form an improved article of manufacture, for the purpose specified.

No. 26,130.—E. C. SINGER, of Port Lavaca, Texas.—*Improvement in Sewing Machines*.—Patent dated November 15, 1859.—The nature of this invention relates to the construction and mode of operation of the feed device.

*Claim*.—The feed device, the essential features of which are the plate *l*, the block *p*, and the lever *m*, and stop *s*, operated by the grooved sliding bar Q, arranged and constructed substantially in the manner and for the purposes set forth.

No. 26,131.—FERDINAND M. SOFGE, of Macon, Ga.—*Improved Billiard Register*.—Patent dated November 15, 1859.—The springs *a* are so placed as to prevent the tally *d* from coming through the aperture *i*; the springs are made so as to permit the tally *d* to pass freely through the aperture *i*; the aperture *i* is situated above the tally, in the box D, so that by pressing the springs *a*, tally *d* will pass freely through the aperture *i*, and thus each tally, pressed by the player on springs *a*, will show the amount of billiards made by the player.

The inventor says: I *claim* the arrangement of springs *a*, *b*, and *c*, operated by means of cylinder A, upon tally *d*, as and for the purpose described.

I also claim, in combination with the above, the cylinder C, in connection with the tally



1 and 2, or any number of tallies and springs *h*, constructed and operated as and for the purpose forth.

No. 26,132.—W. H. TUPPER, of New York, N. Y.—*Improvement in Pouncing Hat Bodies*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The employment of an air blast to cleanse and hold the body *G*, within the hollow cone *F*, while the said body is being rotated and pounced, as shown and described.

No. 26,133.—JOHN T. TOWNSEND, of Brenham, Texas.—*Improvement in Ploughs*.—Patent dated November 15, 1859.—This invention consists in a peculiar arrangement and combination of braces, landside, mould board, and standard, whereby said parts may be attached to iron beams and a durable and efficient implement is obtained.

*Claim*.—The arrangement and combination of the landside *A*, standard *B C*, mould board *H*, share *F*, braces or arms *D E I*, and cross bar *G*, substantially as and for the purpose set forth.

No. 26,134.—WILLIAM H. RODGERS, of New York, N. Y.—*Improvement in Machines for Inserting Eyelets*.—Patent dated November 15, 1859.—The inventor says: In this machine there is no trouble in removing the punch or taking out the cutter, the whole machine can be easily taken apart. The yielding guide pin that holds the eyelet in its place is a great improvement, whereby the eyelet is held in the centre of the countersink until the punch fixes it in.

*Claim*.—Single punch *B*, operated as described, in combination with the connection lever *A*, cutter *D*, and yielding spring guide point *F*.

No. 26,135.—WILLIAM T. VOSE, of Newtonville, Mass.—*Improved Portable Pump*.—Patent dated November 15, 1859.—This invention consists of an improved pump in combination with a stirrup, or foot stand, by which the pump may not only be supported on the ground, but be maintained by the foot of a person while he may be employed in operating the pump.

*Claim*.—An improved pump, as constructed with a barrel and the foot stand or rest, combined and arranged together, substantially as described.

No. 26,136.—EDWARD WIEBE, of Brooklyn, N. Y.—*Improved Mode of Advertising*.—Patent dated November 15, 1859.—The object of this invention is to present to the eye a continued succession of notices, &c., as the band revolves. It is intended to be used in public conveyances, hotels, or other public places. The motive power may be derived from fixed machinery, or by suitable connection with the axles of vehicles on the machinery by which they are actuated.

*Claim*.—The above described mode of exhibiting advertisements, when operated automatically, substantially in the manner set forth.

No. 26,137.—JOSEPH A. WOODWARD, of Philadelphia, Pa.—*Improved Signal Bell*.—Patent dated November 15, 1859.—The object of this invention is to ensure the striking of the bell at all times, and by simplicity of construction to diminish its liability to accident.

*Claim*.—The lever escapement bar *L E B*, constructed substantially as described, with the elliptical slot and projecting point *x x*, in combination with the projecting point *x*, of the hammer or striking arm *S A*, the whole arranged substantially as described and for the purpose set forth.

No. 26,138.—WILLIAM WRIGHT, of Hartford, Conn.—*Improvement in Steam Pumping Engines*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of the invention.

The inventor says: I *claim*, first, the application of the forked yoke inclined arms and levers, in conjunction with an independent hydraulic cylinder or engine, for working the valves of a steam engine properly, opening and closing them, and effecting the cut-off at the proper points, and performing all the offices and obtaining all the useful results of a well regulated and effective valve gearing.

Second. The combination of the forked frame and inclined arms for controlling and regulating the length of stroke between certain points or the faces of said planes, and graduating it between these points at the will and pleasure of the engineer, so as to reduce the clearance in the steam cylinder to a minimum.

Third. The manner in which the main valve of the hydraulic cylinder is brought into action at proper and fixed intervals, and working the steam valves of the engine independently of the forked frame and its inclined arms, should the latter part of the gearing fail, from any cause, to assist in performing their duty.

Fourth. The application of the auxiliary valve, in combination with the main valve of the hydraulic cylinder, for effecting at the proper point the opening of the steam valves instantaneously.



neously and ahead of the steam piston; or in other words, for giving the lead to the valve as effectually as an eccentric will on a crank engine, and forming a cushion for the piston at the end of the stroke, reversing the movement and holding the valves wide open until the cut off is accomplished, substantially in the manner described.

Fifth. The mechanism for accomplishing, positively, the cut off and ensuring the closing of the valves, and in connection therewith, the method of regulating and adjusting the same to any required point of the cut off that the beneficial working of the engine may demand, as explained.

No. 26,139.—WILLIAM WRIGHT, of Hartford, Conn.—*Improvement in Pumps*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the construction of the pump by the application of an auxiliary barrel to the working or brick barrel, and connecting both barrels by a double beat valve, thus effecting a combined opening through the auxiliary and the bucket valves with a minimum lift of said valves greater than the area of the pump itself, and obviating to a great degree the frictional resistance that would be produced by passing all the water through the pump bucket valves alone, preventing all throttling, and permitting the engine to work more regularly and economically, substantially as described.

Second. The placing of one pump above the other, when made as above described, and connecting both together, and passing the load of one through the working and auxiliary barrels and the bucket and auxiliary valves of the other, and *vice versa*, thus allowing the engine to have complete control over the column of water, substantially as described.

No. 26,140.—SAMUEL K. ZOOK, of New York, N. Y.—*Improved Mode of Telegraphing*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of the telegraphic lines of metallic conductors of a high conducting power, having the portions of the wire conductors which are between the two telegraphic extremes in the earth, or submerged in the ocean or rivers, not artificially insulated, but using the earth or water as the natural insulator of those parts, in combination with the artificially insulated portions of the wire on each or other side of the battery or batteries, in the manner and for the purposes described.

No. 26,141.—CHARLES F. BENNETT, of Warehouse Point, Conn., assignor to JULIUS H. BAKER, of East Windsor, Conn.—*Improvement in Machinery for Drying Cloth*.—Patent dated November 15, 1859.—This invention consists in the construction and arrangement of a machine with two adjustable revolving reels, with transverse rollers, suction blowers, and pipes, to force or drive dry or hot air through the cloth while it encircles the reels and revolves with them.

*Claim*.—The extra adjusting vibratory arrangements, plate 2, Fig. 7, whereby the cloth can be spread and straightened on the selvage while passing over the rollers, in the manner substantially as set forth and described.

No. 26,142.—JOHN BUTLER, of Buffalo, N. Y., assignor to JAMES A. SAXTON, of Canton, Ohio.—*Improvement in Harvesters*.—Patent dated November 15, 1859.—When the machine is to be arranged for reaping, the cutters and finger bar can be raised up, and the heel of the finger bar sustained at the side of the machine, as shown in the engravings, where the plate M is raised, it being provided with a series of holes for this purpose, or any suitable appliances may be made to the rod or coupling arm N for holding it up.

*Claim*.—The combination of the shoe L, with hinged and adjusting rods *c* and N, plate M and cup *k*, constructed, arranged, and operating in relation to each other and the main frame, as and for the purposes set forth

No. 26,143.—WILLIAM DARKER, of West Philadelphia, Pa., assignor to J. B. THOMPSON, of Philadelphia, Pa.—*Improvement in Tempering Steel Wire*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Combining the drum D, by which the steel ribbon or wire is drawn through the fire and bath, with the main or counter shaft, from which it derives motion, by means of a pair of cone pulleys or belt, substantially as and for the purpose specified.

No. 26,144.—JOHN H. DOOLITTLE, of Ansonia, Conn., assignor to WALLACE & SONS, of said Ansonia.—*Improvement in Making Clasps for Hoop Skirts*.—Patent dated November 15, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Manufacturing metal clasps for fastening the tapes on hoop skirts, and for similar or analogous purposes, by cutting the scraps from the metal strips A so that the blanks *b* will be attached thereto, and while thus connected fed to the swaging or raising device, and swaged in proper form to produce the clasps, substantially as described.



No. 26,145.—DARIUS WELLINGTON, of Boston, Mass., assignor to C. WELLINGTON, of said Boston.—*Improved Cocks for Water Closets*.—Patent dated November 15, 1859.—This invention consists in constructing a cock which is attached to a pipe containing water under pressure in such a way that when its handle is released from the hand of the occupant of the closet and the basin pan allowed to close, the cock will close gradually so as to admit water direct from the pipe in a sufficient quantity into the basin or bowl, to seal the foul pipe.

*Claim*.—The employment or use of the valve *b* and plunger *B*, connected by the stem *C*, placed within a suitable cylinder *A*, and arranged relatively with the supply and discharge pipes *D E*, to operate as and for the purpose set forth.

No. 26,146.—LEWIS WHITE, of Hartford, Conn., assignor to Himself and E. P. MILLER, of said Hartford.—*Improved Curtain Fixture*.—Patent dated November 15, 1859.—This invention consists in the improved method of regulating the unrolling of the curtain and rendering the same easily adjustable in any position.

*Claim*.—The application of the bracket and brake *E* in combination with the pulley, cord, and pendant lever *K*, thus forming a double brake, in the manner substantially as set forth and described.

No. 26,147.—WILLIAM L. WILLIAMS, of New York, N. Y., assignor to Himself and THOMAS J. O'CONNOR, of said New York.—*Improved Machine for Bundling Kindling Wood*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the follower *c*, acting to lift a bundle of wood through a ring or opening, and separate the same from the mass of split kindling wood in the trough *b*, substantially as specified.

Second. I claim the ring separator or the knife *p*, arranged substantially as set forth, and acting to split or separate from the mass of kindling wood a bundle, as described and shown.

Third. I claim the combination of the follower *c* and ring separator or knife *p*, in the manner and for the purposes set forth.

Fourth. I claim two or more slides *h h*, with curved ends, acting against and on opposite sides of a bundle of kindling wood, to compress the same previous to being secured by a wire or string, as and for the purposes specified.

Fifth. I claim the compressing levers *n n*, in combination with the slides *h h*, to act in compressing the bundle of wood, as set forth.

Sixth. I claim the twisting jaws or pincers *t t<sup>1</sup>*, fitted to receive the wire in the manner specified, so that the act of revolving said jaws to twist the wire shall first draw the wire tight, as set forth.

Seventh. I claim the weight *l*, hung on the levers *m m*, and acting to bring the ends of the wood level, as set forth.

No. 26,148.—HENRY C. RICE, of Worcester, Mass, administrator of the estate of John H. Hathaway, deceased, late of Millbury, Mass.—*Improvement in Rotary Engines*.—Patent dated November 15, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination with the crosshead, or its equivalent, which carries the abutment or cylinder head *F* of the rock shaft *I*, the toggle *J L*, and the vibrating arm *M*, the whole applied and operating substantially as described, in combination with the guide arms *H*, for the purpose specified.

And in combination with the above mentioned rock shaft, I claim the arm *K*, slide *N*, lever *P*, and eccentric *Q*, applied substantially as described, to produce an intermittent or remittent motion of the said rock shaft, as set forth.

No. 26,149.—THOMAS W. GILMER, of Charlottesville, Va., administrator of John B. Gilmer, deceased, of said Charlottesville.—*Improvement in Type Setters and Distributors*.—Patent dated November 15, 1859.—This machine consists of three distinct parts, a case *A* for holding the type, a composing stick *B* for withdrawing the type from the case and setting them in line, and a distributing stick *C* for transferring the type from the line to the type cases.

The claim will further explain the nature of this invention.

The inventor says: I *claim* withdrawing the type from the type case and setting them in line in the composing stick without the aid of intermediate carrying mechanism, but by the direct application of the composing stick to the type case, substantially as described.

I also claim distributing the type to the type case by the direct application of the distributing stick to said case, substantially as described.

I also claim, in combination with the type case, the holding dog, or its equivalent, arranged and operated substantially as described, so as to retain the type as they descend opposite the mouth of the case, and release the type when the mouth of the composing stick is in position to receive them.

I also claim arranging the type case, substantially as described, so that, by a retrograde movement of the case, the type is discharged into the composing stick, as described.



I also claim, in combination with the composing stick, the spring mouth plate, to hold the type as they enter the stick.

In combination with the spring mouth plate I claim the lip *l*, or its equivalent, arranged substantially as described, to assist in withdrawing the type from the case, and to prevent their turning or falling out of the composing stick as they are withdrawn from the case.

I claim discharging the type into the case through the bottom of the distributing stick, substantially as described.

And I also claim, in combination with the distributing stick, a separating and discharging mechanism to the type, arranged substantially as described, so as to separate the front type from the rear, and force them into the type case.

No. 26,150.—CHARLES J. ADDY, of Roxbury, Mass.—*Improved Clock Escapement*.—Patent dated November 22, 1859.—This invention consists in the employment of two independent pallets, one of which is pivoted to some permanent portion of the clock frame, and is thrown down into the path of the teeth of the scape wheel by the movement of the pendulum; the other being pivoted to an arm which is vibrated with the pendulum and is carried along with the scape wheel, while the latter is giving its impulse to the pendulum.

*Claim*.—The independent gravity pallet *f*, pivoted to a fixed bearing, in combination with a recoil pallet swinging with the pendulum, in the manner substantially as set forth.

No. 26,151.—MOSES ALLAN, of Utica, N. Y.—*Improvement in Metal Planing Machines*.—Patent dated November 22, 1859.—This invention consists in the construction of certain mechanical parts, and so attaching and connecting them with the ordinary planing machine, as to enable the operator to use this machine to dress off to the proper shape and curve the sides of the teeth or cogs of iron wheels, thus enabling a single hand to do the work of several.

The inventor says: I *claim*, first, the construction of the apparatus F E g, and its adaptation to the use of the ordinary planing machine and its combination therewith, as described and for the purposes described.

Second. The combination of the bearing stands H I and the disk M with the carriage of the machine, connected and arranged substantially as described, and for the purposes described; the whole being constructed and operating substantially in the manner set forth.

No. 26,152.—E. G. ALLEN, of Boston, Mass.—*Improved Combination Steam Gauge*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination and arrangement of the several instruments requisite to enable the engineer to regulate the proper working of steam machinery, substantially as set forth, the said instruments being inserted in one case and having the hands or other indicators upon one face or dial of the plate, in the manner and for the purposes specified.

No. 26,153.—SAMUEL BARBER, of South Brunswick, N. J.—*Improved Washing Machine*.—Patent dated November 22, 1859.—This invention consists in the employment of a segmental extension guide piece attached to the frame of the dash board and operated by a friction roller attached to a hand lever, so that the motion of the frame can be regulated and the pivot of the lever placed at its least possible working distance from the fulcrum; and it also consists in regulating the dash board by means of a segmental rack extending from the top in the rear of the dash board, and a pin passing down through a cross tie of the swinging frame into the teeth of said rack.

The inventor says: I *claim* the combination, with the lever N for operating the frame D, of a curved extension guide R, for adjusting the frame in the manner set forth.

Second. The arrangement, with the above, of the serrated arc J on top of the dash board G, for adjusting the inclination of said board, for the purposes and in the manner specified.

No. 26,154.—ELI BARTHOLOMEW, of Cleveland, Ohio.—*Improvement in Bee Hives*.—Patent dated November 22, 1859.—The cover G is rabbeted around the edge, as seen at I, for the purpose of receiving the false top K, which incloses the honey boxes L L placed over the openings H in the top of the hive proper. These boxes L can be removed at pleasure by lifting the false top K.

*Claim*.—The arrangement of the outer casing A and the inner casing B, in relation to each other, and the ventilating openings H in cover G, which cover is furnished with a top K and boxes L L, in the manner and for the purposes specified.

No. 26,155.—JERRED BEACH, of Freeport, Pa.—*Improved Saw Set*.—Patent dated November 22, 1859.—This invention consists in a mechanical arrangement of set screws, graduating rest plate, guide, gauge, levers, anvil, and set.

*Claim*.—The arrangement of the guide *c*, with slot *g*, levers *f* and *m*, connecting link *o*, set screws 1 2 3 4 and 5, when used in connection with the gauge *a*, graduating rest plate *d*,



regulating screw *e*, anvil *i*, and set *j*; the whole being arranged and constructed substantially as described for the purposes set forth.

No. 26,156.—D. BERRY, of Huntington, Ind.—*Improvement in Automatic Canal Bridges*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The bridge I, arranged to work on inclined ways F E and connected by a chain and wheel M N, or their equivalents, to a shaft O, which is connected by gearing to segments Q, in line with the bridge and the boat, so that the former can be actuated by the movement of the latter, substantially as described.

No. 26,157.—MILTON B. BISHOP, of Whitingham, Vt.—*Improvement in Washing Machines*. Patent dated November 22, 1859.—In this machine two wash boards are employed, one being arranged over the other, and the two having brakes so applied to them as to enable each by the vibration of the levers or brakes of the lower board to be put into reciprocating movements in opposite directions.

The inventor says: I *claim* the means of operating the two wash boards, viz: the arrangement and application of the two sets of levers or brakes F E, together and with respect to the wash boards B C, disposed one over the other and in the tub, as described.

I also claim, in combination with the upper wash board B and its brake H, the rocker shaft K, the slide bar L, and the springs M M; the same being for the purpose or objects specified, meaning, also, to claim the combination of the said rocker shaft, the slide, and springs.

No. 26,158.—WENDLIN BLESER, of New York, N. Y.—*Improved Composition Cement or Mortar*.—Patent dated November 22, 1859.—The inventor says: In making this mortar, I first mix together seventeen parts by weight of silicious gravel, fifteen parts of soda, and ten parts of charcoal. I melt these ingredients together under a strong heat till the whole mass is perfectly fused, and afterwards reduce it to powder by stamping or grinding. I then mix this flour with water, in the proportion of about one quart to three quarts of water, and boil it about two hours until it is about as thick as molasses. I then take one part of this mixture and mix it with finely pulverized fire brick sufficient to make it as stiff as mortar.

*Claim*.—The mortar described, made and employed substantially as set forth.

No. 26,159.—J. W. BRADLEY, of New York, N. Y.—*Improvement in Ladies' Bustles*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A bustle consisting of a waist band, composed in part of strips *a a* of metal or other elastic material, and a spiral spring A, tapered from the middle towards each end, applied to and combined with such waist band, substantially as described.

No. 26,160.—LOCKWOOD B. BROOKS, of New York, N. Y.—*Improvement in Steam Valves*. Patent dated November 22, 1859.—This invention consists in connecting the two parts of the valve by a yoke or strap on the valve stem, so that by slackening the nuts and holding one valve firmly in its seat by any external force the other may be adjusted, by allowing it to find its seat by the action of the steam thereon, and then securing it firmly in that position relatively to the other by setting the nuts tightly to secure the yoke.

*Claim*.—Rendering the two parts B and C of the balanced puppet valve adjustable relatively to each other, by connecting the stem B<sup>1</sup> to the sleeve C<sup>1</sup> by the yoke D, or its equivalent, arranged and operated substantially in the manner and for the purposes set forth.

No. 26,161.—GEORGE CAWARD and DAVID C. CAWARD, of Prattsburg, N. Y.—*Improvement in Road Scrapers*.—Patent dated November 22, 1859.—The claim and engravings will give an idea of the nature of this improvement.

The inventors say: We *claim* the reversible revolving and adjustable blade B, with the adjusting boxes C, when made and operated as and for the purpose specified.

Also, the circular arms D with the wheels E, when made and used as specified and for the purpose set forth.

No. 26,162.—A. J. CHAPMAN, of Bayou Goula, La.—*Improvement in Bagasse Furnaces*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of the central air heating chamber *n*, having discharge passages *n*<sup>2</sup>, leading into the furnace in its sides, and a central descending flue *i*, in combination with a double walled furnace F, having an air heating chamber *f* between its walls, and discharge passages *z*, through its inner wall, leading into the fire chamber, substantially as and for the purposes set forth.

Second. The combination of the partitioned and valved air heating chamber *f* V X, be-



tween the walls of the furnace, with the upper and lower hot air passages *a b* and mixing chamber *e*, substantially as and for the purposes set forth.

Third. The combination of the auxiliary valved flue *Y r*<sup>1</sup>, leading directly to the chimney, with the valve *d*, boiler flue *B*<sup>1</sup> *r*, and the furnace *F*, substantially as and for the purposes set forth.

Fourth. The combination of the valve *O*<sup>1</sup>, in the hopper, with the cylinder feeder *S*, carrier drum *h*<sup>3</sup>, cam *t*<sup>1</sup>, and lever *O*, substantially as and for the purposes set forth.

No. 26,163.—MATTHIAS P. COONS, of Brooklyn, N. Y.—*Improvement in Apparatus for Generating Illuminating Gas*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the particular form and manner of constructing and combining a gas generating retort, consisting of a fusion chamber and barrel, as represented in Fig. 1, A, Nos. 1 and 3, as combined for the purpose specified.

Second. I also claim the diaphragm *J*, in combination with the chamber *F* and *D*, and diaphragm *N*, as represented in Fig. 4, in the manner and for the purpose specified.

Third: I also claim the chamber *H*, (Fig. 7,) constructed as and in combination with the other apparatus specified.

Fourth. I also claim the chamber *K*, (Fig. 9,) as attached to the cover *M*, in connection with the escape pipe *L*, with a stop cock, or its equivalent, attached in the manner and for the purpose specified.

Fifth. I also claim, in combination with the apparatus specified, the projecting ridge on facing rim or flange *O*, and the corresponding groove *P*, in the door *N*; and I also claim, in combination, the yoke or bar *R*, and crank screw *S*, as combined; and also the hook hinges *X*, (all of which are represented by Fig. 10,) as set forth and specified.

No. 26,164.—BENJAMIN P. CRANDALL, of New York, N. Y.—*Improvement in Childrens' Sleds*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Connecting the head and neck *A* of the horse to the bottom or in front thereof of a child's sled, having spring or other runners, in such a manner that the pole may be secured under the bottom *B* of the sled, substantially as shown in the drawings at Fig. 1, and for the purpose set forth.

No. 26,165.—EDWARD CRANE, of Dorchester, Mass.—*Improvement in Locomotive Engines*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination, in a locomotive, of a boiler and engine, with a water tank, coal box, blower, and baggage department, on one long truck frame suspended underneath the axles of the wheels, arranged substantially as described.

No. 26,166.—EDWARD CRANE, of Dorchester, Mass.—*Improvement in Railroad Cars*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the use of a single long truck for the support of a railroad car, when the frame of said truck is constructed and suspended substantially as described:

I also claim the use of cylindrical bars of iron, passing under the frame of the truck, and nearly in contact with the rails, for the purpose of keeping the truck frame from striking the rails or ground in case the cars leave the track.

No. 26,167.—D. M. CUMMINGS, of Enfield, N. H.—*Improvement in Harrow Teeth*.—Patent dated November 22, 1859.—This invention consists in arranging each tooth with three prongs that are furnished with sharp pointed shields serving to gauge the depth to which the teeth cut; and it also consists in combining with each tooth a wedge shaped plate in such a manner that the teeth can be adjusted according to the soil in which they have to work.

The inventor says: I *claim*, first, constructing the tooth *A* of a harrow with prongs *B*, sharp pointed shields *C*, substantially as and for the purpose specified.

Second. In combination with the above, the wedge shaped plate *D*, substantially in the manner and for the purpose described.

No. 26,168.—JOHN DAVIS and EBENEZER DAVIS, of Mateldaville, Pa.—*Improvement in Launching Flat Boats*.—Patent dated November 22, 1859.—This invention consists in constructing a fixed staging, on which the boat is built, with its top beams arranged in pairs, between which are hinged beams projecting from the side of the staging, having shoulders on the projecting ends, and on the other end pulleys; also, ropes attached to the shoulder ends and passing across the boat into the pulleys on the other end of the beams, so as to allow the gradual descent of the boat from the staging, in launching it.

*Claim*.—The combination of the hinged projection beams *C*, with the shoulders *a*, pulleys



*p*, and ropes *d*, substantially as and for the purpose set forth, when used in connection with the permanent staging *S*.

No. 26,169.—HARRISON DOTY, of Cardington, Ohio.—*Improved Apparatus for Supplying Sawdust to Furnaces*.—Patent dated November 22, 1859.—This invention consists in arranging the different parts of the machine as shown in the claim.

The inventor says: I *claim* the employment of the latch *D*, when the same is constructed and arranged to operate substantially in the manner and for the purpose set forth.

I also claim the arrangement of the hinged bottom *B*, provided with the adjustable weight *d*, with the latch *D*, provided with adjustable weight *a* and with stationary box *A*, for the purpose set forth.

No. 26,170.—CHARLES DOUGLAS, of Hebron, Conn.—*Improvement in Wagon Jacks*.—Patent dated November 22, 1859.—When it is necessary to lower the rod *C* to the lowest point, the instrument may be canted over until the pawl *F* will hang clear of the teeth *d*. When the rod *C* is down to its lowest point, the lever lies back partly in the slot in plate *D* and renders the instrument compact. The stock *A*, base *B*, and rod *C*, are made of wood, and the lever *E*, pawl *F*, and ratchet plate *D*, are of cast-iron.

The inventor says: I *claim*, first, the combination and arrangement of the lever *E*, pawl *F*, ratchet plate *D*, rod *C*, and stock *A*, substantially as described, for the purpose set forth.

Second. The pawl *F*, when used for the double purpose of a pawl on the ratchet plate *D*, and a fulcrum for the lever *E*, as and for the purpose described.

No. 26,171.—C. H. DURKEE, of Hartford, Wis.—*Improvement in Grain Binders*.—Patent dated November 22, 1859.—This improvement relates to that class of machines for binding grain into sheaves before it leaves the platform of the harvester, by an automatic arrangement which requires only one attendant and which will gather the grain as it falls upon the platform of the harvester, and bundle it, and at the same time secure the band around the bundle.

The inventor says: I *claim*, first, the combination of the travelling segment *D*, jointed arm *G*, its rod *G*<sup>1</sup>, connecting rod *I*, and rack *H*, operated by pinion *J*, rack *J*<sup>1</sup>, when the same are arranged and operate as set forth.

Second. I claim the swinging rack *K*, in combination with the travelling segment *D*, for receiving and holding the pinion *J* while the end of the arm *G* is being passed through the loop, in the manner set forth.

Third. I claim the loop holder *c*, trip block *d*, and block *e*, arranged and operating substantially as and for the purposes set forth.

No. 26,172.—ASAHEL K. EATON, of New York, N. Y.—*Improvement in Vulcanizing Rubber Compounds*.—Patent dated November 22, 1859.—This invention consists in the use of a metallic bath, so constituted as to fuse at or below the lowest degree of temperature required in the process.

The inventor says: I *claim* the use of a metallic bath, substantially as described, for the purposes of vulcanization.

No. 26,173.—GUSTAVUS G. ELIAS, of Lancaster, Pa.—*Improved Cabbage Cutting Machine*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The specific arrangement and combination of the sliding box *C*, with its notches *P*, flat spring *N*, and retaining plates *I*, the double coned spiral spring *K*, with its square bottom *L*, and armed top *H*, the counter cutting knives 1 2 and central division 3, on the table *A*, provided with legs, the wheel *E*, crank or connecting rods *F*, when these several parts are made substantially as and for the purpose specified.

No. 26,174.—E. N. ELLIOTT, of Port Gibson, Miss.—*Improvement in Cotton Presses*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of the hinged forms *B*, forming part of the box *A*, in combination with the follower *R*, said forms being so arranged as to receive the cotton and to act as guides for the follower, substantially as described.

Second. I claim the employment of the weighted follower *R*, in connection with the spring bolts *g*, or their equivalent, whereby the loose cotton is instantly, at the proper time, brought down and held in the proper space, to be acted upon by the followers *F*, substantially as described.

Third. I claim the arrangement of the doors *S S* and *T* with reference to the box *A* and the position of the bale therein, when fully compressed, by means of which I am enabled to apply and secure the covering without sewing, substantially as described.

Fourth. I claim the arrangement of the rod *M* and stops *N N*<sup>1</sup>, with reference to nut *H*.



and its movement, whereby the clutch L is not only disconnected from the pulleys J and K at the proper times, but also prevented from connecting by accident or otherwise, as described.

No. 26,175.—GEORGE AUGUST ENGELHARD, of New York, N. Y., and RUDOLPH FRANZ HEINRICH HAVEMANN, of New Brunswick, N. J.—*Improvement in Compounds of Caoutchouc and Allied Gums*.—Patent dated November 22, 1859.—By this invention, or process, solid lumps of gutta percha are dissolved in one of the well known solvents used for the purpose, and this solution is brought in contact with the chlorine by passing a stream of gaseous chlorine into the same, in order to bring the chlorine in immediate contact with the gum contained in said solution. When the combination of the gum with the chlorine is perfected the solvent is removed by evaporation at a low temperature. After removing the liquid by filtering or evaporation the composition of gum and chlorine is well washed with alcohol and then pressed and dried, when it forms a white hard mass.

*Claim*.—The described product, obtained by the action of chlorine on gums, such as India rubber or gutta percha, whether in solution or in substance, in either of the modes pointed out, or in any other that is substantially the same and which will produce a like effect.

No. 26,176.—A. J. EMLAW, of Grand Haven, Mich., and ELLIOTT RICHMOND, of Kelloggsville, Mich.—*Improvement in Saw Mills*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the arrangement of the friction wheel M and pulleys I J, in connection with the shafting E H K, for the purpose of giving the feed and giggering back movement to the carriage M<sup>1</sup>, as set forth.

Second. The arrangement of the adjustable bars O on the carriage M<sup>1</sup>, screw rods P, and adjustable wheels Q on shaft R, whereby the bars O may be adjusted nearer to or further from each other, to suit the length of the stuff to be sawed.

No. 26,177.—DENNIS C. GATELY, of Newtown, Conn.—*Improvement in Rubber Belting*.—Patent dated November 22, 1859.—The claim explains the nature of this invention.

*Claim*.—As a new article of manufacture, machine belting or banding, manufactured with surfaces of India rubber or gutta percha, and having surfaces which are as nearly as is practically possible perfectly smooth, as described.

No. 26,178.—DENNIS C. GATELY, of Newtown, Conn.—*Improvement in Making Rubber Belting*.—Patent dated November 22, 1859.—*a* represents the supporting frame work of the machine; *b* is a large roll of rubber belting, wound upon a shell or hollow shaft *c*, placed upon a square shaft *d* in such a manner that it can be slipped off the same when the said shaft is taken out of its bearings. The rubber belt is then fed to another shell, or mandrel *e*, arranged upon a square shaft *f* in such a manner that it can be slipped off.

*Claim*.—The method described for manufacturing machine belts or bands of India rubber or gutta percha, by rolling them in thin sheets of flexible metal and then heating them, substantially in the manner and for the purposes described.

No. 26,179.—OLIVER C. GREEN, of Dublin, Ind.—*Improvement in Harrows*.—Patent dated November 22, 1859.—This invention consists in an arrangement for elevating the harrow on wheels, at the same time throwing the teeth backward to clear them of trash, and also to facilitate moving the implement from place to place.

*Claim*.—The described arrangement of the harrow teeth *a*, beams *b*, wheels *c*, arms *d*, lever *e*, rod *g*, and rack *h*, the whole being constructed and operating together in the manner and for the purposes set forth.

No. 26,180.—JOHN GRIFFIN, of Louisville, Ky.—*Improvement in Cotton Harvesters*.—Patent dated November 22, 1859.—The object in having the perforations *b* in a spiral line is to effect a gradual detachment of the cotton from the bolls as the cups are placed over them, and thereby guard against the choking or clogging of the tubes.

*Claim*.—The employment or use of annular chambers E communicating with the cups D of the suction tube or tubes A C, by means of perforations *b*, and communicating with a steam or air chamber by means of flexible tubes G, substantially as and for the purposes set forth.

No. 26,181.—P. GRISWOLD and H. H. SEELEY, of Hudson, Mich.—*Improvement in Grain Separators*.—Patent dated November 22, 1859.—This invention consists in giving the lowermost screen in the shoe of the separator a compound movement, and using in connection therewith a supplemental screen having a vertical movement only, whereby the separator is rendered efficient.

*Claim*.—The combination, with the screen D, of the rocking bar I and vibrating bar E, as shown and described, for the purpose set forth.

No. 26,182.—JOHN P. HALE, of Kanawha C. H., Va.—*Improvement in Evaporating Ves-*



sels.—Patent dated November 22, 1859.—This invention consists in the employment of superheated steam generated from the liquid at one stage of the evaporating process, or in one part of the evaporating apparatus, by passing it through suitable heaters and employing it when so superheated to heat and evaporate the liquid, which is at another stage of the process, or in another part of the apparatus.

*Claim.*—The superheating of the steam or vapor arising from the evaporation of the brine, substantially as and for the purpose shown and described.

No. 26,183.—A. J. HALL and RUSSELL PATTEN, of Morristown, Vt.—*Improvement in Carriage Tops.*—Patent dated November 22, 1859.—This invention consists in constructing the bows with joints, so that the desired stiffness will be given to the top when spread by the bows themselves, and when folded the top will be packed close around the seat of the vehicle.

*Claim.*—The construction of bows for folding carriage tops with joints, substantially as and for the purposes set forth.

No. 26,184.—LOUIS HARPER, of Riceville, N. J.—*Improvement in Fertilizers.*—Patent dated November 22, 1859.—The claim explains the nature of the invention.

The inventor says: I *claim*, first, the preparation of the peat or muck or lignite, and their mixture with sulphate of lime, soda, potash, and magnesia, when required to form the basis of the preparation intended for composition of the fertilizer.

Second. The addition of phosphate and the biphosphate of lime to the above basis, and the impregnation of the above mixture with ammonia, in the manner described, so as to be converted into simple and double salts, as above stated.

Third. The combination of peat or muck or lignite, prepared as described, with green sand marl.

No. 26,185.—LEWIS G. HOFFMAN, of Waterford, N. Y.—*Improved Door Fastening.*—Patent dated November 22, 1859.—This invention consists of a metal plate or case, made circular, or in some other form, with a recess on one side for the button to turn in, which button is fastened to the shank of a knob, arranged on the opposite side of the case so as to turn the button and pull the door open with the same knob, the case or plate being made in two parts, one to hold the button and knob which is fastened to the door and the other to form the catch or keeper, which is fastened to the door frame by screws or nails.

*Claim.*—The described button, as a new article of manufacture.

No. 26,186.—JULIUS HORNIG, of Newark, N. J.—*Improved Cut Off Arrangement for Steam Valves.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, for opening and controlling the closing of the cut off valve, of a revolving and swinging cam C, applied in combination with and operated by a revolving wrist plate D, or its equivalent, and a grooved disk E, substantially as described.

No. 26,187.—JOSHUA L. HUSBAND, of Philadelphia, Pa.—*Improved Propelling Wheel.*—Patent dated November 22, 1859.—The operation of the arms A A<sup>1</sup> and guides E F will turn the paddles completely round, so as again to present their broad flat surfaces to the line of the jet, or the direction of the boat or vessel at the point where the propelling power of the paddles begin to operate.

*Claim.*—The combination of the guides E and F, the arms A and A<sup>1</sup>, the connecting rods D and D<sup>1</sup>, the double crank L and M, and the sectional paddles H, operating together, in the manner and so as to produce the effects described.

No. 26,188.—R. W. HUSTON, of Calais, Me.—*Improvement in Coal Hods.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the bucket C, with the external casing A, when the bucket is provided with a rim or flanch c around its top, and with a pin on its bottom, upon which it revolves, and when the external casing is provided with a top which fits snugly around the bucket and over the rim or flanch with a channel D, and with a door to said channel, the whole being used substantially as and for the purpose specified.

No. 26,189.—GEORGE E. INMAN, of Buffalo, N. Y.—*Improvement in Ditching Machines.*—Patent dated November 22, 1859.—L shows a roller placed under the elevated part of the plough c; M is a cutter hinged to the main frame at m<sup>2</sup>, with a crooked arm m<sup>3</sup>, which is acted upon by pins m<sup>4</sup>; I is the caster wheel connected with the draft beam, and running forward of the ploughs for the purpose of graduating the depth which the ploughs shall cut; K is a roller which rolls on the ground in front of the caster wheel.

The inventor says: I *claim*, first, the cutter M, arranged and operating substantially as set forth.

Second. I claim the arrangement of the adjustable roller L, under the elevated part of the share C, substantially as set forth.



Third. I claim the arrangement of the caster wheel I, plough G, cutter M, adjustable roller L, and ploughshare  $c c^1$ , and side pieces D, relatively to each other, substantially as described.

Fourth. I claim the arrangement of the two driving wheels B B, on the same shaft, when placed so near together as to track within the ditch cut by the horizontal share  $c$ , substantially as described.

No. 26, 190.—LUTHER JOHNSON, of Grand Ledge, Mich.—*Improvement in Rotary Steam Engines*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in combination with a sliding abutment fitted to the outer stationary cylinder, of an inner revolving cylinder, having a concentric groove or channel closed permanently in one place by a piston extending all across it, substantially as described.

Second. Operating the abutments E E<sup>1</sup>, and the cut off valves G G<sup>1</sup>, by means of the same cams F F<sup>1</sup>, through the agency of rollers  $g h g^1 h^1$ , or their equivalents, applied to the abutments, and yokes  $k k^1$ , rods L L<sup>1</sup>, and levers M M<sup>1</sup>, and arms  $n n$ , applied to the cut off valve, the whole arranged and operating substantially as described.

Third. The two sliding reversing valves, applied in combination with the two sets of steam pipes in relation to the abutments, and operated simultaneously by a single lever, substantially as described.

No. 26,191.—H. P. JUDSON, of Bethlehem, Conn.—*Improvement in Ox Yokes*.—Patent dated November 22, 1859.—This improvement in self-locking bolts for ox yokes consists in a novel combination of rotary spring disk and curved and horizontally moving bolts.

*Claim*.—The arrangement of the peculiar rotary spring disk D, curved rods F G<sup>1</sup>, and horizontally moving locking bolts B B<sup>1</sup>, as and for the purpose shown and described.

No. 26,192.—CHENEY KILBURN, of Burlington, Vt.—*Improved Lathe Attachment*.—Patent dated November 22, 1859.—This invention consists in the employment of the finishing knife D applied to a common turning lathe A, generally used for turning beaded or ornamental work of wood, and arranged and operated with the parts of lathe A.

*Claim*.—The rotating reciprocating knife D, in combination with the carriage B, provided with the gouging tool F, and V shaped cutter G, pattern L, recess H, and support L<sup>1</sup>, when arranged and operated as set forth and for the purpose specified.

No. 26,193.—ELISHA C. LEONARD, of New Bedford, Mass.—*Improvement in the Manufacture of Paraffine Candles*.—Patent dated November 22, 1859.—The claim explains the nature of this invention.

*Claim*.—My improvement or improved process of treating paraffine in the manufacture of candles therefrom, whereby I am enabled to dispense with a refrigerating air bath cooled by artificial means; my improvement or invention consisting in the employment, in the manner described, of the atmospheric temperature and the refrigerating water bath after the first cooling of the candle in the water bath.

No. 26,194.—EDWARD J. MALLET, of New York, N. Y.—*Improvement in Railroad Car Axles*.—Patent dated November 22, 1859.—This invention, to modify or remedy the extra friction, consists in a peculiar and novel manner of running one axle within the other and then coupling them.

*Claim*.—The combination and arrangement of the parts as represented for the purpose of forming an axle on which the wheels shall have an independent motion; the whole constructed substantially as described for the purpose set forth.

No. 26,195.—CHARLES F. MANN, of Troy, N. Y.—*Improvement in Traction Locomotives Carrying their Own Railway*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—So applying the endless chains A as to make them not only the track for the supporting wheels B of the locomotive to run on, but also the means by which the engine propels the locomotive along the ground, substantially as described.

No. 26,196.—JAMES J. MAPES, of Newark, N. J.—*Improvement in Fertilizers*.—Patent dated November 22, 1859.—The claim explains the nature of this invention.

*Claim*.—The production of a fertilizer by combining guano and sulphate of ammonia, or its equivalent, with burnt bones, or their equivalents, when the said bones, or equivalent, have been treated by sulphuric acid, as specified; the whole being prepared substantially in the manner and for the purpose set forth.

No. 26,197.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in Scythe Rifles*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, a rifle for sharpening scythes, &c., formed of India rubber or gutta percha, with which emery, sand, or other suitable gritty substances, are incorporated, substantially as set forth.



No. 26,198.—WILLIAM MORRISON, of Carlisle, Pa.—*Improvement in Harvesters*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* providing the rear end of the finger with the open slot *d*, whereby I am enabled to readily remove the stationary cutters and fingers, and to replace them without detaching the bolts or nuts which secure the fingers to the finger bar, in the manner and for the purpose specified.

No. 26,199.—MARTIN NIXON, of Philadelphia, Pa.—*Improvement in Boilers for Treating Paper Stock*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The close spherical kier or boiler A, journaled on hollow trunnions B, and provided with a perforated floor F G, steam pipes D and E, and elevating and distributing pipes I and J; the whole being constructed and arranged and operating substantially in the manner set forth, to boil paper stock under a heavy pressure, by the combined action of an upward current of steam and a downward current of hot alkaline solution, and admitting of the ready inversion of the said boiler for the discharge of its contents when cooked.

No. 26,200.—JOHN K. O'NEIL, of Kingston, N. Y.—*Improvement in Vapor Lamps*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The arrangement of the auxiliary burner G, in connection with the gas generating chamber E, in such a manner that a cessation of its action on said chamber may at any time be effected without extinguishing its light by the separation of said burner from its influence on said chamber, as described, and for the purpose specified.

I also claim the spiral revolving shade in combination with the auxiliary burner, as described, and for the purpose set forth.

I also claim the construction and arrangement of the burner G and graduating tube g, in combination, as described and for the purpose specified.

No. 26,201.—WILLIAM PEARSON, of Windsor Locks, Conn.—*Improvement in Sewing Machines*.—Patent dated November 22, 1859.—This invention consists in the combination of the vibrating looper and, with the cam flange by which it is operated, of a vibrating bar, or hanger, carrying two friction rollers, and attached to the looper, or the arm of the looper, by a pivot, the axle line of which is located midway between the friction rollers, whereby the said friction rollers are made capable of adjusting themselves to the inclination of the cam flange, and are thus prevented from binding upon it, while at the same time they are allowed to come up snugly and thus prevent loss of motion.

*Claim*.—The combination of the vibrating looper, the cam flange which operates it, and the vibrating bar J, carrying the friction rollers *j j*, the parts being constructed, combined, and arranged substantially as and for the purposes set forth.

No. 26,202.—J. B. PALSER and G. HOWLAND, of Fort Edward, N. Y.—*Improvement in the Manufacture of Paper Pulp*.—Patent dated November 22, 1857.—The claim explains the nature of this invention.

*Claim*.—The boiling of the straw or other stock for about four hours, under a pressure of from 110 pounds to 130 pounds, in a solution of caustic alkali, of a strength indicating from  $3\frac{1}{2}^{\circ}$  to  $3\frac{3}{4}^{\circ}$  Beaume, substantially in the manner and for the purpose set forth.

No. 26,203.—WILLIAM PHELPS and W. H. HANFORD, of Sycamore, Ill.—*Improvement in Horse Power Machines*.—Patent dated November 22, 1859.—This invention consists of a horizontal track B forming a perfect circle made of iron, or any other material sufficiently hard to prevent indentation by the rollers resting or rolling upon it.

*Claim*.—The combination and arrangement of the wheels and rollers C C C and D D D on truck B and wheel H, and friction rollers I I I and J J J on track H, and friction rollers R R R on rotary track O, with rotary drive wheel N, and friction rollers U, constructed and operated substantially as described.

No. 26,204.—FRANCIS B. RICHARDSON, of Boston, Mass.—*Improvement in Elastic Enema Syringes*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The improvement in India rubber syringes, as an article of manufacture, which consists in combining the India rubber or gutta percha, or other waterproof bag, with the suction end of the syringe, in the manner substantially as described.

No. 26,205.—T. J. W. ROBERTSON, of New York, N. Y.—*Improvement in Sewing Machines*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in combination with the needle of a sewing machine, of a plate K, constructed and operating substantially as shown and described, for the purpose of laying and holding braid, gimp, or other material upon the surface of the fabric, as set forth.



Second. The arrangement of the guides *e e e*, to extend past the centre and on each side of the needle hole, as and for the purpose set forth.

Third. The employment, in combination with a braid holder M, of the adjustable slide N, for the purpose of flattening and opening the braid and preventing its kinking, as shown and described.

No. 26,206.—JOHN A. SEAMAN, of St. Louis, Mo.—*Improved Machine for Chamfering and Crozing Kegs or Casks*.—Patent dated November 22, 1859.—The object of this invention is to obtain a machine whereby kegs may be dowed, crozed, the chimes formed complete ready to receive the heads, and the work performed expeditiously in a perfect manner, and with the aid of a single attendant.

*Claim*.—The rotating arms *a*, provided with the adjustable jaws *b*, the adjustable rotating ring G, fitted to the annular plate D by the screws and guides E F, the plate D being provided with the tool holding levers I J, attached to the guide shafts C, and supported by the springs E, and the shafts C, connected to a treadle frame H, the whole being combined and arranged to operate substantially as and for the purpose set forth.

No. 26,207.—LEMUEL W. SERRELL, of Brooklyn, N. Y.—*Improvement in Guides for Sewing Machines*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a spring tucker B, acting to fold the edge of the hem against the plate of the hem when combined with the adjusting screw 5, or its equivalent, whereby the pressure of the tucker on the goods and the opening or mouth left for their passage are regulated, as set forth.

Second. I claim the horn 5, in combination with the tongue *e*, for the purposes and as specified.

Third. I claim the arrangement of the hem spreader stock *h* and gauge *d*, for the purposes and as specified.

Fourth. I claim attaching the guide or hemmer to the sewing machine by a cylindrical pin or hinge to permit the said guide or hemmer to be turned up or inverted, so that the edge of the cloth, at the beginning of the hem, can be properly entered and folded while in this position, as set forth.

No. 26,208.—DANIEL SPENCER, of Cortlandt, N. Y.—*Improvement in Grain Separators*.—Patent dated November 22, 1859.—On the shaft H a series of wheels I is placed and allowed to slide back and forth. The wheels are permanently connected to each other and vary in size like a set of cone pulleys. The shaft is hollow and a rod J is fitted therein and attached by a pin *a* to a hub *b* on one of the wheels.

*Claim*.—The combination with a grain separator between the fan shaft and the separating screens of a shaft H and a series of sliding wheels I, substantially as shown for the purpose set forth.

No. 26,209.—JOHN F. STARK, of Greensburg, Pa.—*Improved Composition for Protecting and Ornamenting the Surface of Wood*.—Patent dated November 22, 1859.—This invention consists in the use of sulphur, in combination with alcoholic varnish, for the purposes of covering surfaces of wood or other material, to give an ornamental appearance thereto.

*Claim*.—The employment of a compound composed of sulphur and alcohol, or sulphur and the alcoholic varnish described, in the proportions and manner shown and described for the purpose set forth.

No. 26,210.—JAMES STRATTON, of Brooklyn, N. Y.—*Improved Apparatus for Regulating the Pressure of Water in Pipes*.—Patent dated November 22, 1859.—This invention consists in the use of an air chamber provided with a plunger or yielding bottom, to which a valve stem is attached, the air chamber and valve being arranged in connection with suitable pipes, and in such relation to the supply pipe, so as to effect the desired object.

*Claim*.—The employment or use of the air chamber E, diaphragm D or its equivalent, with valve C attached, the pipe B containing valve C and communicating with the air chamber by pipe F provided with the cocks H I, and the pipe G communicating with the pipe F and B; the above parts being arranged in relation with each other and the supply pipe A, to operate as and for the purpose set forth.

No. 26,211.—L. TAYLOR, of Jordan, Wis.—*Improvement in Apparatus for Elevating Water from Wells, &c.*—Patent dated November 22, 1859.—This invention relates to certain improvements in that class of water elevating devices in which the buckets or pails are connected to carriages that run on inclined wires or ways from the well or spring to the house.

The inventor says: I *claim*, first, the employment or use of the springs D, arranged in connection with travelling jackets G I and receivers B B, to operate as and for the purpose set forth.

Second. The means, substantially as shown, of connecting the bucket I to the carriage J, to wit: the lever *x* on the carriage, provided with the loop *w*, and the bail *w*<sup>1</sup> of the bucket,



with its pulley *v*, in connection with the pulleys *e*<sup>2</sup> on the carriage and the taper rod *g*<sup>1</sup> and catch *h*<sup>1</sup> in the well house *L*, whereby the bucket is drawn up the wire or way and dropped and raised from the well.

No. 26,212.—SAMUEL THOMAS and JOHN THOMAS, of Catasauqua, Pa.—*Improvement in Air Heating Pipes for Blast Furnaces*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Supporting both of the legs of the arched pipes *G* upon one bottom tube, constructed substantially as described, so that injury to said pipes by the displacement of the bottom tubes will be prevented; and so that each bottom tube, with its connected arched pipes, may be removed and replaced without disturbing any of the remaining arched pipes or bottom tubes, all as set forth.

No. 26,213.—THOMAS TRIPP, of Buffalo, N. Y.—*Improved Propeller Water Wheel*.—Patent dated November 22, 1859.—For a description of this invention the reader is referred to the inventor's specification. The claim and engravings give some idea of its nature.

*Claim*.—A propeller wheel having blades formed in respect to their main propelling surfaces, and also in respect to their outward arcs, substantially as described.

No. 26,214.—DAVID WALLING, of Garrettsville, N. Y.—*Improvement in Washing Machines*.—Patent dated November 22, 1859.—This invention consists in a peculiar arrangement of levers and weighted arms, with a vibrating dash board or beater, and a fixed vibrating dasher, so that the operation of cleansing the clothes is effected with very little manual labor.

*Claim*.—The combination of weighted arms *D D*, jointed connecting rod *H*, angular lever *G*, rod *a*, vibrating dash board *K*, and dash board *M*, when the same are all arranged and to operate as set forth.

No. 26,215.—MOSES D. WELLS, of Morgantown, Va.—*Improved Washing Machine*.—Patent dated November 22, 1859.—This invention consists in having a ribbed reciprocating plunger moving upon guides, and attached by a pitman to a pendulum rod and weight depended from a shaft above, by the rocking of which the reciprocating movement of the plunger is produced.

*Claim*.—The reciprocating plunger, operated as described, in combination with the rack piece *D*, moved by the plunger in its backward motion, and springs *d d*, throwing said rack in place, the whole operated as specified.

No. 26,216.—J. WHITESIDE and H. F. CRABILL, of Fuller's Corners, N. Y.—*Improvement in Cultivators*.—Patent dated November 22, 1859.—This invention consists in arranging the curved shovel beams in such a manner that they can be used with their concave sides facing each other, and also reversed, bringing their convex sides towards each other, whereby the cultivator may be adapted to different kinds of work. It consists also in combining with said hinged and curved shovel beam a crossbar with a gauging wheel in such a manner that, by shifting said bar, the width of the shovel beams is adjusted, and that the depth to which the shovels cut is governed by said gauging wheel.

The inventors say: We *claim*, first, the arrangement and combination of the hinged curved shovel beams *A A*, crossbar *D*, and gauging wheel *F*, substantially as and for the purpose set forth.

Second. The curved draft beam *B*, arranged as described, in combination with the crossbar *D*, handles *G*, and rod *h*, substantially in the manner and for the purpose specified.

No. 26,217.—R. G. WILKINS, of Burns, N. Y.—*Improved Washing Machine*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of an upper rotary rubber, with revolving slats, with two or more lower rotating rubbers with revolving slats, arranged substantially as described for the purpose set forth.

Second. I claim arranging the undulating surface of the slats in the upper rubber so the projections come opposite to each other throughout, when the same is combined with a lower rotating rubber in which the projections of one slat are arranged opposite the depressions in the adjacent slats, and also when the slats of the upper rubber are arranged in relation to the slats of the lower rubber, as described, for the purpose set forth.

No. 26,218.—JOHN WILLIAMS, of Ashfield, Mass.—*Improved Washing Machine*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of straight fluted rollers, placed in the box of the machine, in the form seen in the model, and two arms connected by a handle at one end, and attached by the other to the extremities of the frame which holds the four rollers.

No. 26,219.—EPENETUS A. WILLIS, of Cold Spring, N. Y.—*Improvement in Floating Bat-*



*teries.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the central upright shaft, so applied that it may serve to anchor the battery, and that the battery may revolve around it, and a system of propellers by which the battery may be either caused to revolve around the said central shaft while at anchor, or propelled from place to place when the said central shaft is elevated, substantially as described.

No. 26,220.—THOMAS W. WILSON and LEWIS RAYMOND, of New York, N. Y.—*Improved Disengaging Hook for Liberating Ships' Boats.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim* the combination of a detachable hook, consisting of an open eye and pin combined with each other, substantially as set forth, with a pulley block for lowering a boat.

We also claim the combination of a detachable hook with the davit or object from which a boat is lowered by means of a lanyard, that is independent of the lowering tackle, in such manner that the combination as a whole operates to free the boat from the tackle by the tautening of the lanyard.

No. 26,221.—MICHAEL WERK, of Cincinnati, Ohio.—*Improvement in Lining Tanks for Fatty Acids.*—Patent dated November 22, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The lining of the tank or metal vessel used with wood and cement, in the manner set forth.

No. 26,222.—C. M. WILKINS, of Madison, Ohio.—*Improved Cheese Vats.*—Patent dated November 22, 1859.—This improvement consists in part in providing the bottom of an ordinary metallic cheese vat or tank, with truss braces J, which extend across the bottom of the tank from one side to the other, and about in the centre of these trusses, and connected with them and the bottom of the tank is a brace K, which gives additional strength to the trusses.

*Claim.*—The arrangement of the valves N and O, within the water chamber and vat, substantially as described.

No. 26,223.—SYLVESTER P. WHEELER, of Bridgeport, Conn., assignor to MOSES H. WHEELER & Co., of said Bridgeport.—*Improvement in the Manufacture of Nitrate of Silver Crayons.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The manufacturing or forming of sticks or pieces of nitrate of silver or lunar caustic, with one or more wires or ribbon of metal running through the same, to which the nitrate of silver or lunar caustic adheres and still holds to the wire, wires, or ribbon, when used or otherwise, when broken.

No. 26,224.—HARRY ABBOTT, of North Huron, Ind., assignor to Himself and EMERSON ABBOTT, of said North Huron.—*Improvement in Centrifugal Water Wheels.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination, with a centrifugal water wheel A, of a valve E, located and arranged within said wheel so as to turn with it, and, at the same time, be adjustable while the wheel is in motion, by means of a bail c, concentric rod H, and adjusting lever I, substantially as set forth.

No. 26,225.—J. A. ALTHOUSE, of Philipstown, Ill., assignor to Himself and F. W. LECHTENBERGER, of New Harmony, Ind.—*Improvement in Machines for Raking and Loading Hay.* Patent dated November 22, 1859.—This invention consists in the use of a stationary revolving and vibrating rake, mounted on wheels, and arranged for joint operation, whereby hay or grain may be thrown into or loaded on a wagon or cart with greater facility than by the usual manual process.

*Claim.*—The combination of the stationary rake C, revolving rake I, and vibrating rake K, placed on a mounted frame, and arranged for joint operation, substantially as and for the purpose set forth.

No. 26,226.—GILLETT BUNTING, of Liberty, Ind., assignor to Himself and W. M. JARRELL, of said Liberty.—*Improved Churn Dasher.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Producing the vibratory movement in the cylindrical churn dasher by means of the combination of said arms with the crank portion of the driving wheel and intermediate connecting rod, when these are used in connection with the current breaker K, as set forth.

No. 26,227.—JAMES T. COXELL, of Brooklyn, N. Y., assignor to Himself and EDWARD



JONES, of said Brooklyn.—*Improved Mangle*.—Patent dated November 22 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the rollers A B B, above the table, so that the fabric will be folded by the machine, substantially as shown and described.

Second. The combination with the weighted levers L, of the lifting ropes F or their equivalents, so that the downward pressure of the roller A may be released, and the roller lifted at the will of the operator to allow such portions of the linen that have buttons or other elevations to pass through the machine uninjured, all as shown and described.

No. 26,228.—H. E. TICKET and JOHN W. SUMMERS, of Glenn's Falls, N. Y., assignor to H. E. TICKET, aforesaid.—*Improved Bed Bottom*.—Patent dated November 22, 1859.—This invention consists in constructing a bed bottom, so that the slats B being supported by the springs C attached to the end pieces G by means of the screws H and the wires D, running beneath each slat its entire length, and the supports E resting on the wire D, and placed directly beneath the centre of each slat, the bed bottom shall not sag in its centre, as in the case where a sacking or yielding bed bottom is used.

*Claim*.—The arrangement of the slats B B B B, with the spiral springs C C C C, wires D D, central supports E E E E, and cross brace F, arranged and operated in the manner described and for the purpose specified.

No. 26,229.—HORATIO P. GATCHELL, of Ravenna, Ohio, assignor to E. J. BATES, of Bedford, Ohio.—*Improvement in Coffee Pots*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The forming of the walls of the cups B C and F, with male and female screws, as described, in combination with the perforated bottoms E and E<sup>1</sup>, for the purpose of compressing the ground coffee and extracting the strength of the drug by displacement, in the manner specified.

No. 26,230.—WILLIAM DARKER, Jr., of Philadelphia, Pa., assignor to Himself and J. B. THOMPSON, of said Philadelphia.—*Improved Mode of Applying Steam as a Motor to City Railroad Cars*.—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, placing a steam engine and steam generator on the top of a city railroad car, when the engine, by suitable driving mechanism, is connected with the wheels of the car, to propel the same.

Second. Connecting the governor N with a throttle valve and brake, arranged substantially as shown to operate as set forth.

Third. The particular arrangement of the brake, formed of the strip Z on wheel K, and actuated by the movement of the yoke Y on its bent ends *e e*, connected with the hand lever rod V, substantially as shown, so as to allow of the adjustment of the throttle valve by hand independently of the automatic connection.

Fourth. The arrangement of the bar A<sup>1</sup>, cam N, lever B<sup>1</sup>, and rod H, connected with the bar A<sup>1</sup> by the arm G, whereby the brake is operated automatically, as set forth.

No. 26,231.—AUGUSTUS J. GOFFE and DAMUS GOFFE, of Cohoes, N. Y., assignors to DOWNS & Co., of Seneca Falls, N. Y.—*Improvement in Knitting Machines*.—Patent dated November 22, 1859.—The inventors say: In this invention, we use a rotary burr or pinion M, having teeth corresponding in size with the interstices between the needles at the point where it is applied, which, by gearing with them, as the top plate A, to which it is pivoted, revolves, causes it to rotate and lay the thread so close to the needles as to ensure its being drawn under the hubs as the needles are made to slide back by the eccentric groove.

*Claim*.—The rotary burr presser M, having inclined planes *a* between the teeth, in combination with the sliding needles, arranged and operating substantially in the manner and for the purpose shown and described.

We also claim varying the eccentricity of the groove *f* by means of the movable pulley *g*, spring *k*, adjusting screw *h*, and friction pulley *l*, substantially in the manner and for the purposes herein described.

No. 26,232.—LIVERAS HULL, of Charlestown, Mass., assignor to Himself and A. WHEELER, of Boston, Mass.—*Improved Method of Making Copal Varnish*.—Patent dated November 22, 1859.—The claim explains the nature of this invention.

*Claim*.—The new manufacture of varnish, as composed of gum copal, camphene, and alcohol, united in the proportions in a cool state in a close or airtight vessel, substantially as specified.

No. 26,233.—HENRY W. JOSLIN, of Trenton, N. J., and A. K. EATON, of New York, N. Y., assignors to the JOSLIN INDIA RUBBER COMPANY, of New York.—*Improvement in the Treatment of India Rubber*.—Patent dated November 22, 1859.—The claim explains the nature of this invention.



*Claim.*—The treatment of the argillaceous red shale of New Jersey or other similar geological localities, in combination with sulphur and caoutchouc, substantially in the manner and for the purpose described for the manufacture of India rubber.

No. 26,234.—JAMES S. McCURDY, of Brooklyn, N. Y., assignor to J. M. MYERS, of New York city.—*Improvement in Sewing Machines.*—Patent dated November 22, 1859.—This invention consists of a compound shuttle driver that acts in a reliable manner, avoiding wear, and thereby insuring a continuance of the proper timing between the needle and the shuttle.

*Claim.*—The vibrating lever *g*, carrying the shuttle driver *h*, and provided with the spring *k* to keep the shuttle driver to the raceway; the whole constructed and operating as and for the purposes specified.

No. 26,235.—HENRY M. SCOTT, of Portland, Me., assignor to Himself and SAMUEL ADLAM, of said Portland.—*Improved Bed Bottom Spring.*—Patent dated November 22, 1859.—This invention consists in a particular arrangement of a spring hook and clamp that serve to attach the webbing to the frame of the bedstead in such a manner that the slack can readily be taken in.

*Claim.*—The employment of spring hooks A and clamps D, substantially as described, for the purpose of attaching strips of webbing to the frame of a bedstead.

No. 26,236.—PAREMUS P. PARKHURST, of Princeton, Mass.—*Improved Ore Separator.*—Patent dated November 22, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The washing box or chamber *a*, constructed with the pipe *b* entering near the bottom to cause a whirl and circulation, as specified, and with the gate or overflow *c*, for the purposes and as described and shown, and in combination with such washing box *a*, I claim the receptacle or box *e* and chamber *f*, to receive the metallic particles when the gate *d* is raised, as set forth.

No. 26,237.—JOHN THOMAS, of Indianapolis, Ind., assignor to Himself and JOHN M. LORD, of said Indianapolis.—*Improvement in Piling Railroad Bars for Re-rolling.*—Patent dated November 22, 1859.—The engraving represents six pieces of "T" rail arranged in a "pile," having two tiers of three rails in each, numbering 1, 2, 3, 4, 5, and 6, with their tie number 7 prepared for re-working.

*Claim.*—The tie No. 7, or its equivalent, when used for interlocking T rail or other old iron, and forming the pile of six rails, shown in Fig. 1, when constructed and arranged as and for the purposes set forth.

No. 26,238.—E. T. WEEKS, of Franconia, N. H., assignor to S. H. BABCOCK, of said Franconia.—*Improved Shoe Peg Machine.*—Patent dated November 22, 1859.—This invention consists of the means employed for clamping the bolt and feeding the same to the knife; also, in the use of a gauge in connection with the knife for properly adjusting the bolt relatively to the knife.

The inventor says: I *claim* the feeding device formed of bar L, to which the jaws are connected, operated by the screw K, ratchet S, and pawl T, lever U, and pitman V, substantially as and for the purposes set forth.

I also claim, in connection with the riving or splitting knife, the gauge I, arranged as and for the purpose specified.

I further claim the elastic or yielding bar Q, when attached to the arbor M, provided with cam *d* and used in connection with the segment rack P, curved bars N O, and jaws *k l*, for the purpose set forth.

No. 26,239.—REUBEN L. ALLEN, of Providence, R. I.—*Improvement in Sleeve Fasteners.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The new article of manufacture described, namely, a sleeve fastening, composed of springs A, cylindrical arms B C, hinge and catch *b c*, and hooked bar D, arranged in the relations, and so as to operate together, in the manner set forth.

No. 26,240.—SETH A. ANDRUS, of Roscoe, Ill.—*Improved Washing Machine.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the circular plate or crank I with the rubber, as described, and so constructed and arranged that by operating the said crank I am enabled to communicate to the said rubber J two motions at the same time, that is, a vertical reciprocating motion and a lateral vibratory motion.

Second. The combination of the caster rollers *m m* with the double spring K, constructed and arranged in connection with the rubber J, as fully set forth and for the purpose stated.

No. 26,241.—Evens BACKUS, of Stuyvesant, N. Y.—*Improvement in Cooking Ranges.*—



Patent dated November 29, 1859.—The use of the damper L is, when closed, to throw the products of combustion around the baking oven G, also around the broiling oven E and the roasting oven D, and then to allow a direct access to the chimney, or what is termed the "direct draft," by the way of the common exit.

*Claim.*—Attaching to a stove, or range, the curved plate I, and the movable plate n, and the continuous flue F, when arranged in the manner and for the purpose set forth.

No. 26,242.—G. W. BEERS, of Bridgeport, Conn.—*Improvement in Making Hub Bands for Wagon Wheels.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Casting slits, or holes, through the band, sufficiently large to allow the solder, or other suitable metal used in connecting the cap to the band to flow through them and unite them, as described.

No. 26,243.—WILLIAM BOCH, Sr., of Green Point, N. Y.—*Improved Water Closet Basin.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A water closet basin, having a covered annular water passage B at its upper edge, as shown and described.

No. 26,244.—HENRY F. BOND, of Hudson, Wis.—*Improved Machine for Registering Music.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the application of the bell pull action with knees and wires to act upon the markers, substantially as described.

Second. The arrangement of the levers J J J and K K K by which the sharps are marked with double lines on the spaces or lines in music, with their corresponding naturals, the levers or markers K K K being made each of two pieces of tin or other metal, and the levers or markers J J J playing between those two pieces.

Third. The arrangement of levers or markers, of both kinds, in a row, with proper intervals to record the music on paper ruled, substantially as represented in Fig. 6, the staves of music being ruled of one color, with just leger lines enough of another color to write directly up or down from one staff to another, the leger lines between the two staves belonging alike to both of them, and the whole number of lines and spaces being equal to the compass of the instruments.

Fourth. Application of the ink or coloring matter to the cylinder A, as described, and the producing of colored marks by pressing the paper against the inked cylinder.

Fifth. The action of the lever E upon the bar marker L, substantially after the manner set forth.

Sixth. The mode in which the loud pedal action is marked, substantially as set forth.

No. 26,245.—S. L. BOND, of Greenwood, S. C.—*Improved Hub Boring Machine.*—Patent dated November 29, 1859.—This invention consists in the combination of an augur or bit and a centring device, arranged substantially as described, whereby hubs may be expeditiously centred and bored for the purpose of receiving their boxes.

*Claim.*—The V shaped bars or jaws F H, in combination with the bit arbor D, when the whole are arranged substantially as shown to operate as and for the purpose set forth.

No. 26,246.—JAMES A. BOUGHTON, of Poughkeepsie, N. Y.—*Improvement in Making Hub Bands for Wagon Wheels.*—Patent dated November 29, 1859.—This invention consists in furnishing an open band with a movable cap to allow its being taken out for the insertion of a wrench to unscrew the nuts on the end of a half patent axle, and the time to present the appearance and finish of a band for a patent axle.

*Claim.*—The combination of the flange C and projection D on the leaf B and the set screw E, in the open band A, or their equivalents, for the purposes set forth.

No. 26,247.—JOHN CALVIN BROWN, of Providence, R. I.—*Improvement in Machines for Making Chain.*—Patent dated November 29, 1859.—This invention relates to a method of forming chain without turning each link after it has been placed in position, the fractional part of a circle necessary to present the arms of each link to the bending instrument.

*Claim.*—The circular disk I, provided with the wedged form projections E F G H, arranged as described, in combination with the bell crank levers D D<sup>1</sup>, which operate the several bending instruments, such combination operating in the manner substantially as described for the purposes specified.

No. 26,248.—PETER BROWN, of Brooklyn, N. Y.—*Improvement in Paint Cans.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment of a strengthening wire within the bead a, as and for the purpose shown and described.



Second. The combination of the pivoted ears *c*, with the cover B, lug *b*, and can A, as and for the purpose shown and described.

No. 26,249.—THOMAS S. BROWN, of New York, N. Y.—*Improvement in Quartz Crushers*.—Patent dated November 29, 1859.—This invention consists in the peculiar construction of the pestles, and employing therewith nipples or cones for the purpose of preventing the pestles from wearing unevenly.

*Claim*.—The employment or use of the tubular pestle C, having a reciprocating and rotary movement, in connection with the nipple or cone *e* in the box or mortar D, substantially as and for the purpose set forth.

No. 26,250.—JOHN BRUBAKER and HENRY BRUBAKER, of Lancaster county, Ohio.—*Improvement in Tools for Handling Tire*.—Patent dated November 29, 1859.—The grip handle *c* with B can be adjusted to any diameter required by pushing it back or forth on the rod handle A.

*Claim*.—The rod handle tong Fig. 2, with its sliding leg *c*, hooked end *a*, in combination with the ring E, Fig. 3, when made substantially as described, for the purpose specified.

No. 26,251.—JOHN P. BURNHAM, of Rockford, Ill.—*Improvement in Harvesters*.—Patent dated November 29, 1859.—To each end of the lever J a friction roller *c* is attached, and these rollers are kept in contact with the teeth of the cam E by means of a spiral spring *d*, which is placed on an arm or shaft *e* attached to the slide I; to the lower end of the arm *b* a connecting rod L is attached, said rod being also attached to the end of sickle *c*.

*Claim*.—The employment of a spring *d*, in combination with the lever J, and connecting rod L, substantially as and for the purpose shown and described.

No. 26,252.—ZE BUTT, of Lincolnton, N. C.—*Improved Harness Yoke*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the manner described of constructing and arranging the yoke so that its weight, or the greater portion of it, may rest upon the back instead of the neck of the horses.

I also claim, in combination with the yoke, giving a wide base to the line of draft, either by the bolt and clevis, or any other equivalent device, for the purpose and in the manner set forth and described.

No. 26,253.—ANDREW J. CHAPMAN, of Scipio, N. Y.—*Improvement in Vegetable Cutters*.—Patent dated November 29, 1859.—This invention consists in the arrangement and combination of the hinged tail board, hinged follower, and stationary slatted cutting bed.

*Claim*.—The arrangement and combination of the hinged guard or feed board, hinged follower, and stationary slatted cutting bed, when constructed and operating substantially in the manner and for the purposes set forth.

No. 26,254.—WILLIAM B. COATES, of Philadelphia, Pa.—*Improved Potato Parer*.—Patent dated November 29, 1859.—This invention consists in submitting to the action of a steel blade ground flat on the under side, and a combined laterally and part circularly moving guard secured to a removable gauging ferrule, sliding on another by means of serrations, vegetables and fruit for the purpose of paring them evenly and preventing a waste by thick paring, the paring passing out between the edge of the blade and guard, the latter being forward of the former.

*Claim*.—The handle A, ferrules B and C, guard D, and blade G, the whole being arranged and constructed substantially in the manner and for the purposes set forth.

No. 26,255.—SETH L. COLE, of Burlington, Vt.—*Improvement in Gas Burners*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction from some good conducting material, as set forth, of a gas burner with an enlargement of the tube at the point where gas is discharged and burned in the form of a globe, or the like, furnished with a slot aperture, as described, so that the gas shall be heated to the utmost at the point where it is consumed.

No. 26,256.—JOHN WEBSTER COCHRAN, of New York, N. Y.—*Improvement in Breech Loading and other Fire-Arms*.—Patent dated November 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, so constructing and applying one or more accelerating chambers in combination with the plunger or elastic cushion that the charge or charges in the accelerating chamber or chambers are fired by the driving back of the plunger or cushion, and that the plunger or cushion serves as a safety valve to the accelerating chambers, substantially as described.

Second. Combining the movable breech piece B, containing the plunger or elastic cushion,



with a ring or circular frame E hinged to a slide F, which works longitudinally to the gun, the whole operating substantially as described.

Third. In combination with the breech piece B, secured in place by a screw or its equivalent, I claim the adjustable screwed cushion G applied to the gun, substantially as and for the purpose described.

Fourth. The combination of the plunger C, accelerating chamber *c c*, volute spring D, movable breech piece B, ring or frame E, and slide F, the several parts constructed and applied to the gun, and operating substantially as described.

No. 26,257.—GEORGE COOPER, of Concord, N. H.—*Improved Cooking Range*.—Patent dated November 29, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* the combination and arrangement of the leading flues A B C, (each provided with a damper *a b* or *c*, arranged in it as explained,) with flues D E F G H, disposed around the ovens as specified.

And in combination therewith, I claim the separate insulating flues I K, arranged between the ovens and on opposite sides of the leading flue A, and made to open into the bottom flues D and G, and to communicate with the flue A by openings provided with dampers, all as specified.

No. 26,258.—P. DAVEY, of Ironton, Ohio.—*Improvement in Buttons*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of the double flanged shank piece at the basis of the button, forming on one end thereof a button and on the other a fastening, and in the middle two flange guards, to receive the button hole and protect it from too much abrasion and friction, substantially as set forth.

No. 26,259.—A. A. DICKSON, of Anderson, S. C.—*Improvement in Ploughs*.—Patent dated November 29, 1859.—This invention consists in an improved mode of constructing the plough, whereby the same is rendered simple and capable of being adapted to various kinds of work.

*Claim*.—The arrangement of the peculiar shaped bar D with the shares E F and G, beam A, and handles C C, substantially as described for the purpose set forth.

No. 26,260.—PATRICK H. DUFFY, of Somerset, Ohio.—*Improved Detective Register for Watchmen*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* dropping the balls by which the action of the apparatus is indicated into the cells of a revolving wheel, by operating a rod O and slide Q, substantially in the manner and for the purpose herein described.

I also claim locking and releasing the rod O by devices, substantially in the manner and for the purpose set forth.

No. 26,261.—HENRY EHRENFELD, of New York, N. Y.—*Improvement in Machines for Converting Reciprocating into Intermittent Rotary Motion*.—Patent dated November 29, 1859.—This invention consists in arranging in a recess formed by the wheel or roller to which the intermittent rotary motion is to be imparted, a circular plate that fits closely into said recess, and is cut or split open through its centre, and furnished with an oblong hole forming a socket for an oblong pin attached to the lever, serving to communicate motion to the wheel, so that the slightest motion imparted to the outer end of said lever causes the oblong pin, as it turns in its socket, to force the edges of the plate tightly up to the sides of the recess, and to bind the same as long as the strain on the lever continues.

*Claim*.—The plate B or its equivalent, arranged with a socket *c*, and cut or split through its centre, as described, to operate in combination with the wheel A and lever C, which latter is furnished with an oblong pin *d* or its equivalent, substantially in the manner and for the purpose specified.

No. 26,262.—WILLIAM M. FERRY, Jr., of Ferrysburg, Ohio.—*Improved Journal Box for Saw Mill Carriages*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A new article of manufacture, to wit: a single casting A moulded with an intermediate space B, and with offsetting boxes C D on each side of the space, substantially as and for the purposes set forth.

No. 26,263.—HENRY FISHER, of Alliance, Ohio.—*Improvement in Railroad Hand Cars*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The manner described of combining the hand crank shaft F with the axle of a railroad hand car, so that when the crank shaft F meets with any obstruction, it disconnects



automatically from the axle, and ceases its revolution with the same, and thus prevents a sweeping off of the operators from the platform, as set forth.

No. 26,264.—DENNIS C. GATELY, of Newtown, Conn.—*Improvement in the Manufacture of Rubber Belting*.—Patent dated November 29, 1859.—The claim explains the nature of this invention.

*Claim*.—The method described of imparting a smooth and finished surface to belts or bands of India rubber or gutta percha, the same consisting in placing them in contact with sheets or strips of vulcanized India rubber or gutta percha, and then vulcanizing them by applying heat, substantially in the manner and for the purposes set forth.

No. 26, 265.—DENNIS C. GATELY, of Newtown, Conn.—*Improvement in the Manufacture of Rubber Belting*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The manner of manufacturing belting or banding, composed either wholly or in part of India rubber or gutta percha, which consists in vulcanizing the belt or band, and giving it a smooth friction surface at one operation, by feeding the belt or band around or in contact with a series of smooth heated rollers, substantially as described.

No. 26,266.—GEORGE A. GRAY, Jr., of Cincinnati, Ohio.—*Improved Bench Vise*.—Patent dated November 29, 1859.—This invention consists in a provision whereby the workman is enabled to increase the gripe or bite of the jaws.

*Claim*.—The described combination of the handle G, loose head F, and catch H, with the jaws, screws, and endless chains of a parallel bench vise.

No. 26,267.—JONATHAN H. GREEN, of Christiansburg, Iowa.—*Improved Composition for Metals*.—Patent dated November 29, 1859.—This invention consists of an improved elastic composition for covering metals, hard wood, or any other substances, which from their nature are capable of receiving it, and which may also be used for coating the inside of vessels and water pipes, and for luting in chemical experiments.

This composition is made as follows: Take six ounces of emery, four ounces of pumice stone, two ounces of Paris white, one ounce of lamp black, two ounces of magnesia, three ounces of gutta percha or India rubber cement, consisting of saturated solution of India rubber in camphene, or a similar solution of gutta percha, one pint of linseed oil, half a pint of turpentine, and one gill of slow japanner's varnish. These are all ground together to the thickness of paint and then subjected to proper heat.

*Claim*.—The composition described.

No. 26,268.—WILLIAM I. HORTON, of La Grange, Ala.—*Improved Machine for Riving Basket Splints, &c.*—Patent dated November 29, 1859.—This invention consists in the use of rollers and a riving knife, arranged to operate conjointly and thereby effect the desired end.

*Claim*.—The employment or use of the rollers C C D, three or more, knife H placed in the gate G, and the guide plates E E arranged for joint operation, substantially as and for the purpose set forth.

No. 26,269.—JOSEF JOHNSON, of New York, N. Y.—*Improved Toy Gun*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, so arranging the spring D relatively to the bore A that D is, by single movement of the finger, used both as a trigger and a propelling power to discharge the projectile through A, substantially as shown and described.

Second. I claim in connection with the above receiving the impact of the spring D upon the single bearing g, so that the free portion of D moves by its momentum beyond its original position, for the purpose shown and described.

Third. I claim the detaching surface a arranged relatively to the spring lever D and barrel A, substantially as shown and described.

No. 26,270.—FRANCIS H. JOYNER, of Richmond, Vt.—*Improvement in Railroad Switches*.—Patent dated November 29, 1859.—e e are switch rails with the nearer ends slightly curved inwards, and resting on chairs in which they have some slight play as on pivots. The other ends curve inward still more and slide on suitable chairs, and are moved by a switch rod in any usual manner. The curve is such that when thrown to the left, the left rail presses against the left wheel of the car going out and forces it into the left track, and the reverse when thrown to the right.

*Claim*.—A pair of switch rails in connection with stationary bearing rails, the whole constructed and arranged as is described.

No. 26,271.—BERNHARD KOEGEL, of New York, N. Y.—*Improvement in the Manufacture of Vinegar*.—Patent dated November 29, 1859.—The claim and engraving explain the nature of this invention.



The inventor says: I *claim* converting wine or other alcoholic liquors rapidly into vinegar or acetic acid, by means of pumice stone, or its equivalent; and I also claim the tub or apparatus, substantially as described, when pumice stone is used in the same, for the purpose as set forth.

No. 26,272.—JOHN M. LANIER, of Eufaula, Ala.—*Improvement in Apparatus for Taming Horses*.—Patent dated November 29, 1859.—The object of this invention is to effectually prevent horses from rearing, kicking, or running away, by the employment of certain devices.

*Claim*.—The employment of the straps A A, loop B, and straps D C and E, when the same are constructed, arranged, and used substantially as and for the purpose specified.

No. 26,273.—OLIVER LINDSAY and ROBERT F. STREAM, of Washington, Pa.—*Improvement in Grain Fans*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of division board A with the inclined plane B<sup>1</sup>, the screen board G, and the riddles C and F, when the same are united in the peculiar manner described and arranged to operate in the relation to each other and to the currents of wind thrown off by the fan, as fully shown in Fig. 1, substantially as and for the purpose set forth and described.

No. 26,274.—WILLIAM LINTON, of Baltimore, Md.—*Improvement in Filters*.—Patent dated November 29, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Arranging a clamping plate B of less diameter than the filtering cylinder on adjusting screws g of the removable head c of the cylinder A, substantially as and for the purpose set forth.

No. 26,275.—PETER LOUIS, of New York, N. Y.—*Improvement in Valve Gear of Steam-Engines*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the auxiliary cylinder D, having a partition g, and arrangement of steam and exhaust passages, substantially as described, and fitted with a valve T, or its equivalent, and with the two pistons F F<sup>1</sup>, on opposite sides of its partition, applied substantially as described, in combination with the induction and eduction valves and the shaft of the main engine, so that each of said pistons, acted upon by steam admitted to its compartment of the auxiliary cylinder by the valve T, or its equivalent, serves to open one induction and the opposite eduction valve of the main engine at the proper time, substantially as described.

Second. In combination with the auxiliary cylinder D, and its pistons applied and operating as described, to open the induction and eduction valves of the main engine, I claim the employment of the rock shaft N and its toes O O<sup>1</sup>, so applied in combination with the said eduction valves that, while they permit the said valves to be opened by the action of the steam on the pistons of the auxiliary cylinder, they keep the said valves open as long as may be desired, substantially as described.

No. 26,276.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in the Manufacture of Waterproof Hose*.—Patent dated November 29, 1859.—The claim explains the nature of this invention.

The inventor says: I *claim* my improvement in the manufacture of India rubber or gutta percha hose or tubing, which consists in impregnating the fibrous fabric, which forms the basis thereof, with protective or preservative substances, and subsequently coating with India rubber or gutta percha, and forming the same into hose or tubing, substantially as described.

No. 26,277.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in Steels*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, a "steel," or implement for sharpening table knives, &c., formed of India rubber or gutta percha, with which emery, sand, or other suitable substances, are incorporated, substantially as set forth.

No. 26,278.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in the Manufacture of Packing and Tubing*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* my new method of forming packing hose or tubing, and other similar articles; the same consisting in rolling or wrapping the fabric to be used around the core or mandrel, by rolling or passing the said core or mandrel and the fabric or wrapper together between two surfaces, one of which exerts a self-adjusting, yielding pressure upon the article to be formed, while the other surface has the necessary motion imparted to it to roll or wind the fabric used around the core or mandrel, substantially as set forth.

No. 26,279.—ALBERT E. MCGAUGHEY and SAMUEL N. MCGAUGHEY, of Wastedo, Minn.—



*Improvement in Steam Ploughs.*—Patent dated November 29, 1859.—This invention consists in the use of a series of intermittingly rotating and oscillating ploughs, and oscillating or vibrating harrows, so arranged as to operate in a transverse direction with the movement of the machine, substantially as described.

The inventor says: I *claim*, first, the ploughs S attached to radial arms *m*, or oscillating shafts *k*, and arranged with the pinions *n*, racks T, ratchet toothed hubs *l*, and stop rods *r s*, to operate substantially as and for the purpose set forth.

Second. In connection with the ploughs S, arranged and operated as described, the rakes or harrows V, attached to the bars *i i*<sup>1</sup>, for the purpose specified.

No. 26,280.—JAMES H. McNEELY, of Indianapolis, Ind.—*Improved Means for Climbing Telegraph Poles.*—Patent dated November 29, 1859.—This invention consists in preparing a piece of iron A, shaped as shown in the engravings, to the bottom of which are attached the loops D E F, in which works the adjustable hook B, secured by the thumb screw G.

The hook C is riveted to the loops D E F, and the whole implement is attached to the foot of the user by the toe and heel straps H and I, in the manner of an ordinary skate.

*Claim.*—The combination and arrangement of the hooks B and C with the loops D E F and set screw G, when constructed and operated substantially as set forth.

No. 26,281.—REUBEN MILLER, of Pittsburg, Pa.—*Improvement in Cut Off Apparatus for Steam Engines.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment, in combination with the tappets F F<sup>1</sup> for opening the valve to effect the induction of steam, of the collars G G<sup>1</sup> attached to the same valve rod, and the tappet levers H H<sup>1</sup> with independent arms *g g*<sup>1</sup>, said collars and tappet levers being applied and operating substantially as described, to effect the cutting off of the steam at such point in the stroke of the piston as may be desired.

No. 26,282.—JOHN MILLER and SILAS MERRICK, of New Brighton, Pa.—*Improvement in Railroad Cars.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention

The inventors say: We *claim*, in the construction of railroad cars, inserting strips of wood between the angle iron which forms the frame work of the car, in combination with panel plates formed of a single piece of iron struck up, whether plain or ornamented, substantially as described.

We also claim constructing the ribs and frame work of the car of two strips of L iron with a bar of wood interposed where these wires and the wood are united by rivets, substantially in the manner described.

No. 26,283.—JOHN R. MOFFIT, of Piqua, Ohio.—*Improvement in Grain Separators.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, in the described combination, with a reversible spout adapted to discharge grain at either side of a threshing and separating machine, the screen N placed placed within or above said spout, and operated by the motion of the shoe, for the purpose of screening grain after the action of the winnowing apparatus.

No. 26,284.—F. I. PALMER, of Knoxville, Tenn.—*Improvement in Car Trucks.*—Patent dated November 29, 1859.—The object of this invention is to bring the weight of the car body, or cause the same to bear directly over the journal boxes of the axles, and at the same time employ a swinging cross beam so as to admit of a certain degree of lateral play or movement of the car body independently of the trucks, whereby an uneven wear of the journals is prevented, an easy yielding capacity given the car both laterally and vertically while in motion, and much wear and tear avoided in the running parts.

*Claim.*—The arrangement and combination of the bars I K L H H, substantially as and for the purpose set forth.

No. 26,285.—J. J. PARKER, of Marietta, Ohio.—*Improvement in Paper Files.*—Patent dated November 29, 1859.—This invention consists in placing a hinge down the middle of a book back, and arranging within a back thus hinged a pair of spring bars, in combination with two or more pointed file wires for the purpose of receiving and filing pamphlets, documents, &c., that it may be desired to preserve.

*Claim.*—The combination, with a hinged book back, of bars, springs, and rods, arranged for conjoint operation, substantially in the manner described.

No. 26,286.—DUBOIS D. PARMELEE, of Salem, Mass., assignor to JOHN A. GREEN, of Beverly, Mass.—*Improvement in the Manufacture of Hollow Moulded Rubber Goods.*—Patent dated November 29, 1859.—The claim explains the nature of this invention.

*Claim.*—The method described of shaping the said articles in moulds preparatory to



their being vulcanized or hermized—*i. e.*, treated in the cold way by any known process, by applying heat to bags made of India rubber, its equivalent, or their compound, free from sulphur, and inflated with air so as to snugly fit the moulds in the manner substantially as set forth.

No. 26,287.—FRANCIS A. PARMELEE, of New Haven, Conn.—*Improvement in Twine Spools*. Patent dated November 29, 1859.—This improvement consists in constructing an apparatus, so that, by the use of a double spool and the spindle, the operator is enabled, by the act of drawing off the twine from one part of the spool to fill up the other part, by winding the twine from a ball on the spindle, so that when the twine is exhausted from one part of the spool, by using it, the other part will be filled ready for use.

*Claim*.—The combination of the double spool C C, with the spindle D; when the whole is constructed substantially as described.

No. 26,288.—G. H. PEABODY, of Columbus, Ga.—*Improvement in Cotton Pickers' Wallets*. Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Applying a sponge, or other equivalent device to a cotton picker's wallet, for the purpose of enabling the picker to readily moisten his fingers, and thus facilitate his work as described.

No. 26,289.—SIMEON T. PEEK, of Penfield, Ga.—*Improvement in Ploughs*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The manner of attaching the share E to the foot bar D, to wit: having the back part of the share notched and fitted in a rebate *a* in the foot bar and receiving the shoulder *b* formed by the rebate, while the ends *f* of the share fit underneath the projections *c c* and the lever F is pressed on the outer side of the share by means of the wedge G, substantially as shown.

No. 26,290.—WILLIAM PETERS, of Baltimore, Md.—*Improved Propeller and Paddle Wheel Shaft*.—Patent dated November 29, 1859.—The inventor says: The principle upon which my shaft is constructed is opposed to direct fracture, as the strain is necessarily distributed and removed from the line of its force, *i. e.*, from the line of direct fracture at right angles to the line of the shaft.

*Claim*.—A propeller or paddle wheel shaft constructed as set forth.

No. 26,291.—S. M. PERKINS, of Albany, Ill.—*Improvement in Whiffletree Hooks*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the stud with a revolving spring button, arranged substantially as described for the purpose set forth.

Second. In combination with a revolving spring button, I claim a stationary stop D, so arranged as to prevent the eye of the trace in all positions from passing over the button.

Third. I claim the combination of the spiral spring, the projecting stud, and the inner stop, arranged substantially as described, for the purpose set forth.

And I also claim constructing the button with a hooked end, substantially as described, for the purpose set forth.

No. 26,292.—CHARLES PERLEY, of New York, N. Y.—*Improved Chain Cable Stopper*.—Patent dated November 29, 1859.—This invention consists in providing a clamping bridge or plate over and in combination with said stopper, whereby the chain is forced into the jaw and effectually stopped.

*Claim*.—The bridge *k* over the chain, in combination with the cable stopper, for the purpose of forcing the chain into said stopper, in the manner and substantially as specified.

No. 26,293.—GIDEON PEIRCE, of Ercildown, Pa.—*Improvement in Horse Rakes*.—Patent dated November 29, 1859.—In order to discharge the teeth *f*, it is only necessary to withdraw the foot from the lever *j* and place it upon the lever I. This action, bringing the rack *c* into gear with the wheel *b*, causes the rack to be drawn downward by the motion of the machine, thereby elevating the teeth through the agency of the frame *d* and bar G.

*Claim*.—The arrangement of the cog wheel *b*, rack *c*, lever I, frame *d*, bar G, standard *g*, and teeth *f*, operating substantially as and for the purpose set forth.

No. 26,294.—MATHIAS REAZER, of Reading, Pa.—*Improvement in Horse Hay Rakes*.—Patent dated November 29, 1859.—In operating this machine, the draft is applied through the single tree H to the bar I, which is now thrown back and retained in the position shown in the engravings by the catch *m* on the foot lever K, and the machine is drawn forward until a sufficient quantity of grass is collected thereon, when the driver presses his foot upon the lever K, releasing the catch *m* from the notch in the bar I, when said bar is drawn forward and acts through the link I<sup>2</sup> upon arm M of the rake head N, causing the rake head



partially to revolve, thereby throwing up the rake teeth, and thus clear the grass from the teeth of the rake.

*Claim.*—The combination of the rock shafts N and O, clearers P, teeth *c*, brace guides L, spring bar F, pins *e* and *f*, springs *d* and *g*, with the draft bar I, when the several parts are arranged and operated in the manner and for the purpose described.

No. 26,295.—CHARLES W. RICHTER, of Madison, Ga.—*Improvement in Lamps.*—Patent dated November 29, 1859.—This invention consists of a novel means employed for adjusting or raising and lowering the wick within the wick tube, so that the wick is allowed to remain loose and free from pressure within the tube, thereby favoring the capillary ascent of the viscid oil, and ensuring a proper supply of the same to the flame.

*Claim.*—The employment or use of the wick adjuster, formed of the bar *f*, provided with a toothed plate *r* at its inner end, and so arranged as to have a certain degree of longitudinal adjustment in relation with the wick *u*, for the purpose set forth.

No. 26,296.—WILLIAM SALISBURY, of Wheeling, Va.—*Improved Catch Bolt.*—Patent dated November 29, 1859.—This invention consists in attaching to an ordinary catch bolt, a lever arranged and applied so as to avoid the friction and consequent wear usually attending the operation of bolts.

*Claim.*—The employment or use of the lever C, combined and arranged with the catch bolt B, to operate substantially as and for the purpose set forth.

No. 26,297.—HENRY SANDERS, of Utica, N. Y.—*Improvement in Cultivator Teeth.*—Patent dated November 29, 1859.—This improvement consists of two pieces of metal, exclusive of the bolt, the tooth being formed of sheet steel, or iron with flanches on the upper end of it next to the frame; the other piece is made of cast-iron, with flanches on it corresponding with the flanches on the tooth, for the purpose of securing the tooth firmly to the cultivator frame, by means of a bolt passing through it and the frame.

*Claim.*—The flanches *a a*, and semi-circular projection B on the tooth, and the flanches *c c* and pin *e* on the chair, and arranged in relation to each other in the manner substantially as described and for the purposes set forth.

No. 26,298.—SAMUEL SMITH, of Philadelphia, Pa.—*Improvement in Cooking Stoves.*—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the grate G, having hollow bars communicating with each other, and arranged in respect to the hollow back L and its zigzag passages, as set forth, for the purpose specified.

Second. The plates *r* and *s*, and the grate G, when arranged as specified, so as to serve the double purpose of connecting the bars of the grate together, and forming a chamber for heating the air, preparatory to the same being discharged in jets into the front of the fire.

No. 26,299.—JAMES SPEERS, of West Manchester, Pa.—*Improved Water Heater for Steam Engines.*—Patent dated November 29, 1859.—This invention consists in furnishing the water heaters of steam engines, which supply the force pump with heated water, with a self regulating waste valve, and also in dividing the heater into two compartments, and so arranging the pipe which conveys the water to the force pump that it will receive from the top, or near the top, of the water in the heater.

The inventor says: I *claim*, first, the arrangement of the float *h*, lever *f*, valve *o*, partition *k*, and pipes *b c* and *x*, when arranged substantially as described, for the purpose of constructing water heaters for supplying the force pump of steam engines with heated water.

Second. The use of the branch pipe *x*, when used in connection with pipe *c* and valve *o*, as described and for the purpose set forth.

No. 26,300.—HENRY STEINWAY, JR., of New York, N. Y.—*Improvement in Piano Fortes.*—Patent dated November 29, 1859.—This invention consists in providing the cast iron plate with a projection on its under side to lap over the edge of and abut against the tuning block, and screwing the agraffs down from the upper surface of the said plate into the said projection.

*Claim.*—The employment, in combination with the agraffs C C, of the projection *a* on the under side of the plate, lapping over and abutting against the edge of the tuning block, substantially as described and for the purpose specified.

No. 26,301.—DAVID STODDART, of San Francisco, Cal.—*Improvement in Valve Gear for Steam Engines.*—Patent dated November 29, 1859.—The purpose of this invention is the usual office of a steam engine cut off to open the steam valve at the commencement of a stroke, and afterwards close it again at some required period of the stroke, and thus permit the steam to work expansively.

*Claim.*—The use of the fixed cam A, in combination with the adjustable cam B and the working bar E, which is connected to the cam rod, and also connected to and operated by the cam yokes, substantially in the manner described.



No. 26,302.—J. E. STURDY, of Augusta, Me.—*Improvement in Shingle Machines*.—Patent dated November 29, 1859.—The object of this invention is to plane the face and side of shingles as they are sawed from the bolt, without any additional aid or attendance in the manipulation of the machine to which the invention is applied.

*Claim*.—The employment or use, in connection with the shingle sawing machine described, of the guides I I attached to the bolt carriage E, and actuated alternately to perform their proper function to the planer L, the whole being arranged substantially as and for the purpose set forth.

No. 26,303.—JOSEPH R. SWIFT, of New Orleans, La.—*Improvement in Railroad Car Couplings*.—Patent dated November 29, 1859.—The inventor says: This invention provides sufficient leverage in the hook itself, whereby the cars can be uncoupled while in motion, or exerting longitudinal strain upon the links, by an upward pull of the train hand, and thus the power of the train hand obtained, instead of only his weight, as in the lever links which are operated by a downward thrust.

*Claim*.—The combination of the peculiarly constructed draw head A B *f a g b c*, with the peculiarly constructed elbow shaped gravitating lever hook C *m n*, in the manner and for the purpose described.

No. 26,304.—J. B. THOMPSON, of Philadelphia, Pa.—*Improvement in Metal Strings for Pianos, &c.*—Patent dated November 29, 1859.—The claim explains the nature of this invention.

*Claim*.—The employment for the strings of piano fortes and other musical instruments of hardened and tempered steel wire, as described.

No. 26,305.—S. H. TIFT, of Morrisville, Vt.—*Improvement in Apparatus for Elevating Water*.—Patent dated November 29, 1859.—This invention consists in having over the well a wheel with flanges on each side, said flanges being notched at regular distances.

*Claim*.—The buckets B curved at the rear, as described, in combination with the trunnions T, band *b*, notched flanged wheel W, roller R, and frame F, constructed and operating substantially in the manner and for the purpose set forth.

No. 26,306.—GEORGE W. TOLHURST, of Liverpool, Ohio.—*Improved Composition for Making Soap*.—Patent dated November 29, 1859.—The claim explains the nature of this invention.

*Claim*.—A soap compound, when prepared of the ingredients proportioned in quantities hereafter mentioned, viz: five ounces of common bar soap, four ounces of sal-soda, half ounce of borax, half drachm of sugar, burned, and one teaspoonful of linseed oil; add as much rain water as to make a soap of suitable consistency; after it is boiled, it is ready for use.

No. 26,307.—ALFRED F. TOULMIR, of Ellicott's Mills, Md.—*Improvement in Railroad Car Brakes*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim as my invention the mode described of simultaneously applying or putting down brakes by means of the brake cord E *c d*, the box spring W, the crank lever *k*, the trigger P, the cross piece *x*, the slide *l*, and the swivel bar *b*, with springs SS and SS, arranged as described.

I also claim the mode described of instantaneously freeing, relieving, or raising the brakes and of keeping them free when raised until the engineer, conductor, or brakeman shall desire to apply them, by means of the forward, or tractive, movement of the train in combination with the slide *l*, the cross piece *x*, and the trigger, with its shoulder P, arranged and operating as described.

No. 26,308.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Stoves*.—Patent dated November 29, 1859.—This invention consists in casting a ventilating flue immediately under and in contact with the bottom of the stove, which communicates at the rear of the stove with a vertical flue passing up through the smoke pipe and entering the chimney, thus creating an independent ventilating draft from the room.

*Claim*.—The arrangement of the stove A, flue B, door F, flue D, and smoke pipe C, when the flue B is secured to or made part of the underside or bottom of the stove, the several parts being connected and constructed substantially as and for the purpose specified.

No. 26,309.—HENRY GEORGE TYER, of Andover, Mass.—*Improved Composition for Soles and Heels of Shoes and Boots, Veneers, Packing, and other Purposes*.—Patent dated November 29, 1859.—The following are the proportions of this composition: Of leather scraps, eight pounds, old vulcanized India rubber, two pounds, raw gutta percha, two pounds.

*Claim*.—A composition made of vulcanized India rubber, leather, gutta percha, in the proportions and the manner set forth.

No. 26,310.—I. T. VANVIRK, of Frankfort, Pa., and WILLIAM M. FULTON, of Cranberry,



N. J.—*Improvement in Lamps*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The spindle B, with its cog wheels D, the said spindle being confined to its place by and acted upon by a spring attached to the wick tube, and arranged in respect to the latter, as and for the purpose set forth.

No. 26,311.—D. S. WAGENER, of Penn Yan, N. Y.—*Improvement in Grain Separators*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The case *i*, with flanges or divisions *t*, surrounding distributor or sheath *r*, for distributing the grain in a circular form within said case and separating the impurities from the grain at said point by means of a suction and blast fans, or by a suction and blast fan, operating as described and for the purposes set forth.

No. 26,312.—JOHN H. WELLS, of Brooklyn, N. Y.—*Improved Rocking Chair*—Patent dated November 29, 1859.—This invention consists in the arrangement of parts by which difficulties are obviated, and a favorable disposition of material to resist the strain imposed is secured.

*Claim*.—The arrangement described of legs 1 2 3 4, the hinge joint at 7 7 connecting the seat with the underwork, and the springs 8 and 9, substantially as and for the purpose set forth.

No. 26,313.—CALVIN D. WHEELER, of New York, N. Y.—*Improvement in Machines for Cleaning Animals*.—Patent dated November 29, 1859.—The nature and object of this invention consists in combining and arranging with a portable case a rotating comb, wheel, and brush, operated by proper mechanism, whereby the operator is enabled to comb and brush an animal at a single operation.

*Claim*.—Arranging and combing with a portable case or frame a rotating comb and brush, substantially as set forth and for the purpose specified.

No. 26,314.—C. W. WILLIAMS, of Port Jervis, N. Y.—*Improvement in Canal Locks*.—Patent dated November 29, 1859.—This invention consists in the peculiar mechanism employed for operating the upper wickets and gate, and also in a guard attachment applied to the upper gate.

The inventor says: I *claim*, first, the arrangement of the sliding shaft R, gearing S M P, sliding rack N, rods O *i i i*, wickets F, and gate E, applied to a canal lock, substantially as and for the purpose set forth.

Second. The employment or use of the guard strip I, applied to the gate E, and arranged substantially as and for the purpose set forth.

No. 26,315.—SETH WILMARTH, of Charlestown, Mass.—*Improved Machines for Drawing Bolts*.—Patent dated November 29, 1859.—The operation of this machine is as follows: On its being applied to a bolt, the jaws *f* are drawn back upon the inclined surface upon which they rest by the pipe or ram *h*, being at the same time forced apart or opened by the spring *g*; they are then ready to receive the bolt; the machine being placed, the jaws are made to gripe the bolt by being forced or driven upon it by the pipe or ram *h*, which is free to move the length of the slots in the handles marked *l*.

*Claim*.—The combination and arrangement of the several parts specified and illustrated, substantially as and for the purposes set forth.

No. 26,316.—WILLIAM WILMINGTON, of Toledo, Ohio.—*Improvement in Grain Separators*. Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the endless belt D, the dividing board H, and the rotary reciprocating bars G, the belt being separated from the bars by means of the board H, and used for delivering the straw and unseparated grain to the bars at its turning point, substantially as and for the purpose specified.

Second. I claim the combination of the teeth on the underside and end of the bars, with the fingers or combs, for the purpose described.

No. 26,317.—MARTIN WINGER, of Lancaster county, Ohio.—*Improved Machine for Shaving Bark*.—Patent dated November 29, 1859.—There is between roller No. 1 and the conducting roller No. 2 a bearing pulley *h*, supported on the vertical shaft H to prevent the possibility of the bark from turning upwards as it passes through under the pressing roller No. 1 to the conducting roller No. 2, which latter presents it to the action of a series of knives V mounted, as shown by 3.

*Claim*.—The combination of the convex travelling bed O W, with the rotary knives V and pressure rollers 1, 2, 4, and *h*, in the manner and for the purpose set forth.



No. 26,318.—JOHN E. WOOTTEN, of Philadelphia, Pa.—*Improvement in Moving Locomotive Engines by Hand Power*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application of the hydraulic piston D to the purpose of propelling a locomotive engine or railroad car upon the track by its direct action upon the periphery of the wheel as described, combined with the peculiar arrangement of the plunger, by aid of atmospheric pressure and without the intervention of valves, in the manner and for the purpose substantially as set forth.

No. 26,319.—OSCAR M. ANDREWS, of Hecla Works, N. Y., assignor to A. K. SEYMOUR, of said Hecla Works.—*Improved Blind Fastener*.—Patent dated November 29, 1859.—The object of this invention is to fasten a blind or shutter, when the same is open, in such a manner that the fastening can be reached without putting the head and body out of the window; and it consists in arranging, on that side of the frame to which the shutter is hinged, a rotary cam of particular construction that catches into a hook formed by that part of the but hinge which is secured to the blind, or by a separate piece secured to the blind in any convenient place.

*Claim*.—Arranging on the side of the frame B of a shutter or blind A, rotary wedge shaped cam D, in combination with hook a.

No. 26,320.—GEORGE BRADLEY, of Paterson, N. J., assignor to JACOB S. ROGERS, of said Paterson.—*Improvement in Can Bottoms for Roving*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—So mounting two or more ordinary can bottoms C C<sup>1</sup> that the filled can may be removed from under the coiler and an empty one substituted in its place by means simply of a partial revolution of the frame H, substantially as described.

No. 26,321.—JOHN P. BROADMEADOW, of Bridgeport, Conn., assignor to Himself and ALBERT EAMES, of said Bridgeport.—*Improvement in Moulding for Metal Casting*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combined use of a half flask, of a sufficient size to hold the quantity of loose sand required to form a half mould, and a follow board small enough to enter the said half flask and act as a piston to compress the sand therein when pressure is applied, substantially as set forth.

I also claim the combined use of a half flask, as described, and of a strike whose profile corresponds in form with the transverse section, or profile of the pattern, substantially as set forth.

I also claim the combined use of a half flask, as described, constituting the cope of a ribbed cope plate fitted to enter therein, and of sustaining pins in said cope, the whole substantially as set forth.

I also claim the combined use of the aforesaid cope plate, of a bottom plate fitted to enter the drag of the flask and of clamps, substantially as set forth.

I also claim combining the sprue pattern with the follow board, when this combination is used in connection with a match board having an opening to permit the descent of the lower end of the sprue pattern, substantially as set forth.

I also claim the combination of projections, or indentations, or both, with the follow board in contradistinction to constructing the flasks with projections and indentations.

No. 26,322.—ALMON COOLEY, of Hartford, Conn., assignor to E. W. SPERRY, J. H. ASHMEAD, E. HURLBERT, and HENRY E. ROBBINS, of said Hartford.—*Improvement for Holding Knife Handles for Soldering*.—Patent dated November 29, 1859.—This improvement consists in securing the handle and blade in their proper place and position, and holding them while the parts are soldered together, by the use of spring clamps, screw clamps, or their equivalents.

*Claim*.—The described device for holding knife blades, handles, &c., for soldering together, or their substantial equivalents the rod C, cap D, bar E, springs I, operating in the manner substantially as set forth for the purpose specified.

No. 26,323.—ALMON COOLEY, of Hartford, Conn., assignor to E. W. SPERRY, J. H. ASHMEAD, E. HURLBERT, and HENRY E. ROBBINS, of said Hartford.—*Improvement in Holding Knife Handles for Soldering*.—Patent dated November 29, 1859.—This invention consists in the use of yielding clamps to hold the two halves of a handle in the proper position for soldering; also in arranging yielding clamps upon a turn table, or its equivalent, so as to turn or accommodate to the blaze while the soldering is done.

The inventor says: I *claim* the described device for holding or securing handles, (formed of two parts,) &c., for soldering, or their substantial equivalents, the adjustable yielding clamps, or brackets G L, substantially in the manner for the purpose described.

The combination of the yielding clamps, or brackets G L, with a turn table D, or their substantial equivalents, substantially in the manner as and for the purpose described.



No. 26,324.—THOMAS HARVEY, of Wooster, Ohio, assignor to Himself and DAVID KRAMER, of said Wooster.—*Improved Washing Machine*.—Patent dated November 29, 1859.—The nature of this invention consists in the arrangement of parts whereby the operator is enabled to move two vertical plates up and down two inclined planes in such a manner that they will still remain in a vertical position.

*Claim*.—The combination of the two vertical movable plates L L<sup>1</sup> with the inclined planes D D<sup>1</sup>, and the fixed perforated corrugated partition N, the whole constructed, combined, arranged, and operated as described and for the purposes set forth.

No. 26,325.—WHEELER HEDGES, of Chicago, Ill., assignor to Himself and P. W. GATES, of said Chicago.—*Improvement in Pans for Evaporating Sugar Juice*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the pipes E E with the pipe F in the pan B, so that the application of the steam to the pipes E E will cause the greatest ebullition, and the foam to raise highest longitudinally in the middle of the pan B, for the purpose of causing all impurities to be deposited upon the flaring sides P P of the pan B.

Second. The construction and application of the flaring sides, or beaches P and P, that by their great obliqueness obtain all the scum thrown upon them, substantially as specified.

Third. The construction and application of the defecator D, in combination with the evaporator, substantially as specified and for the purpose set forth.

Fourth. The stop boards Q Q, in combination with the evaporator, as described, and for the purpose set forth.

No. 26,326.—MATTHEW HODKINSON, of Pittsburg, Pa., assignor to MATTHEW HODKINSON, Jr., of said Pittsburg.—*Improvement in Retorts for Distilling Coal Oil*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The stationary retort with a shaft armed with knives whose edges are at right angles with the shaft passing through it, by which, when motion is given to the shaft, the coal is broken and pulverized more effectually than by any other method.

No. 26,327.—FRANCIS J. LA FORME, of Boston, Mass.—*Improvement in Nursing Bottles*. Patent dated November 29, 1859.—This invention consists in applying within, or to the mouth or neck of, a nurse bottle, a flexible tube, whereby the nutriment contained in such bottle can not only be drawn out of the same with equal facility, in whatever position the bottle may be placed, but the child prevented from inhaling air therefrom. The tube has an enlargement at each end.

*Claim*.—An improved nurse bottle, or one having an elastic tube constructed and applied thereto, in manner and for the purpose set forth.

No. 26,328.—DANIEL PENMAN and ELISHA FITZGERALD, of New York, N. Y., assignors to WILLIAM C. WALKER and M. PENMAN, of said New York.—*Improved Machine for the Manufacture of Ruches*.—Patent dated November 29, 1859.—This improved machine is used or forming and making ruches used in millinery

*Claim*.—The pressing bar A, attached to the shaft L by the arms M, (said shaft having a crank B at its end, for the purposes described,) in combination with the adjustable gauge bar I, hook rods D, and treadles H, the whole being constructed and operated substantially in the manner and for the purposes set forth.

No. 26,329.—NEWMAN SILVERTHORN, of Prescott, Wis., assignor to JAMES M. ALLEN, of Fredericktown, Ohio.—*Improved Boot and Shoe Tip*.—Patent dated November 29, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, a boot or shoe tip A, made of any of the known preparations of India rubber or gutta percha, and to be applied to the boot or shoe in the manner substantially as described.

No. 26,330.—G. M. ATHERTON, of Friendsville, Ill.—*Improvement in Hub Boring and Mortising Machines*.—Patent dated December 6, 1859.—This invention consists in arranging upon the inside of one of the standards, two spring rods, one on each side of the reciprocating gate, to which rods are pivoted two pawls, which may be made to engage alternately with suitable racks upon the carriage, by a lever working in a guide, so as to move the carriage simultaneously with the upward movement of the reciprocating gate for carrying the mortising chisel.

*Claim*.—The arrangement of the pawls S S<sup>1</sup>, with spring rods P P<sup>1</sup>, and arms V V, projecting from the reciprocating gate L, for operating the same, in combination with lever M, for relieving either one or both pawls from racks T T<sup>1</sup>, the whole being arranged and combined for the purpose of moving the carriage, with the hub up, to the mortising tool, as set forth.

No. 26,331.—WILSON AGER, of Rohrsburgh, Pa., assignor to THOMAS J. WOLF and P.



J. JORDAN, of Philadelphia, Pa.—*Improvement in Machines for Cleaning Rice.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, giving the grain a positive outward motion from under the pressing wings by the clearer *k*, or its equivalent, situated and operating substantially as set forth.

Second. The adjustable leaves *l*, upon the wings, for aiding the upward movement of the grain.

No. 26,332.—C. P. BUCKINGHAM, of Mount Vernon, Ohio.—*Improvement in Grinding Mills.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the improved method of securing the spindle to the runner stone of a grinding mill, by combining the flanch *m*, at the end of the spindle *I*, and the ring *N*, attached to the metal cap *O* of the runner *C*, said ring being provided with projections *n*, which shall permit a rocking motion of the stone upon the spindle, and a key *p*, or its equivalent, substantially as and for the purposes set forth.

Second. The use, in connection with the bed stone *B*, of the elastic bars *h*, for the purpose specified.

No. 26,333.—P. N. BURKE, of Buffalo, N. Y.—*Improvement in Steam Boilers.*—Patent dated December 6, 1859.—This invention consists in a novel arrangement of direct or return flues within the body of a boiler, for the purpose of effecting economy of fuel, the rapid generating of steam after firing up, and the perfect circulation of water in contact with the heating surfaces of the flues and of the shell. It also consists in a certain system of draft distributors employed in combination with such arrangement of flues for the purpose of producing an equable diffusion of heat over the whole surface of the flues.

*Claim.*—The employment, in combination with flues arranged substantially as described, of draft distributors *E E*, applied and furnished with apertures of varying size, substantially as specified.

No. 26,334.—B. F. CAMPBELL, of Roxbury, Mass.—*Improvement in Steam Boilers.*—Patent dated December 6, 1859.—The object of this invention is to obtain a boiler for the generation of steam under a low pressure, to be used for heating purposes, that shall present a great amount of heating surface in a small space, and that shall not be liable to be injured should the water within it, through the negligence of those having it in charge, fall below the proper level.

*Claim.*—The combination of the exterior water chamber *A* and interior water chamber *B*, the interposed smoke flue *C*, and the basin *F*, the whole arranged to operate substantially as and for the purposes set forth.

No. 26,335.—C. CARTER, of Franklin, Iowa.—*Improved Washing Machine.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the inclined washboard *C*, fitted between ways and guides *b b*, which have a sliding or reciprocating rubber frame *F* fitted on them by being hinged to slides *D D*, the above parts being fitted within a suitable box or suds receptacle *A*, and arranged to operate as and for the purpose set forth.

I further claim the arrangement of the rubbers *G H* filled within the hinged reciprocating frame *F*, and used in connection with the inclined washboard *C*, for the purpose specified.

No. 26,336.—EDWIN CLARK, of Windsor, Vt.—*Improvement in Sewing Machines.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of bar *G*, which has its front end or needle *a* controlled by a double fulcrum guide *d*, so as to describe an ellipse, and its rear end attached to a rotating disk, or crank pin, with a perforating needle *n*, as shown and described.

No. 26,337.—JOHN W. COCHRAN, of New York, N. Y.—*Improvement in Projectiles for Rifled Ordnance.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* fitting a projectile with a hollow case, jacket, or band containing gunpowder or other explosive material, which, when ignited by the firing of the charge of the gun will, by its explosion, cause the said case, jacket, or band to be expanded toward the bore of the gun, and to be compressed around the projectile, substantially as and for the purpose set forth.

And in combination with an expanding case, jacket, or band, applied to a projectile, I claim the use of an outer covering of wire cloth to constitute a packing, substantially as and for the purpose specified.

No. 26,338.—WILLIAM COGSWELL and IRA COGSWELL, Jr., of Ottawa, Ill.—*Improvement in*



*Harvesters.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the shifting pinion I with the eccentric axle D and adjusting frame E, substantially as shown, so that by turning the said axle the pinion I will be thrown into gear with either of the concentric wheels C H, or out of gear with both as desired, and so that the height of the main frame may be readily adjusted to correspond with the adjustment given the axle D and pinion I, as set forth.

No. 26,339.—JAMES P. COLLINS, of Troy, N. Y.—*Improved Water Wheels.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the lighter plate L, in the particular manner specified and for the purpose set forth.

Second. The arrangement, in the particular manner specified, of the packing ring *i*, for the purpose set forth.

Third. The arrangement, in the particular manner specified, of the lip or projecting piece *e* of the buckets, for the purpose set forth.

Fourth. The arrangement, in the particular manner specified, of the regulating plate J, in combination with the peculiar specified device for operating it, for the purpose set forth.

Fifth. The employment or use of the dividing strip, or annular ring inserted in the buckets, substantially as and for the purpose set forth.

Sixth. The employment, for united use, in one wheel of the lighter plate B, packing ring *i*, projecting lips or flanches *e*, gauge or regulating plate J, and annular dividing plate A, the whole being constructed, arranged, and operating in the manner and for the purpose set forth.

No. 26,340.—JOHN COOPER, of Mount Vernon, Ohio.—*Improvement in Oiling Boxes for Vertical Sugar Mills.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The concentric cups H and I upon the upper sides of the heads C C<sup>1</sup>, the same being furnished with the openings *e* and *o* for the conveyance of the oil from the upper box to the stationary cup J, which surrounds the shaft upon the lower bed plate K in combination with the cups J, substantially as described for the purpose set forth.

No. 26,341.—THOMAS P. COSTELLO, of Buffalo, N. Y.—*Improvement in Skate Fastenings.*—Patent dated December 6, 1859.—This invention consists in the attachment of the blade, or runner, of a skate to a boot made for the purpose, without the aid of exterior straps or ligaments to bind the boot and runner together.

*Claim.*—A boot, with sockets therein, as described, and upright bolts welded to a steel blade, or skate runner, both being made and arranged as shown and described, and attached to each other, for the purpose specified.

No. 26,342.—E. G. CUSHING, of Dryden, N. Y.—*Improvement in Horizontal Water Wheels.*—Patent dated December 6, 1859.—A represents two rims which are connected by arms to a vertical shaft B. The rims are encompassed by a spiral scroll C applied to the rims in the usual way. Between the rims the buckets D are placed.

*Claim.*—The combination of the tubes *b* with the bolts *c* and buckets D, the whole being constructed and arranged as and for the purpose shown and described.

No. 26,343.—G. W. R. BAYLEY, of Brashear, La.—*Improvement in Hook Headed Spikes.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The improved railroad spike, having the sides and front of its head beveled downwards and inwards, but convex, and having the peculiar projecting lip or hook behind, for facilitating its easy withdrawal, as a new article of manufacture.

No. 26,344.—CHARLES G. BURKE, of Utica, N. Y.—*Improvement in Melodeons.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* fitting a melodeon or other reed instrument of the same class, with a series of swell valves D, so applied as to be capable of being operated by the keys, in playing, substantially as described, for the purpose of giving expression to any note, independently of the proceeding or succeeding ones or of the other notes of a chord.

And I also claim the employment of a stop H, applied and operating substantially as described, in combination with the keys and the swell valves, for the purpose set forth.

No. 26,345.—JACOB DICKERSON, of Sacramento, Cal.—*Improvement in Wind Mills.*—Patent dated December 6, 1859.—This invention relates to that class of wind mills which have their sails regulated by the centrifugal force resulting from the revolution of the wheel. This improvement is intended to lessen the cost of construction and bring the different parts more compactly together.

*Claim.*—The arrangement of the curved iron sections E<sup>1</sup>, sails B, arms D, slides E, hollow



drum I, scroll spring H, flexible connecting rods J, and links G, in the manner and for the purpose described.

No. 26,346.—CHARLES W. DICKINSON, of Newark, N. J.—*Improvement in Sewing Machines*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction of a pendently swinging, gravitating self adjusting pressure pad or stripper X X, formed with an adjustable slotted end X<sup>2</sup>, suspended on an adjusting pin or stud B<sup>3</sup>, the said pad having no feed pressure spring, but substantially as described, set forth, and shown.

No. 26,347.—JEPHTHA DYSON, of Fulton, S. C.—*Improvement in Carding Engines*.—Patent dated December 6, 1859.—This invention relates to certain improvements in feeding and forwarding the cotton from the lap to the main cylinder in carding engines, and differs essentially from all others for the same purpose where feed rollers and lickens are employed, by dispensing with the use of both, and substituting in lieu thereof a small cylinder clothed with strong coarse card teeth, adapted to the end in view, as a regulator for the uniform delivery of the lap, and as a worker to the feeder.

The inventor says: I *claim*, first, the combination and arrangement of the feed regulating and working cylinder *a*, feeder A, worker *c*, and clearer *b*, substantially in the manner and for the purpose described.

Second. The combination and arrangement of the feeder A, worker B, cleaning and delivering cylinder C, and main cylinder D, substantially as and for the purpose described.

Third. The combination and arrangement of the feed regulating and working cylinder *a*, feeder A, worker *c*, clearer *b*, worker B, clearing and delivering cylinder C, and main cylinder D, substantially in the manner and for the purpose set forth.

Fourth. The combination, with the features included in the third claim of the stripper E, substantially in the manner and for the purposes set forth.

No. 26,348.—A. B. FURBEE, of Dresden, Ohio.—*Improvement in Corn Cribs*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of the inclined flooring C, with the trunks or boxes D, substantially as and for the purpose set forth.

I also claim covering the posts A of the crib, with sheet metal *d*, when said posts are used in connection with a crib provided with an inclined flooring C, and trunks or boxes D, as and for the purpose specified.

No. 26,349.—JACKSON GORHAM, of Bairdstown, Ga.—*Improvement in Ploughs*.—Patent dated December 6, 1859.—This invention consists in a peculiar manner of constructing a plough for the purpose of making it strong, light, durable, and cheap.

*Claim*.—The arrangement of the vertical curved standard B, shovel C, curved handle straps D, hooked inclined brace E, and adjustable beam A, as shown and described.

No. 26,350.—CALEB H. GRIFFIN, of Lynn, Mass., assignor to JOHN WILLIAMS, assignor to WALTER D. RICHARDS, of said Lynn.—*Improvement in Machinery for Cutting Leather into Soles for Boots and Shoes*.—Patent dated December 6, 1859; antedated June 6, 1859.—This improvement relates more particularly to the operation of the knife, and it consists in communicating to it a vibrating motion in the arc of a circle, or in a curve approximating thereto. It further consists in combining with the knife certain devices by means of which, though vibrating in the arc of a circle, it is still made to enter or cut out the leather at right angles to the plane of the latter, as fed up to be cut into soles.

The inventor says: I *claim*, first, vibrating the knife or knives L, in the arc of a circle or a curve approximating thereto, in the manner substantially as set forth.

Second. I claim the arm M, stud *n*, and slot N, or their equivalents, as combined with the knife or knives L, for the purpose substantially as described.

No. 26,351.—DANIEL M. HALL, of Bridgeport, Conn.—*Improvement in Railroad Car Blinds*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The use of the flexible blind C, arranged with the rollers *ll*, fitted within the curved grooves *e e*, and applied to a window of the car, or other wheel vehicle, so that it may be raised above the sash B, and drawn within the roof of the vehicle, substantially as described.

No. 26,352.—ALEXANDER HAY, of Philadelphia, Pa.—*Improvement in the Bearings for Railroad and other Machinery*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Imbedding the bearings of journals or surrounding the same with India rubber or



other suitable elastic material, so as to cause them to yield in every direction when subjected to strains and thrusts, and readjust themselves upon the pressure being removed, substantially as described.

No. 26,353.—GEORGE G. HENRY, of Mobile, Ala.—*Improvement in Drying Wet Seed Cotton*.—Patent dated December 6, 1859.—The inventor says: In this invention I construct a house or closet of any suitable material and size, with three sides tightly closed (with the exception of small holes near the roof for the escape of the vapor produced by the evaporation of the moisture contained in the cotton) and the fourth capable of being closed. Within this closet there is a series of drawers or shelves, upon which the wet seed cotton is to be placed; these drawers are arranged in such a manner that they can readily be slid in and out to facilitate the deposition and removal of the cotton. By means of pipes or flues the room is heated to a sufficient degree to dry the cotton as rapidly as may be necessary.

*Claim*.—The application of artificial heat for the purpose of drying wet seed cotton by means of mechanism, substantially as described.

No. 26,354.—JOHN HERALD and C. B. TOMPKINS, of Trumansburg, N. Y.—*Improvement in Pitchforks*.—Patent dated December 6, 1859.—This invention relates to that class of pitch or hay forks that are operated by a horse and attendant. Its object is to render the fork more durable than usual, and at the same time reduce the cost of construction.

*Claim*.—The arrangement of the hollow head A, tines B passing through the head socket b, handle C, screw D, plugs c, and screw tongs d, as and for the purpose shown and described.

No. 26,355.—F. E. HINCKLEY, of Galesburgh, Ill.—*Improvement in Mole Ploughs*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination of the clearer or hanging coulter F and the rotating coulter G, constructed and arranged as described for conjoint operation.

Second. I claim constructing the sword M of a mole plough with a hole or bore N through it, of sufficient size and suitable shape to admit at the same time a rod of metal large enough to raise and lower the point of the mole, and also to admit the air to pass free into the drain through the sword and mole, as described.

Third. I claim expanding and contracting the mole of a mole plough, substantially as and for the purpose described, or by any other mechanical means.

Fourth. I claim constructing the mole of a mole plough in sections consisting of two sides and a top, hinged to a head block and operated by a wedge, as described.

Fifth. I claim two revolving cutters, with plain outsides and conoidal insides, which may be placed upon a common axle and adjusted to the beam in such a manner as to be forced to cut into the ground and press the earth laterally into the sword cut and firmly close it up, substantially as described.

No. 26,356.—TRUMAN J. HOMER, of St. Louis, Mo.—*Improved Portable Collection Box*.—Patent dated December 6, 1859.—The object of this invention is the construction of a portable box to receive money, which, when deposited therein, will be secure from abstraction.

The inventor says: I *claim* the whole box as original, as a portable collection box, in the peculiar arrangement of its component parts of glass, wood, and metal.

I particularly claim the money inlet l as original, it being in the shape of a box without a bottom, through the top of which is inserted a narrow flat tube, and between it and the sides of the box are two ranges of disks, which disks close the aperture of the tube when the box is inverted.

No. 26,357.—SHELDON A. HOTCHKISS, of New Haven, Conn.—*Improvement in Machines for Raising Weights*.—Patent dated December 6, 1859.—This invention consists in gearing a drum to an upright shaft, with a screw cut on the surface of the shaft, and connecting the drum by means of a hook to a lever, so that by means of the drum and lever operating together increased power and facilities are obtained for raising weights, and by means of a knee, which is attached to the shaft above the screw and near the lower end of the outer angle of which a sheave is attached, over which the rope is made to pass, and by the use of the screw the drum rises as it revolves, and by the aid of a zone which surrounds the drum and is attached to the knee, adjusts the coil of the rope which is attached to the weight.

*Claim*.—The zone J and the screw drum, pawl hook, knee, and sheave, in combination, substantially as and for the purposes set forth.

No. 26,358.—E. E. MARCY, of New York, N. Y.—*Improvement in India Rubber Fabrics*.—Patent dated December 6, 1859.—The claim explains the nature of this invention.

*Claim*.—The improved India rubber fabric made by the combination of India rubber with hypo-sulphite of zinc, and by the exposure of the said compound to steam or water at the temperature stated, substantially as described, without any admixture of free sulphur.



No. 26,359.—E. E. MARCY, of New York, N. Y.—*Improvement in India Rubber Fabrics.*—Patent dated December 6, 1859.—The claim explains the nature of this invention.

*Claim.*—The improved India rubber fabric made by the combination of India rubber with sulphuret of lead and carbonate of lead, or the protoxide of lead, and by the exposure of said compound to steam or water at the temperature stated, substantially as described, without any admixture of free sulphur.

No. 26,360.—E. E. MARCY, of New York, N. Y.—*Improvement in India Rubber Fabrics.*—Patent dated December 6, 1859.—The claim explains the nature of this invention.

*Claim.*—The improved India rubber fabric made by the combination of India rubber with the sulphuret of zinc and hypo-sulphite of zinc, and by the exposure of said compound to steam or water at the temperature stated, substantially as described, without any admixture of free sulphur.

No. 26,361.—EMANUEL MARQUIS, of Bloomington, Ind.—*Improved Apparatus for Setting and Copying Music for the Blind.*—Patent dated December 6, 1859.—This invention consists of a tablet A, provided with raised staves B B and raised sockets *b b b*, placed at equal distances between, above, and below the lines of the staves, in combination with detached solid notes *c c c*, rests *d d d*, and other signs of musical notation *e e e*, which, by means of a peg or pivot attached to each, may be inserted into the sockets of the table in such a manner as to represent a musical composition sensible to the touch of the blind.

*Claim.*—The tablet A, or its equivalent, with raised staves and sockets, in combination with detached solid notes and other signs of musical notation, or their equivalents, capable of being transposed on and fixed in the tablet, substantially as and for the purpose described.

No. 26,362.—SAMUEL W. MARSH, of Washington, D. C.—*Improvement in Breech Loading Fire-Arms.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction and application of a detachable headed breech pin *h h I J K* (Fig. 6) with a split female expanding ring or collar L (Fig. 7) and a non-expanding male collar or ring M (Fig. 8) and a detachable adjusting screw head O, (Fig. 9,) forming a compound expanding detachable headed breech pin, as shown complete at *h h L O*, (Fig. 4,) substantially as described and set forth.

No. 26,363.—EDWIN MAY, of Indianapolis, Ind.—*Improved Apparatus for Sanding Painted Surfaces.*—Patent dated December 6, 1859.—This invention consists in the forcing of sand on a painted surface by means of a current of air from the air chamber A, which is produced by the fans F on the revolving shaft I; said sand being supplied by the tube N or hopper C, in the line of the current of air, after it is produced by the fans F and while it is discharged from the chamber, through the conductor B, upon the painted or cemented surface.

*Claim.*—The combination and arrangement of the blast fan F, in cylinder A, conductor B, adjustable mouth piece D, with the elastic tube N, or its equivalent, when constructed and arranged substantially as set forth.

No. 26,364.—EDWARD MAYNARD, of Washington, D. C.—*Improvement in Breech Loading Fire-Arms.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the peculiar manner of connecting the barrel to the breech piece, viz: the hook *e*, on the underside of the barrel, taking hold of the pin *f* or the equivalent thereof, at the front end of the breech piece, while the link C, the lever D, and the joint pins of said link and lever are arranged in such a manner, with relation to the slot in the breech piece and the ears on the underside of the but of the barrel, as to form a treble jointed and compound leverage connection between the breech piece and the but of the barrel, of such a character that the barrel can be instantly thrown from a firing position to a loading position, and *vice versa*; and also of such character that the barrel can be easily and quickly detached from the breech piece or be securely united thereto, substantially in the manner set forth.

Second. I also claim the combination of the metallic block *b*, the screw *c*, and the screw *a*, with each other and with the front portion of the breech piece, in such a manner, with relation to the shoulder *d* on the underside of the barrel, that the joint between the but of the barrel and the abutment of the breech piece can be tightened or loosened, substantially in the manner set forth.

Third. I also claim retaining the pivot pin *w*, in its position within the breech piece by means of the overlapping head of the screw *a*<sup>1</sup>; but this I only claim when the longitudinal groove *z*, in one side of a portion of the length of said pivot pin, is so located that when the pin is turned to the position shown in Fig. 12, or any other previously determined position, it may be drawn out far enough (and only far enough) to detach the said pin from its hold upon the lever D, and thereby allow the barrel to be separated from the breech piece substantially in the manner set forth.



Fourth. When the pivot pin  $w$  is retained in its position within the breech piece by the overlapping head of the screw  $a^1$ , in such a manner that it can be loosened by partially turning the same upon its axis, I also claim the arm  $b^1$ , upon the outer end of said pin which enables it to be readily turned upon its axis, and partially withdrawn from its place without any mechanical assistance, substantially as set forth.

Fifth. When the barrel is connected to the breech piece in the within described manner, I also claim the producing of a tight joint between the but of the barrel and the abutment of the breech piece by combining therewith a flange bottomed metallic cup, substantially as set forth.

Sixth. I also claim giving the opposite faces  $r r$  of the but of the barrel such a shape that the flange bottomed metallic cup  $v$  can be easily taken hold of by the thumb and finger of the free hand of the user when the barrel is thrown into the loading position, substantially as set forth.

No. 26,365.—G. W. MITCHELL, of Jackson, Tenn.—*Improvement in the Mode of Operating Car Brakes*.—Patent dated December 6, 1859.—This invention consists of a pair of beveled wheels, of which the smaller one is placed on a horizontal shaft A, driven by the crank B; the large beveled wheel C is placed on a perpendicular shaft D, and is driven by the small beveled wheel E.

The inventor says: I claim the flanged or ratchet wheel and its hooked pawl, as described and shown at F G.

I also claim the spring platform and the pin attached and stop pin I, as described and for the purpose set forth.

No. 26,366.—GEORGE W. MITCHELL, of Jackson, Tenn.—*Improvement in Sewing Machines*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, the combination of the crank I, on the driving shaft, the slotted arm H, forming a portion of the same lever with the needle arm, and so extended as to operate the lever  $F^1$ , and the lever  $E^1$ , carrying the shuttle or looper, the whole arranged and operating, substantially as described, to drive the needle and shuttle.

Second. The vertically and horizontally elastic arm L, having the presser attached, and constructed and applied substantially as described, so as to be operated upon by an appendage of the needle to feed the material, substantially as set forth.

Third. The polygonal collar M, fitted to turn upon the needle arm, so that any one of its sides may be presented to act upon the presser arm for the purpose of feeding the cloth more or less, according to the wish of the operator, as set forth.

No. 26,367.—RICHARD MONTGOMERY, of New York, N. Y.—*Improvement in Iron Ships*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, forming the supports or frame to which the side covering E is attached, of iron or other metal corrugated, in the form and for the purposes substantially as described.

Second. I claim the combination and arrangement of the corrugated cross beams B and corrugated bottom supports A, with the iron divisions D, substantially as and for the purpose set forth.

No. 26,368.—OSCAR F. MORRILL, of Boston, Mass.—*Improvement in Broiling Apparatus*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

Claim.—The improved steak broiler, as made with the deflector in its grid or grating, a flame and heat passage under the deflector, and, with the gravy trough, to surround or encompass the heat passage, as specified.

No. 26,369.—JOHN KNICKERBACKER, of Stockport, N. Y.—*Improvement in Clutches for Pulley Couplings*.—Patent dated December 6, 1859.—This invention is designed to actuate and stop machinery at pleasure, without jar or concussion, thereby preventing the wear and tear consequent upon all abrupt checks of their motions. It consists in providing the disk of the movable pulley E, with three or more vibratory lever blocks suspended in radiating slots, extending from the hub to the rim through the said disk, and having attached to their extremities friction clutches or impellers in the form of arcs, corresponding in curvature with the inner surface of the periphery, or band of the fixed pulley F.

Claim.—Suspending the clutches or impellers A A A in radial slots in the disk of the movable pulley E, so as to allow them to vibrate, substantially in the manner and for the purpose set forth.

No. 26,370.—N. W. LANGLEY, of East Cambridge, Mass., and HENRY S. JONES and AARON S. DRAKE, of Stoughton, Mass.—*Improved Mode of Securing Photographs, &c., to*



*Tombstones.*—Patent dated December 6, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Securing daguerreotypes, photographs, &c., upon tombstones, by inclosing them in a glass case, the opening to which is closed by a glass stopper, and affixing the same to the stone.

No. 26,371.—THOMAS J. LINTON, of Providence, R. I.—*Improvement in Mounting Precious Stones.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The improvement in making mountings for precious stones and other articles of jewelry, which are to be mounted by forming the border setting and beveled edge from a single sheet of metal at one operation, by the use of a die, in the manner described, the mountings being in an oval, round, square, or other form, as the article to be mounted may require.

No. 26,372.—CHARLES A. LOWBER, of Medina, N. Y.—*Improvement in Cotton Seed Hoppers.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* making the runner with the surface next to the shaft smooth, to receive the cotton seeds from a suitable hopper and cause them to be properly distributed thereon and to be carried towards the periphery, and with that part, or the surface within the periphery and outside of the smooth part, armed with teeth in the form of long cutting edges, having continuous channels or furrows between them of sufficient size to receive a cotton seed and permit it to pass and roll therein, substantially as described, in combination with an upper plate surrounding the eye or aperture for the passage of the cotton seeds to the smooth part of the surface of the runner, the under surface of the said plate being parallel with the surface of the runner, and armed with a rim of teeth in the form of long cutting edges, and formed with interposed channels or furrows similar to those of the runner, but of reversed inclination, substantially as and for the purpose specified.

I also claim making the said teeth of long cutting edges, and surrounding the smooth surface of the runner of varying lengths, as described, that is, having some of them approaching the shaft nearer than others, that the seeds, while travelling outward on the smooth surface of the runner may arrange themselves and properly enter the furrows or channels one by one, as described.

And I also claim surrounding the periphery of the runner and upper plate with a trough which extends within the periphery of the runner, leaving an open space or air passage between, substantially as described, in combination with the vanes, or equivalent means, for blowing in a current of air, substantially as and for the purposes specified.

No. 26,373.—WASHINGTON A. PEASLEE and JOHN O. D. LILLEY, of Indianapolis, Ind.—*Improvement in Spark Arresters and Chimneys of Locomotive Engines.*—Patent dated December 6, 1859.—This invention consists in providing a perforated spark and smoke cone within the chimney stack proper, and forcing or drawing all the products of combustion through the perforation by a centrifugal action given to said products by means of a continuous current of exhaust steam passed up along the outside of the perforated cone, and between it and the inside of the chimney.

*Claim.*—The construction of a chimney or spark arrester by the combination and arrangement of the various parts, substantially as they are described in the foregoing specification and for the purposes mentioned.

No. 26,374.—NATHAN PUCKETT, of Deming, Ind.—*Improved Boiler Feeding Apparatus.*—Patent dated December 6, 1859.—The valve E is provided with the usual gibs I and set screws for keeping its face firmly against the bearing surface of the valve chest A; and, when it reaches its highest point, its chamber D is in full communication with the aperture B leading to the supply or feed pipe of the heater, which, from its superior height, fills the chamber D with water heated to a boiling point, while the lower aperture C is closed by the body of metal between the chamber D and the bottom valve E, in which it is formed.

*Claim.*—The arrangement of the chamber D, valve E, chest A, and openings B C, as and for the purpose shown and described.

No. 26,375.—SAMUEL M. RICHARDSON, of New York, N. Y.—*Improvement in Hinges.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Constructing hinges for blinds by the bent straps *f g*, passing around the outer edges of the blind, and inclosing the angle thereof, combined with the eye *d*, connected to said bent strap *f g* by the part *e*, the whole applied and acting in the manner and for the purpose specified.

No. 26,376.—D. SANFORD, of Taylor, Ill.—*Improvement in Harvesters.*—Patent dated De-



ember 6, 1859.—This invention consists in a novel arrangement of a rake and grain or gavel passage, and also in a tilting gavel receiver and a box, whereby the grain, as it is cut, is raked into gavels and into the receiver, in which they are bound by the attendant and thrown by him into a box, which is tilted intermittingly, so as to cast the sheaves in bundles on the ground.

The inventor says: I *claim*, first, the sliding rake bar E fitted within the bent arm D, and provided with a jointed rake head F, in connection with the guide strip *m*, and a gavel passage *n* on the platform A, substantially as described.

Second. The combination of the tilting gavel receiver H with the tilting box J, when arranged to operate together automatically, as and for the purpose set forth.

No. 26,377.—HENRY ROHRER, of Strasburg Township, Lancaster county, Pa.—*Improved Churn*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application of the tube I K to enter the rear head of the churn, the connecting pipes C and H, and its wide mouth *m*, partition *l*, and connecting tubes L M, with the dashers D, elevated on an open step F, when combined in the manner and for the purpose specified.

No. 26,378.—WILLIAM SELPHO and JAMES WALBER, of New York, N. Y.—*Improvement in Artificial Hands*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, the arrangement of the cords or catguts *m* and *o*, and the pulley *n*, as set forth, for applying a double purchase in opening the hand, as described and shown.

Second. We claim the arrangement of the wrist joint and hand spring *l*, whereby the said spring *l* can be adjusted by the rod *k* that passes through the pipe *h*, in the manner specified.

Third. We claim the cord *p* or its equivalent passing from the elbow pad *r*, and giving motion at the wrist *g*, for the purposes and as specified.

No. 26,379.—ISAAC C. SHULER, of Amsterdam, N. Y.—*Improvement in Sheet Metal Coffins*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of stiffening the base of a sheet metal coffin by locking together the surplus edges of the walls and bottom, forming a rim *c* surrounding the base, also the frame D.

Second. The inside tray E, whose bottom is in permanent contact with the exterior bottom S, and whose sides may be soldered directly to the walls A, or set away, leaving a chamber to be filled with molten metal, as described.

Third. The arrangement of scrolling or double locking the walls at the corners, in order, by making a voluminous joint, to stiffen and brace the general structure, whether the body of the joint be formed on the inner or outside of the coffin.

Fourth. I claim the slotted or double rim H I, through which the walls protrude, as described, for the purpose of stiffening the upper edges of the walls, and sustaining the lid or cover; also, the arrangement of folding the surplus edges of the walls over the frame I, for the purpose specified.

Fifth. I claim stiffening the cover J with the frame *r* near its outer edge on the upper side, inclosing the surplus sheet metal over the same.

Sixth. I claim, for the purpose of stiffening their respective portions of the coffin, the frames of cast or wrought metal P for the blind V; K for the cover; J, G and F, for the walls in the vicinity of the handles; *t* for the upper edge of the tray E, and *q* for the exterior bottom S.

Seventh. I disclaim hinging the sections of the concave sides of the cover to the body of the same, but—

I claim hinging them to the body of the coffin.

No. 26,380.—J. C. STODDARD, of Worcester, Mass.—*Improvement in Hay Making Machines*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the rake head shaft, furnished with friction wheels or rollers, which are arranged on pivoted lever bearings, in combination with driving wheels which are furnished with a plain flange for the friction rollers to act against, so that the necessary friction may be produced either by means of the specified lever arrangement or by the same in combination with the gravity of the rake head, substantially as and for the purpose set forth.

Second. I claim the adjustable spurred ring P, set screws *p p*, with the wheels *u*, on the ends of the rake bars N, arranged and combined as set forth and for the purposes specified.

No. 26,381.—SAMUEL TARVER, of White county, Ark.—*Improvement in Saw Mills*.—Patent dated December 6, 1859.—This invention consists in so arranging its parts, as that great



saving in motive power and timber is effected, by accomplishing with a small thin circular saw all that can be done with a large thick one, and in so suspending the log upon the pivots as to make it most easily controlled whilst sawed; and in setting the saw at every line run to the log, instead of setting the log to the saw; and of causing the saw to feed along to the log on a light carriage and to a perfectly true guide, instead of the log to the saw.

The inventor says: I *claim*, first, the arrangement of the parts A B C D E H I J K L of Fig. 1; I say arrangement, because I cannot claim the invention of pulleys, saws, rollers, shafts, &c., these being in use everywhere, but simply claim the peculiar manner in which they are arranged.

Second. I claim the construction of the saw carriage, as described above, and by drawing of Fig. 3.

No. 26,382.—THOMAS THORP, of New York, N. Y.—*Improved Machine for Making Cigars*.—Patent dated December 6, 1859.—By treading alternately on the rings a continuous motion may be imparted to D, and consequently the wheels A and B and to the belt C, or by giving a proper impulse at the moment of introducing the material upon the belt, may be moved to such a distance as is necessary to complete the operation and allow it to be stopped at exactly the right moment, without continuing the rolling process too long, thereby injuring the cigar.

The inventor says: I *claim*, first, the arrangement of the drums or pulleys A B, in connection with the rollers M and belt C, with or without the rollers N, substantially as and for the purpose set forth.

Second. I claim in connection with the above, the runged wheel D, or its equivalent, arranged and operated in the manner and for the purposes set forth.

Third. I claim the means, substantially as described, of regulating the pressure on the cigar.

Fourth. I also claim, as my invention, the arrangement of a machine substantially as set forth, as an arrangement not heretofore known, for the purpose before mentioned.

Fifth. I also claim the peculiar steady curves or bends given to the belt C, for the purposes mentioned.

No. 26,383.—I. P. TICE, of Baltimore, Md.—*Improved Rotary Cutter Head*.—Patent dated December 6, 1859.—This invention consists in having the cutters placed in such relation to a cylinder, or a segment of a cylinder, as to prevent any undue action of the cutters on the stuff, so that the former cannot follow the grain of the wood and draw it suddenly along, thereby spoiling the work and endangering the hands of the operator.

*Claim*.—The employment or use of a cylinder C, or any segment or section thereof, applied to rotary cutters, to operate substantially as and for the purpose set forth.

No. 26,384.—GEORGE W. TOLHURST, of Liverpool, Ohio.—*Improved Washing Machine*.—Patent dated December 6, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim* constructing the round follower of washing machines of two sets of rings or hoops, and furnishing each set of rings with a handle, so that the surface that comes in contact with the clothes can move in opposite directions at one time, and this I claim when the same is arranged for operation, in the manner and for the purpose as described and set forth and for the purpose specified.

No. 26,385.—A. P. TORRENCE, of Oxford, Ga.—*Improved Machine for Girdling and Felling Trees*.—Patent dated December 6, 1859.—This invention consists in attaching a cutter to a proper handle and connecting said cutter and handle to a draft lever in such a way that when the implement is applied to its work, the necessary power applied to the draft lever and the cutter handle properly manipulated by the operator, the cutter will be moved around the tree, and cut the same circumferentially and towards its centre.

*Claim*.—The employment or use of the handle B, provided with a cutter A, and connected to a draft lever G, by the bars C D E, or any equivalent means, so as to operate substantially as and for the purpose set forth.

No. 26,386.—HIRAM VAN DEUSEN, of Phelps, N. Y., assignor to Himself and HIRAM ROCKEFELLER, of Clifton Springs, N. Y.—*Improved Clapboard Gauge*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A gauge for fitting clapboards for railing, composed of the bar A, the arm B, the slide D, with the cam and lever by which it is actuated, the stop H, and the straight edge k, or their equivalents, constructed and arranged substantially as set forth.

No. 26,387.—THEODORE VAN DEVENTER, of New Brunswick, N. J.—*Improvement in Rollers for Printing Paper Hangings*.—Patent dated December 6, 1859.—This invention consists in a certain combination of conically bored bushes fitted into the ends of the rollers, conical sliding collars fitted with feathers and grooves both to shaft and bushes; and nuts



fitted to screw threads on the shaft, by which the truth of the several rollers upon the shaft is ensured and provision is made for adjusting the rollers lengthwise upon the shaft.

*Claim.*—The combination of the conically bored and grooved bushes B, the concentric feathered collars D D, the feathered and screwed shaft U, and the nuts E E, the whole applied and operating as described.

No. 26,388.—NAHUM WASHBURN, of Bridgewater, Mass.—*Improvement in Dental Apparatus for Relief of Pain While Operating.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of dental forceps, or instrument for operating upon the teeth, with electro-magnetic mechanism, substantially as described, or its equivalent, so that the electrical current or currents may be made to flow through the nerve or nerves of the tooth, or the jaw or flesh immediately contiguous thereto, in order to benumb the same and render such more or less insensible to pain during the performance of the dental operation.

I also particularly claim the application of the electrical apparatus to the dental instrument, so that the latter may be in or form part of the circuit, as specified.

No. 26,389.—D. A. WILLBANKS, of Harmony Grove, Ill.—*Improvement in Threshing Machines.*—Patent dated December 6, 1859.—The operation of this invention is as follows: The beater cylinder is rotated in the direction indicated by arrow 1, and the grain to be thrashed is fed into the trough K and passes through the opening *f*, between the beater cylinder and concave B, and is thrashed by the action of the flails I in connection with the concave B, the latter being adjusted nearer to or further from the beater cylinder by turning the set screws D D. The thrashed grain and straw are discharged at the lower end of the concave B, the impurities and dust are arrested by the guard L and discharged from the machine over the top of the cap J. The guard L protects the operator from dust.

*Claim.*—The peculiar construction of the wrought-iron ribs I, in combination with the peculiar construction and arrangement of the cylinder heads H, to wit: the ribs with angular hooks *e e*, and the cylinder heads with key seats, and with the slotted projections *c c* and radial slots *d*, as and for the purpose set forth.

No. 26,390.—WILLIAM F. YEAGER, of Starkville, Miss.—*Improvement in Ploughs.*—Patent dated December 6, 1859.—The mould board B is attached to the share A by two screws *c c*. The letters *d d* represent the bolts attaching B to a handle of the plough. From the lower part of handle D a rod T passes to and through the beam F on the end of which is a screw nut for the purpose of bracing and securing the parts of the plough in place. The upper end S of the cutter K also passes through the beam F, to the top of which it is secured by a screw P.

*Claim.*—The arrangement of the landside G, the shank S, slot P, brace T, lug U, beam F, brace X, handles E D, share A, cutter K, and mould board B, the whole being constructed as described, for the purposes set forth.

No. 26,391.—GEORGE W. ATKINS, of Milton, Del., and WILLIAM B. AITKEN, of Philadelphia, Pa., assignor to GEORGE W. ATKINS and I. B. HENRY, of Delaware City, Del.—*Improvement in Registering Apparatus.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We *claim*, first, making the ratchet wheels C C<sup>1</sup>, in pairs secured together, with their notches inclined in opposite directions, as described, in combination with both an actuating and a checking pawl, operating together simultaneously, as described, the same being constructed and arranged together, substantially in the manner and for the purpose set forth and described.

Second. We claim the employment of a self righting cover G G<sup>1</sup>, operating in combination with the platform A, or its equivalent, substantially in the manner and for the purposes set forth and described, and this we claim whether the said cover G G<sup>1</sup> be applied either to a fixed platform or floor A, or to the moving platform of a weighing scale, connected with a registering machine, as described.

Third. We also claim the bell striker F, when the same is constructed with the arms 5 6 7, and operated by the notches of the ratchet wheel C, as and for the purpose set forth and described.

No. 26,392.—CHARLES H. DENISON, of Guilford, Vt., assignor to A. MILLER, of Brattleboro', Vt.—*Improved Tool for Finishing Felloes.*—Patent dated December 6, 1859.—In using this invention, the inventor says: after the felloes have been squared, I subject them to the action of revolving cutters A A, carried by an arbor B. This arbor, when in use, rises perpendicularly through a table or bench.

The inventor says: I *claim*, first, the described washer, and the described iron gauge for trimming and shaping the internal surface of felloes, &c.

Second. The described collar gauges for squaring the external and internal curved surfaces of the felloe.



No. 26,393.—WILLIAM B. DUNBAR, of Waterbury, Conn., assignor to Himself and GEORGE H. SEYMOUR, of Plymouth, Conn.—*Improved Ladle and Fork*.—Patent dated December 6, 1859.—This invention consists in hinging to the rear part of a ladle, made of suitable wire, which is formed into a handle of any required length and secured in the end of a wooden holder, a fork having curved tines, and operating said fork so as to grasp the vegetables while in the boiler with the boiling water by a rod connected to the head of the fork, which is crank shaped, and passing through tubes which serve to keep the connecting rod in place.

*Claim*.—The combined ladle and fork, constructed in the manner described and represented for the purpose set forth, as a new article of manufacture.

No. 26,394.—THOMAS ELLIS, of Philadelphia, Pa., assignor to Himself, W. A. ELLIS, and A. D. ELLIS, of said Philadelphia.—*Improvement in Casting Boxes for Wheel Hubs*.—Patent dated December 6, 1859.—The object of this invention is to cast the boxes with internal diameters of uniform size, by obviating the difficulty hitherto attending the varying position of the core relatively to the other parts forming the mould.

*Claim*.—Supporting the sand core E, between two sand heads F, when the above parts are employed in connection with a sand mould C, in the manner shown and represented.

No. 26,395.—RICHARD FITZGERALD, of Newark, N. J., assignor to JAMES BOOTH, of said Newark.—*Improvement in Machines for Forming Hat Bodies*.—Patent dated December 6, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, distributing the fur C on the former L, by discharging the same through an annular opening  $b^1$ , over and cocentric with the former L, substantially as set forth.

Second. The employment or use of the stationary shell O, provided with the recess  $p$ , cards or pickers  $q r$ , and having within it the cocentric rotary wheels P Q, one or more, also provided with cards or pickers  $v u$ , and with or without fan blades  $w$ , when said parts are arranged relatively with the former L, to operate substantially as described.

Third. The employment or use of the slide G, with the sliding tube or pipe H fitted therein, containing the former shaft J, the box F, and elastic belt  $l$ , or its equivalent; the above parts being arranged relatively with the suction fan C, and the shell O, and wheels P Q, substantially as and for the purpose specified.

No. 26,396.—GEORGE N. HALL, of Mamakating, N. Y., assignor to Himself, S. ARTHUR, and J. PIERCE, of said Mamakating, and S. D. ARTHUR, of New York city.—*Improvement in Horse Hay Rakes*.—Patent dated December 6, 1859.—This invention consists in the arrangement of the main lever, intermediate link, auxiliary lever, connecting rod, rake head, slotted brace bar, and driver's seat.

*Claim*.—The arrangement of the main lever H, intermediate link  $h$ , auxiliary lever  $e$ , connecting rod  $d$ , cam  $k$ , arm  $c$ , rake head G  $b$ , and slotted brace bar F, and driver's seat D, substantially as and for the purposes set forth.

No. 26,397.—JAMES W. McLEAN, of Indianapolis, Ind., assignor to Himself and EDWIN MAY, of said Indianapolis.—*Improvement in Steam Ploughs*.—Patent dated December 6, 1859.—The steam pipes K K conduct the steam from the boiler A to the cylinders B B, where it comes in contact with and operates the piston E. To the staff  $c$  is attached the wheel F, gearing with the wheel D, and that with the wheel O, which gears with the pinion  $n$  upon the shaft R, giving motion to the wheels D and O; the wheel D being fastened to the bearing wheel G; the wheels F and O are attached to the shafts M and U; upon the shaft U is attached the pinion P, gearing with the pinion Q upon the shaft R, giving motion to the machinery by being geared with the wheels F D and O and N.

*Claim*.—The arrangement of the ploughs  $h$ , gearing V W X, cutters  $b$ , lever T, and connecting rod S, in combination with the universal jointed shaft U M M, when operated in connection with the steam engine, substantially as set forth.

No. 26,398.—JOHN P. KEMP, of Charlestown, Mass., assignor to N. F. STEVENS, of Moultonbro', N. H.—*Improvement in Peg Tubes and Drivers*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing the interior peg guiding portion of the tube of a form made up of angles or corners and surfaces, substantially as described, and so that, while the cross section or area thereof is materially greater than that of the peg, to admit of a driver of increased strength and materially greater cross section or area than that of the peg working therein, said tube in its peg guiding portion serves by its corners or angles and surfaces to restrain the peg from lateral shake or play.

No. 26,399.—WARREN NICHOLS, of Lima, Ohio, assignor to Himself and THOMAS GHORMLEY, of Stokes, Ohio.—*Improvement in Cattle Pumps*.—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the combination with the covers L L<sup>1</sup> of stops which will open



the trough when its corresponding platform rises to its highest position and close it when the platform descends to its lowest position, as described, for the purposes set forth.

Second. The arrangement described of the spout I, in combination with the arm *k*, or with some other part operated by the descent of one of the platforms, by which the direction of the water is changed, near the close of the descent of the platform, as set forth, for the purpose stated.

No. 26,400.—GEORGE H. REYNOLDS, of New York, N. Y., assignor to CALEB BARSTOW and D. D. BADGER, of said New York.—*Improvement in Cut Off Valves of Steam Engines.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement, within each steam chest of a rotary engine, of the starting and reversing valve having the cut off valve in combination therewith, the two being so coupled and operating that the starting or reversing may be effected without coupling or uncoupling any of the connecting parts, substantially in the manner set forth.

No. 26,401.—NANCY POINDEXTER BRASHEAR, of Pattersonville, La., executrix of ROBERT B. BRASHEAR, deceased, late of said Pattersonville.—*Improved Mode of Applying Sulphurous Acid Gas in the Defecation of Cane Juices.*—Patent dated December 6, 1859.—The claim explains the nature of this invention.

*Claim.*—Subjecting sugar cane juice or other saccharine liquid to the direct action of the fumes of burning sulphur, such liquid being employed in a diffused state, as set forth, so that every or nearly every portion of the whole body of liquid is brought in contact with the same almost simultaneously, substantially as and for the purpose set forth.

No. 26,402.—REBECCA H. WILLSON, of Washington, D. C., administratrix of the estate of JOHN M. WILLSON, deceased, late of said Washington.—*Improvement in Fastenings for Cartridge Boxes.*—Patent dated December 6, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A cartridge box fastening composed of hinged lever and spring, said spring serving to hold the lever open or closed, and said lever by the aid of said spring clamping the flap of the cartridge box between itself and the side of said box, substantially as herein represented.

No. 26,403.—LUTHER ADAMS, of Blanchester, Ohio.—*Improvement in Car Couplings.*—Patent dated December 13, 1859.—This invention relates, first, to the construction and arrangement of latches by means of which the cars may couple of themselves as they are made to come together; second, in combination with the coupling latches, the arrangement of a rubber spring, by means of which said latches are made to act as elastic bumpers.

*Claim.*—The combination and arrangement of the latch *c f*, spring *b*, and plates *h h*<sup>1</sup>, when constructed and made to operate substantially as described for the purposes set forth.

No. 26,404.—PETER B. BAKER, of Wall Hill, Miss.—*Improvement in Cotton Seed Planters.* Patent dated December 13, 1859.—In order to complete the covering of the seed, a drag board or scraper *G* finally follows, its under edge being hollowed in the middle to leave the surface of the ground in proper shape. This scraper is secured to long wooden springs *E E* extending forward and upward to the sides of the frame *A*, to which they are secured. In order to get access to the interior of the drum *D* one of the segments *f* may be removable, as at *m*, for the purpose.

*Claim.*—The arrangement of the teeth *b b* in front of the drill opener *C* and the scraper *G*, secured upon the spring runners or shoes *E E*, in combination with the seed drum *D*, substantially in the manner and for the purpose specified.

No. 26,405.—NELSON BARNUM, of St. Louis, Mo.—*Improved Sash Fastener.*—Patent dated December 13, 1859.—When it is desired to raise the sash the lever *H*, which is hinged to the sash *r*, is depressed, drawing the spring *J* back to the bottom of the groove in which it operates, and then by a still further compression of the lever the strip *B* is drawn back in the groove *D*, which releases the sash and allows it to move with ease.

*Claim.*—The lever *H*, the adjustable connection *G*, and the springs *J* and *F*, and bolt *I*, or their equivalents, in combination with the yielding strip *B*, for the purpose specified.

No. 26,406.—A. R. BARTRAM, of Redding, Conn.—*Improvement in the Running Gear of Vehicles.*—Patent dated December 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Attaching the front axle *A* to the bolster *B*, by means of the sleeves *b b* fitted loosely on the bolster and connected with the bar *C*, which is attached to a circle plate or any suitable swivel connection between the said bar and axle, when said parts, substantially thus arranged, are used in connection with thills or a draft pole attached rigidly to the axle *A*, for the purpose set forth.



No. 26,407.—ALEXANDER BECKERS, of New York, N. Y.—*Improved Double Eye Piece for Optical Instruments.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Connecting a stereoscope or other optical instrument with double eye tubes, sight tubes, or eye pieces, each of which being shaped or turned of one piece in the form of an obliquely intersected and moulded hollow cylinder, substantially in the manner and for the purposes as described.

No. 26,408.—ELIZABETH BELLINGER, of Mohawk, N. Y.—*Improved Composition for Kindling Fire.*—Patent dated December 13, 1859.—The claim explains the nature of this invention.

*Claim.*—The inflammable gum paste composed of Kaurie gum, camphor, and wax, in about the proportions stated, when combined with friction match paste, placed on kindlers for fires, in the manner and for the purposes set forth.

No. 26,409.—JOHN C. BIRDSSELL, of West Henrietta, N. Y.—*Improved Machine for Cleaning Clover Seed.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, operating the bolts A A so as to impart to them an oblique alternately rising and falling motion, by means of the double crank D E, guide rods F F, arms G H, and connecting rods B B, or their equivalents, in the manner and for the purposes set forth; it being understood that I claim the above only when applied to bolting clover seed.

Second. I claim arranging a trough I provided with endless conveyors J, as set forth, for the purpose of returning the unhulled seed or tailings to be again submitted to the operation of hulling, as described.

No. 26,410.—WILLIAM BLESSING, of Jeffersonville, Ohio.—*Improvement in Seed Planters.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of the top portion of the distributor, made with a semi-lunar opening, and the recess under the covered portion of the said top, when the periphery of the top is made with the chaff openings H on either side of the reciprocating seed bar, so that said bar, by its reciprocating action, shall work out the chaff through the passages H H on either side of the seed bar, and thus prevent choking the distributor.

No. 26,411.—JEREMY W. BLISS, of Hartford, Conn.—*Improved Striking Apparatus for Gongs.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, arranging the striking mechanism of a bell substantially within the hollow of the bell, when the wire which actuates that mechanism moves in lines parallel to the axis of the bell, or nearly so, as described.

And lastly, I claim a rock shaft arm, arranged with reference to the bell, substantially as described, in combination with a slide, a swing catch, and a hammer, and hammer wire and proper springs; the whole constituting a striking apparatus substantially as herein set forth.

No. 26,412.—JOHN DROUGHTON, of New York, N. Y.—*Improvement in Grinding Mills.*—Patent dated December 13, 1859.—B is a revolving grinder, secured to a shaft C by a set screw e; D is a cob cutter or cracker keyed to the shaft C; E is a stationary grinder bolted by the flanches F to the open end of drum A; G is a vertical spout communicating with the interior of the stationary grinder E, and into which spout the grain or other substance to be ground is fed from a suitable hopper; J J are wings or fan blades, secured to the revolving grinder B.

The inventor says: I *claim*, first, the double and reverse acting conical grinding surfaces B F, constructed and operated substantially as herein set forth.

Second. In combination with a revolving grinder and hollow case or drum A, I claim the wings or fan blades J, operating substantially as and for the purpose set forth.

No. 26,413.—PETER M. BROWN, of Carrollton, Ill.—*Improvement in Portable Fences.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Giving such a shape to the slots at each end of the sections of my improved fence that the said sections can be securely interlocked with each other by means of supporting posts of the within described shape, in such a manner that the said sections can be either lengthened or shortened when they are put up for use, substantially as set forth.

No. 26,414.—ISAAC Y. CHUBBUCK, of Roxbury, Mass.—*Improvement in Fan Governors for Steam Engines.*—Patent dated December 13, 1859.—The nature of this invention is explained by the claim and engravings.

*Claim.*—Combining the main spindle C of the fan governor with the stem or spindle B of the valve, by means of a toothed arc formed upon or attached to the extremity of the crank



arm which carries the fan and a toothed sector upon the valve stem, the said crank arm being attached to a sleeve fitted to the spindle C, and the whole being otherwise arranged substantially as described.

No. 26,415.—HEZEKIAH CONANT, of Willimantic, Conn.—*Improvement in Machines for Winding Thread on Spools.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the combination, substantially in the manner set forth, of a traverse changer with right and left hand screws, and with nuts which are alternately in gear with such screws, the combination operating as a whole, substantially in the manner and for the purpose described.

Second. I claim a traverse changer, provided with successive steps or teeth, substantially such as is before described, and acting upon lips as set forth.

Third. I claim a stop motion, substantially such as is described, for causing the machine to come to rest when a spool is filled, in combination with automatic apparatus, substantially such as set forth, for regulating the length of motion and change of direction of motion, of a guide through which the thread is delivered on a bobbin or spool.

Fourth. I claim adjustable lips, substantially such as set forth, in combination with a traverse changer, whereby spools of different lengths may be wound by the use of the same traverse changer.

Fifth. I claim mounting the presser and thread guide directly upon or attaching it firmly to the traverse rod, as before described, whereby the machine is cheapened and performs its work more accurately.

And lastly. In combination with apparatus, substantially such as described, for governing automatically the motions of a thread guide, I claim a tension apparatus and stop motion which arrests the motion of a machine when a thread breaks, substantially by the mode of operation set forth.

No. 26,416.—JOHN B. CORNELL, of New York, N. Y.—*Improvement in Sash Weights.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—As a new article of manufacture, my improved metallic sash-weight, the peculiarity of which consists in its having a series of annular grooves formed at suitable distances from each other, in the lower portion of said sash-weight, for the purpose set forth.

No. 26,417.—THOMAS R. CROSBY, of Newark, N. J.—*Improved Machine for Wiring Blind Rods.*—Patent dated December 13, 1859.—The wire, while in the act of entering the rod, is firmly held in proper position within the yielding mouth formed by the lower end of D pressing, by means of the spring H, upon the plate T.

The inventor says: I *claim*, first, the use, in wiring machines, of the yielding mouth to hold the wire when being driven and formed, substantially as described.

Second. I claim the use of the adjustable slide K, substantially in the manner and for the purposes described.

Third. I claim in said machines the use of the dog V in the end of the arm E, substantially in the manner and for the purposes described.

Fourth. I claim the combination together of the driver O and the yielding mouth formed by the rack D and plate I, substantially as described.

No. 26,418.—R. CROWLEY, of New York, N. Y.—*Improvement in Needle Wrappers.*—Patent dated December 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The incision of the wrapper, as shown at *d d*, so as to expose the heads of the needles and produce a covering or flap B of the form shown, or equivalent form, as and for the purposes set forth and described.

No. 26,419.—JONATHAN CUTTER, of Chicopee, Mass.—*Improved Machine for Making Clasps.*—Patent dated December 13, 1859.—This invention consists in the general arrangement and application of a series of cams, slides, and other attachments, to partially form an automatic machine to make metal clasps.

The inventor says: I *claim*, first, the sliding former A and the vibrating lever B, in combination with the die and punches, in the manner described.

Second. The reciprocating ring C to actuate the slide former A, in combination with the revolving cam D and lever arm I and pin M.

Third. The centre spring pin W, to press the blank down through the die plate on the forming bed Y, in the manner described.

Fourth. I claim the whole arrangement in combination as an organized automatic machine, in the manner and for the purpose specified, substantially as set forth.

No. 26,420.—OLIVER H. DENNIS, of Altona, Ill.—*Improvement in Seeding Machines.*—



Patent dated December 13, 1859.—The front end of the frame is supported by two wheels *g g* on an axle *B*, which has a king bolt *e* to give freedom of action in turning, &c., as in carriages; the shank of the king bolt extends upward through and is movable in a cross piece of the frame for the purpose of adjusting the height of the machine, so that its cultivating parts may be entirely raised from the ground when not to be used, as in transporting and turning the machine, or be brought into action in the ground, and adjusted to different depths therein, as desired.

The inventor says: I *claim* the combination and arrangement of the cylinder *G*, of circular cutters *l l*, with the cultivating and opening teeth *c c*, and with the sowing cylinder *H*, substantially in the manner and for the purposes set forth.

I also claim, in combination with the above, the arrangement of the loosely hinged harrows *N N* in relation to each other, and to the frame of the machine, and in combination with the arms *P P*, rack shaft *O*, lever *Q*, and catch *R*, substantially as specified.

No. 26,421.—DAVID S. FANCHER, of Logansport, Ind.—*Improvement in Stone Loading Wagons*.—Patent dated December 13, 1859.—The frame bed *A* is fixed upon the gearing of a common log or other wagon; the drop *B B* is secured to the rear end of the bed by the hinged joints *K K*, and is made to rise or lower, to suit the occasion, and can be secured at any desired position above or below the bed by the hooks *G G*, which enter the staples *P*; the levers *E* and the slotted cross bars *D* are made with pin holes through the bars; the levers are provided with strong loops *l l* for catching upon the hoops *h h*.

The inventor says: I *claim*, first the inclined frame or bed *A*<sup>1</sup>, and the hinged drop *B*, in combination with the friction rollers *c c*, and the windlass *a b b*, for the purpose set forth.

Second. I claim the receiving table *A*, in combination with the clamps *E E D*, substantially as described and for the purpose set forth.

No. 26,422.—J. W. FAWKES, of Christiana, Pa.—*Improvement in Steam Ploughs*.—Patent dated December 13, 1859.—This invention consists in a peculiar arrangement of mechanism employed for elevating the plough frame, whereby the latter may be actuated so as to incline the ploughs, and the mechanism stopped automatically when the frame and plough are sufficiently elevated; also, in combination with the first named feature, of a holding pawl and brake to facilitate the adjustment of the ploughs to their work.

The inventor says: I *claim*, first, the arrangement of the clutch *r*, levers *M N*, rod *O*, lever *b*<sup>1</sup>, and button or projection *c*<sup>1</sup>, on the chain *F*, whereby the chains *F F* are wound on the pulleys *e e* of the shaft *E*, and stopped automatically at the proper time for the purposes set forth.

Second. In combination with the above, the brake *R* and pawl *d*, when applied to the machine to operate simultaneously, as and for the purpose described.

No. 26,423.—THOMAS B. FOGARTY, of Charleston, S. C.—*Improvement in Gas Meters*.—Patent dated December 13, 1859.—This invention consists, first, in the combination of an inclined wheel with a separate water reservoir and the measuring drum, the periphery of said wheel having suitable buckets arranged on it so as to dip up the water contained in said reservoir, as the wheel is operated by the drum and convey the same into the measuring chamber. It consists, second, in the method of preventing the meter chamber and the water reservoir from being overcharged, and also in the arrangement of the water inlet pipe, so that it will have no communication with the body of the meter chamber, while it has free communication with the water reservoir.

The inventor says: I *claim*, first, the combination, with the water reservoir *B* and the revolving measuring drum *H*, of an inclined feed wheel *E*, substantially as and for the purposes set forth.

Second. The arrangement of the overflow pipe *K* in combination with the water reservoir, meter chamber, and dry well *L*, and pipe *N*, in the manner substantially as set forth.

Third. The arrangement of the water inlet *S R*, substantially in the manner and for the purposes set forth.

No. 26,424.—ADDISON M. FORD and CHARLES W. WARNER, of Jericho, Vt.—*Improvement in Horizontal Water Wheels*.—Patent dated December 13, 1859.—The buckets are made in what is termed "ogee form," and are placed in the wheel as shown at points *a b*, and each bucket projects inwardly obliquely in such a manner that the ends of the buckets at the outer edge of the wheel are nearly twice as far from each other as the other ends of the buckets are in the inner part of the wheel.

*Claim*.—The construction and arrangement of the lifter *e* and band *d*, as shown in Fig. 1, and of the buckets *a* and *b*, combined in the manner and for the purposes substantially as set forth.

No. 26,425.—GEORGE FOSTER, of Brooklyn, N. Y.—*Improvement in Axles or Shafts*.—Patent dated December 13, 1859.—This invention consists in the formation of a shaft or axle by combining cast-iron with wrought-iron in a cellular form in such a manner that the cast-



iron shall be melted around the wrought iron and form the journal wheel, bearing section wheel, or pulley.

*Claim.*—A shaft or axle, cellular in its character, and composed of a series of wrought iron rods or tubes, covered and held together by a casting cast upon the same, and forming the journal wheel, bearing section wheel, and pulley.

No. 26,426.—WILLIAM P. GOOLMAN, of Dublin, Ind., assignor to Himself and SAMUEL B. MORRIS, of Wayne county, Ind.—*Improvement in Mole Ploughs.*—Patent dated December 13, 1859.—This invention consists, first, in an arrangement for adjusting the pitch of the mole in respect to that of the beam; second, in a provision for inclining the coulter at will, to compensate for the downward tendency of the mole.

The inventor says: I *claim*, first, the lever F, rigidly attached to a pivoted mole R, in the described combination with the rack F, the whole being constructed and arranged and operating substantially as and for the purposes set forth.

Second. The cam D, in the described combination with the coulter Q, and adjustable pivot mole R, operating substantially as and for the purpose set forth.

No. 26,427.—MAGNUS GROSS, of Washington, D. C.—*Improvement in Preserving Flesh and Meats.*—Patent dated December 13, 1859.—This invention consists in the application of an air tight apparatus for displacement, to which hydrostatic pressure is applied.

*Claim.*—The application of an air tight apparatus of displacement to which hydrostatic pressure is applied, for the purpose and in the manner set forth in the specification.

No. 26,428.—CHARLES HADFIELD, of Brooklyn, N. Y.—*Improvement in Sticks for Exhibition Rockets.*—Patent dated December 13, 1859.—This invention consists in furnishing the usual rocket stick with a magazine of powder, the said charge of powder being connected with the charge of the rocket, so that on, or immediately after, the burning of the rocket charge, the magazine of powder of the rocket stick shall be exploded and the stick broken into two or more pieces.

*Claim.*—The rocket stick inclosing or in connection with a magazine of powder, in the manner and for the purposes set forth

No. 26,429.—H. HALVORSON, of Cambridge, Mass.—*Improvement in Candle Moulds.*—Patent dated December 13, 1859.—This invention consists in constructing the mould of two tubes, one fitted within the other, and with a tip of elastic or yielding material, the outer tube being rigid and so much larger than the candle as to admit within it the inner one, whose interior is of the desired size of the exterior of the candle, and which is made with a longitudinal slit and to possess such elasticity that when not confined within the outer one to such a degree as to keep the edges of the slit close together, it will expand and release the candle which has been moulded in it, and the tip being fitted into the inner tube.

The inventor says: I *claim* the combination with an outer tube A, of an inner elastic slit tube B, applied and operating substantially as and for the purpose set forth.

And, in combination with the elastic tube B, I claim the tip c, of elastic or yielding material, applied and operating substantially as and for the purpose described.

No. 26,430.—IRA HANN, of Hope, N. J.—*Improved Washing Machine.*—Patent dated December 13, 1859.—The inventor says: While the board m is caused to reciprocate it may be made to exert any desired pressure upon the clothes, and by virtue of the combination of the levers and the construction of the pressure carriage such result is accomplished in a desired manner without much friction. The parts are so constructed and arranged together that the moving rubber carriage, &c., are readily thrown out of the way for the insertion or extraction of the clothes.

*Claim.*—The combination of the fixed rubber board n, with the removable rubber m, friction roll, presser carriage a b, and operating lever F B and M, the whole arranged and operating as specified for the purposes described.

No. 26,431.—JOHN S. HARBISON, of Sacramento, Cal.—*Improvement in Bee Hives.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Placing the bee comb, known as worker cells, in a horizontal or nearly horizontal position, so that the cells shall be vertical or nearly vertical instead of horizontal, by the means, or their equivalents, substantially as set forth and represented.

No. 26,432.—WILLIAM HOFFMAN, of Benicia, Cal.—*Improved Butler's Tray.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—As a new article of manufacture, a single handed butler's tray, furnished with a hinged, or pivoted handle, so as to be detached or swing out of the way, to facilitate the placing or removing of articles upon it, and to economize room and space in carrying or stowing it away, as set forth and explained.



No. 26,433.—JOHN B. HOLMES, Jr., of New York, N. Y.—*Improved Ratchet Pulleys for Blind Cords*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the metallic bar *a* projecting from the window casing, and having teeth on the back thereof, in combination with the bridle pawl *b* passing around said bar *a* and carrying the pulley for the cord, as set forth.

I also claim the porcelain roller *d* on the centre pin 4, in combination with the bridle pawl *b* and bar *a*, substantially as set forth.

No. 26,434 —ALBERT H. HOOK, of New York, N. Y.—*Improvement in Clamps for Metal Straps*.—Patent dated December 13, 1859.—This invention is constructed as follows: A hollow metal cylinder is made with two flanches, one at each end *b b*; the part between the flanches has two narrow openings from flanch to flanch opposite each other, as seen at *c*; through these openings the ends of the band *d d* are passed, and the wedged form of the nail *e* being driven between the two ends of the band, they are thereby fastened securely.

*Claim*.—The outer griper *a* and nail *e*, for fastening the ends of bale and other straps, constructed substantially as and for the purposes set forth.

No. 26,435.—DANIEL HUGHES, of Rochester, N. Y.—*Improvement in Hoop Locks*.—Patent dated December 13, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—The case or box *A*, having slots *a a* in two opposite sides, and provided with a clamp or jaw *B*, arranged substantially as and for the purpose set forth.

No. 26,436.—PETER KEFFER, of Reading, Pa.—*Improvement in Boots*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The above described mode of making the leg of the boot, the leather being folded in front and the crimp hammered in, instead of crimping in the usual way, and the ankle being completed by a single seam and one piece of leather, substantially as set forth for the purposes described.

No. 26,437.—L. G. KNIFFEN, of North Salem, N. Y.—*Improvement in Harvesters*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing, as a whole, the shoe on which the cutter and finger bars are supported and adjusted in one piece, combining the guide box *a* for the cutter bar, the recess *b* for the finger bar, the slotted bracket *m* for the caster wheel to be attached to the vertical locking portion *d* or its equivalent, the vertical pivot or gudgeon *G* for the whole to be suspended or adjusted on, horizontally, to a position parallel with the inner side of the main frame, as set forth.

No. 26,438.—GEORGE A. LATHROP, of East Saginaw, Mich.—*Improvement in Metallic Window Blinds*.—Patent dated December 13, 1859.—The object of this invention is to produce a shutter or blind that is simple, cheap, easily operated, and fireproof. It consists in combining with a metallic plate provided with slots and water sheds or slats, a slotted side, in such a manner that the light may be admitted or excluded at pleasure.

*Claim*.—The arrangement of the plate *A* with slots *a*, slats or water sheds *c*, and grooves *d*, in combination with the slotted side *B*, substantially as and for the purpose specified.

No. 26,439.—JAMES H. LEE, of Camanche, Iowa.—*Improvement in Seed Planters*.—Patent dated December 13, 1859.—This invention operates as follows: In drilling in seed, such as wheat, rye, &c., the seed box *G* is supplied with a requisite quantity of seed, and as the machine is drawn along a reciprocating movement is communicated to the slide *H* by the lever *E*, which is vibrated by the pins *b* as the axle *D* rotates, the slide distributing the seed as usual, the quantity to be planted on a given area being regulated by adjusting the plate *f*, which may be secured at any point within the scope of its movement by pin *l*.

*Claim*.—The arrangement of the bar *F*, cord *J*, rotary shaft *K*, sliding seed box *G*, bars *c*, lever *B*, and sliding axle *D*, as and for the purposes shown and described.

No. 26,440.—HORATIO LEONARD and HENRY RYDER, of New Bedford, Mass.—*Improved Apparatus for Moulding Candles*.—Patent dated December 13, 1859.—This invention consists in a peculiar construction and application of a removable receiver or trough to the top surface of the mould or series of moulds, whereby, when the moulds are filled with paraffine or the material to be moulded, the surplus left in the receiver shall form a plate or serve as shoulders to the candles. It also consists in a peculiar mode of packing or closing the orifices at the lower parts or tips of the moulds, in order to prevent leakage therefrom.

The inventors say: We *claim* making the receiver or trough *E* separate from the body of the mould or series of moulds, and so constructed and arranged as to operate therewith, substantially in the manner and for the purpose set forth.

We also claim the described improved mode of packing the lower orifice of the mould,



viz: by means of a spring *a*, furnished with rubber or other proper elastic material, the same being arranged and made to operate with respect to the said orifice, as set forth.

No. 26,441.—BENJAMIN A. MASON, of Newport, R. I.—*Improved Machine for Cutting Railroad Bars*.—Patent dated December 13, 1859.—The object of this invention is to cut the ends of T-rails for railroads, so as to form the kind of lap joint represented in the engraving.

*Claim*.—For giving to rails the form, substantially such as herein described, the combination of the series of cutters, arranged in relation to each other, substantially as described.

No. 26,442.—O. C. McCUNE, of Darby Creek, Ohio.—*Improvement in Corn Planters*.—Patent dated December 13, 1859.—A rod L connects with the curved bar G and passes vertically through a slot in the plough beam and connects with a bent lever M. The rod L is furnished with rack teeth, which, in connection with a pawl N, prevents the coverer G<sup>1</sup> from rising until it has formed the hill over the seed; then the pawl is disengaged from the rack by projections *a a* on the wheel E, and the coverer raised at the same time by the projections *a<sup>1</sup> a<sup>1</sup>* on the ring F coming in contact with a small cam *c*, which draws forward the arm *d* and one arm of the bent lever M, and raises the rod L, and the operation of the corn is effected.

*Claim*.—The arrangement of the peculiarly formed rack bar rod L, bent lever M, pawl N, ring F, cam *c*, and arm *d*, as and for the purpose shown and described.

No. 26,443.—CHAUNCEY PARMELEE, of Wilmington, Vt.—*Improved Vegetable Slicer*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* supporting the front end of the adjustable plane of bottom K on the fixed bottom board of the hopper, so that it shall be stationary relatively to the gate, and arranging at the end of the plane K the mechanism for raising it.

I also claim the application of the board or partition O to the hopper and the adjustable platform K, substantially in the manner and for the purpose as specified.

No. 26,444.—WILLIAM H. PECKHAM, of Hoboken, N. J.—*Improved Spectacle Frame*.—Patent dated December 13, 1859.—This invention consists in providing a clasp socket on the end of the temple, receiving divided spring catches at the ends of the grooved wire surrounding the glass, the parts being so constructed that the socket clasp can be slid off and the glasses changed.

*Claim*.—Connecting the end pieces *c c* of spectacle frames by the clasp sockets *d d*, in the manner and for the purposes substantially as specified.

No. 26,445.—CHARLES A. SEELY, of New York, N. Y.—*Improved Method of Protecting Frictional Electrical Machines from Moisture*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* inclosing an electrical machine in a covering or box, which is nearly or quite air tight; and, by means of an absorbent moisture, preserving the air about the machine nearly uniformly dry.

I also claim the insulating covering or box, substantially as described and for the purposes specified.

No. 26,446.—ANDREW J. SHEPHARD, of Buffalo, N. Y.—*Improvement in Nut Machines*.—Patent dated December 13, 1859.—The bar is fed to the punches, the motions of the various parts being so arranged and regulated that the cam N will first move the part M of the nut box until it comes nearly in contact with the part L, when the angular punch D<sup>1</sup> and central punch *f*, by means of cams H<sup>1</sup> and H<sup>2</sup>, commence their upward movement.

The inventor says: I *claim*, first, perforating the punch *e* as described, for the purpose set forth.

Second. The cutters *t* and *t<sup>1</sup>*, when constructed and arranged relatively to the dies L and M, as described.

Third. The combination of the dies L and M with the water chambers *l* and *m*, when arranged and operated substantially as described for the purpose set forth.

Fourth. The combination and arrangement of the punch D (Fig. 1) with the water chamber 7, and openings 8 9, substantially as and for the purpose described.

No. 26,447.—JOEL Y. SCHELLY, of Hereford, Pa.—*Improvement in Attaching Spokes of Carriage Wheels*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the ferrule D, when furnished with rings *a a*, and applied in the manner and for the purpose set forth.

Second. The screw plates *b* welded upon the inside face of the tire, in the manner and for the purposes set forth.

Third. I claim the combination of (with suitable slots made in the inside face of the tire)



the bolt *e*, key bolt *g*, and plate *h*, all arranged in the manner specified for securing the tire rigidly in its place upon the wheel as stated.

No. 26,448.—G. B. SINGLETARY, of Greenville, N. C.—*Improvement in Manure Drills*.—Patent dated December 13, 1859.—This invention consists in the employment of a bilge shaped rotating hopper applied to a plough, whereby the desired end is attained.

*Claim*.—The arrangement of the plough B, guide board E, lifting bar F, guiding bar G, and rotating hopper or receptacle D, as and for the purposes shown and described.

No. 26,449.—STEPHEN STAFFORD, of Carrollton, Mo.—*Improvement in Hemp Breaking Machines*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Constructing the brake with two disks and heads, and uniting said disks by means of rounds or slats armed with obliquely set teeth, and arranged so that spaces shall exist between them, and they can be adjusted to give the teeth any required obliquity, substantially as and for the purposes set forth.

No. 26,450.—JOHN F. STIRLING, of San Francisco, Cal.—*Improvement in Watch Keys*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—As a new article of manufacture, a watch or door key with a hollow stem or pod, open at both its ends, so that anything getting into it that would obstruct its action will drop or be punched out through the open stem, as set forth.

No. 26,451.—EUCLID C. THAYER, of Providence, R. I.—*Improvement in Belting for Pulleys*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The manufacture of round belting by preparing the leather or other material in the mode described, and rolling and twisting the same in a spiral form with any required number of conical layers in the cylinder, either with or without a cylindrical space in the centre of the belt, and cementing the layers in the process of manufacture, substantially as described.

No. 26,452.—T. S. UNDERHILL, of St. Johnsville, N. Y.—*Improvement in Bee Hives*.—Patent dated December 13, 1859.—The object of this invention is to render the frames more accessible than hitherto, and also capable of being manipulated or adjusted with much greater facility, so as to permit the combs to be thoroughly examined and removed, if necessary.

It has also for its object the varying of the capacity of the hive to suit the size of the colony.

The inventor says: I *claim*, first, the arrangement of the movable frame E, in combination with the sliding hive A, and adjustable side *e*, substantially as and for the purpose set forth.

Second. The arrangement of the adjustable boards G, H, and D, placed on a frame F, when said parts are constructed as described, and used in connection with the sliding hive A, for the purpose specified.

No. 26,453.—ANTONY WELSCH, of Chicago, Ill.—*Improvement in Hand Cars for Railroads*.—Patent dated December 13, 1859.—A A is a platform working in bearings B B attached to the platform, and about midway between its centre and end is a crank C, which connects with the brakes at D; on the axle of this crank is fastened the wheel E, which works in the pinion F on the axle of the car, and on the other side of the centre of the platform at G a rod is fastened connecting with the brakes at H.

*Claim*.—The movable platform, and the attachment thereto of the crank and wheel, in the manner and for the purposes set forth.

No. 26,454.—WILLIAM WHARTON, Jr., of Philadelphia, Pa.—*Improvement in Dispensing with Switches on Railroads*.—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: The employment of a car wheel provided with one or more treads in addition to the ordinary tread, upon either the outer or inner side of said ordinary tread, and of the same or different diameter as said ordinary tread, in combination with additional raised rail or rails with a gradual rise, either curved or straight, so placed that such of the said extra treads as desired shall be caused to run upon them, thereby raising the car entirely clear of the ordinary track, and causing it to follow the direction of said raised rail or rails, whether curved or straight, for the purpose of avoiding the necessity for railroad switches, arranged and operated substantially as set forth.

No. 26,455.—WILLIAM H. WORTH and LEONARD FINLAY, of Canton, Mo.—*Improvement in Seed Planters*.—Patent dated December 13, 1859.—The frame E extends out in front and on either side of the wheels and carries two seed hoppers F F, through which passes later-



ally a seed slide G to be operated by a hand lever H, so as to deposit the seed in the hollow shoes I I.

*Claim.*—The arrangement of the longitudinally moving slotted plate N, vertical gate L, sliding bar G, operating lever H, shoes I, and the rotary coulters K, as and for the purpose shown and described.

No. 26,456.—HENRY BELL, of Clinton, Ill., assignor to FENTON H. BOGAR and JOSEPH W. TIDBALL, of said Clinton.—*Improvement in Seed Planters.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement and combination of the rock shaft J, cog segments I, pinion K, crank shaft Q R, ratchet bars H H, springs S S, feed slide G, and discharge regulating valve O, when the same are arranged and combined in the manner set forth.

Second. In combination with the above, the arrangement of the treadle V and hand lever U together and on the same fulcrum, so that the feed slide can be worked either by the hand or foot, substantially as and for the purposes set forth.

Third. The combination with the foregoing peculiar arrangement of parts for dropping the seed, the arrangement of *a b c d* for regulating the depth of the furrow openers, substantially as and for the purpose set forth.

No. 26,457.—WILLIAM BELLOWS, of Cincinnati, Ohio, assignor to CHARLES W. SMITH, of said Cincinnati.—*Improvement in Revivifying Bone Black.*—Patent dated December 13, 1859.—This invention consists in new mechanical details of construction in a furnace for reburning bone black.

The inventor says: I *claim*, first, an improved apparatus for revivifying bone black, arranged and constructed as described.

Second. The flaring bottoms of the retorts *a a*, when arranged and combined with the described apparatus, for the purpose specified.

Third. The flanches *c c*, in combination with the retorts *a a*, for the purpose of allowing for expansion and contraction and replacing of retorts, as well as protecting internal heating surface, substantially as described.

Fourth. The chamber between flanches *c c*, and the lower plates *d d*, when for the purpose of preventing undue radiation of heat, and for the purpose of passing off the offensive gases arising from retorts when said chamber is combined with the flanches *c c*, and cover plates *d d*, for the purpose described.

No. 26,458.—GEORGE H. BRONSON, of Cincinnati, Ohio, assignor to Himself and DAVID MILLARD, of said Cincinnati.—*Improvement in Hydro-carbon Vapor Apparatus.*—Patent dated December 13, 1859.—This invention relates to the arrangement of the zigzag passages through a carbonizing or naphthalizing apparatus.

*Claim.*—The arrangement and combination of the zigzag folded surfaces extending over the projecting edges F, with the projecting edges E C C c c, &c., in each of the several cells or chambers of the impregnating apparatus, substantially in the manner and for the purpose set forth.

No. 26,459.—MORTIMER S. HARSHA, of Sycamore, Ill., assignor to Himself, RUFUS S. SANBORN, and H. B. JONES, of said Sycamore.—*Improved Churn.*—Patent dated December 13, 1859.—The nature of this improvement will be understood by an examination of the claim and engravings.

*Claim.*—An entirely stationary brake dash, in combination with a cream receiver, made to rotate on a vertical or upright shaft, as described and for the purposes set forth.

No. 26,460.—THOMAS C. HENDRY, of Conyers, Ga., assignor to Himself, J. DILLWORTH, and F. E. ASKIN, of said Conyers.—*Improvement in Gravel Cars.*—Patent dated December 13, 1859.—The object of this invention is to obtain a gravel car which may have its load readily discharged simultaneously from both sides.

*Claim.*—The combination of the double inclined bottom D D and swinging doors G G, the latter being operated by the rods H, bar *i*, and lever J, substantially as and for the purpose set forth.

No. 26,461.—JAMES W. LAWRENCE, of New York, N. Y., assignor to Himself, HENRY BREWSTER, and JOHN W. BRITTON, of said New York.—*Improvement in Connecting Elliptic Springs to Vehicles.*—Patent dated December 13, 1859.—This improvement lies in the manner of affixing the elliptic spring, generally preferred, upon the back axletree, and of securing the parts in place.

*Claim.*—The manner of combining and securing the back axle and the elliptic spring, specifically as described.

No. 26,462.—CHARLES MILLER, of New York, N. Y., assignor to GEORGE RICARDO, of



said New York.—*Improvement in Sewing Machines.*—Patent dated December 13, 1859.—This invention consists in effecting the releasing movement of the releasing plate by means of a wedge like projection, or its equivalent, formed upon or carried by a shuttle driver.

The inventor says: I *claim*, first, the combination with the shuttle driver K, of the releasing plate and lifter g, as and for the purpose shown and described.

Second. The employment of a shuttle made of two springs *i j*, in the peculiar manner shown and described, in combination with the bobbin *l*, as set forth.

No. 26,463.—E. R. MORRISON, of Brooklyn, N. Y., assignor to S. C. HILLS, of said Brooklyn.—*Improvement in Shingle Machines.*—Patent dated December 13, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the arrangement of the knife H and projection *v*, in connection with the reciprocating bed, substantially as shown, whereby the bolt is supported as the bed passes underneath it during the cutting or riving operation.

Second. The employment or use of the planers or knives C C, operated by the plates D D, bar E, and ledge or projection F on the bed G, substantially as and for the purposes described.

No. 26,464.—JOHN I. ARMPFIELD, of Jamestown, N. C.—*Improved Apple Parer, Corer, and Slicer.*—Patent dated December 20, 1859.—This invention consists in attaching the cutter that cuts or quarters the peeled apples to a lever connected to another lever, one end of which is fitted on the arbor of the fork, the parts being so arranged that by actuating the lever to which the cutter is attached for the purpose of cutting the apple, the other lever, fitted on the fork arbor, will move toward the cutter and bear against the inner end of the apple, and force the same against the advancing cutter.

*Claim.*—The combination of the levers B C, connected by the link *b*, one lever B being provided with the cutter F, and the other lever C having one end fitted on the arbor D, substantially as and for the purpose set forth.

No. 26,465.—JOHN AUGSPURGER, of Trenton, N. J.—*Improvement in Cattle Pumps.*—Patent dated December 20, 1859.—This invention consists of a device for preventing concussion and violence at the termination of the upward motion of the bucket, and an arrangement by which the quantity of water raised from the well as it comes from the well is at all times proportioned to the weight of the animals, so that the speed of the bucket in being raised from the well may be the same under the operation of different weights of animals.

The inventor says: I *claim*, first, the combination and arrangement of the platform B, levers N N, springs *f*, weight P, rods O, and brake wheels F, operating substantially as and for the purpose set forth.

Second. The arrangement of the float *l*, rod *i*, and valve *k*, in the described combination with and relation to the bucket K and hinged platform B, operating in the manner and for the purpose explained.

No. 26,466.—JOHN H. BAILEY, of Sand Ford, Ind.—*Improvement in Locomotive Traction Vehicles.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the means employed for rotating or communicating power to the wheels D D, to wit: the fixed pinion *p* on the shaft H, loose or sliding pinions *q q*, wheels *s*, pinions *v*, and toothed rims *w w*, substantially as described.

Second. The combination of the wheels J D D, when applied to a traction engine and arranged for joint operation, substantially as and for the purpose set forth.

No. 26,467.—S. W. BAKER, of Providence, R. I.—*Improvement in Blankets for Printing.*—Patent dated December 20, 1859.—This invention consists in forming a new kind of India rubber or other elastic blanket, having either its edges or margins, or the whole of its surface, sufficiently roughened to prevent the coloring matter received by it from the printing rollers from running or flowing back upon the edges of the fabric printed.

*Claim.*—A rubber of gutta percha, or other elastic printing band or blanket, having either roughened selvages or margins, or the whole of its surface roughened, substantially as set forth.

No. 26,468.—A. J. BELL, of Greensburg, Ky.—*Improved Wrench.*—Patent dated December 20, 1859.—This invention consists in attaching a jointed lever to the movable or sliding jaw of the wrench, and having a wedge connected to said lever and a tooth, the stem of the wrench being serrated or toothed.

*Claim.*—The combination of the jointed lever F, wedge E, and tooth *e*, with the sliding jaw D and bar A, as and for the purpose shown and described.

No. 26,469.—ALBERT BETTELEY, of Boston, Mass.—*Improvement in Hoisting Machines.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.



The inventor says: I *claim*, first, bringing the car to a stop whenever (while in motion) its door may be opened by causing the shipper rope to be pinched or held, substantially as described.

Second. The arrangement, substantially as specified, for causing the car to be stopped at proper times or places; said arrangement consisting of cam *m*, spring *i*, levers K G, operating together and upon the shipper cord.

No. 26,470.—LOUIS BRANDT, of Indianola, Texas.—*Improvement in the Arrangement for Supplying Air to the Furnaces of Steam Boilers from the Wheel-Houses of Steamers.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Supplying air under pressure to the furnace or furnaces of steamers by means of the paddle-wheel and the peculiar curved pipe, with water escape passage leading down from the casing or housing of the same to the fire, or under the grates of the furnaces, substantially as and for the purposes set forth.

No. 26,471.—B. BRIDENDOLPH, of Clear Spring, Md.—*Improvement in Corn Shellers.*—Patent dated December 20, 1859.—The shaft B is rotated in the direction of the arrow; the ears of corn are fed point downward into the spout or trunk G; the wheel C rotates the ears in the spout or trunk G, and also rotates the shaft E; the lower part *d* of the screw F, assisted by the screw corrugations *e* in the lower part of the spout or trunk, feeds the ears downward, while the other part *c* of the screw, in consequence of its quicker thread, shells the corn from the cob.

*Claim.*—The differential feeding and shelling screw F, constructed as described, in combination with the spout or trunk G and surface wheel C, when these several parts are arranged and operate together, in the manner described, for the purpose specified.

No. 26,472.—ROBERT D. BROWN, of Prattsburg, N. Y.—*Improvement in Wagon Brakes.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination and arrangement of the brake mechanism, lever E, and connecting rod F, when the latter is attached directly to the front axle so as to be operated by the backward movement of the front truck; the said movement being allowed by the slot H, in the reach or coupling bar, and the roller G, in the bolster, substantially as set forth.

No. 26,473.—HENRY F. BROWN, of Chagrin Falls, Ohio.—*Improvement in Skirt Supporters.*—Patent dated December 20, 1859.—This skirt supporter consists of two parts, the body A and expanded portion A<sup>1</sup>.

*Claim.*—An improvement in the supporter, by connecting the hoops or bands by a clasp or inflexible joint, substantially as described.

No. 26,474.—JOSEPH B. BUCKLAND, of Chicopee Falls, Mass.—*Improvement in Coal Sifters.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a dumping or tipping sieve provided with a movable tail piece or gate, so arranged that the tipping or slanting of the sieve causes the opening of the end or side of the same for the free passage of the coal or other substance sifted.

Second. A combination of the scrolls C C and cams D D, with the sieve A, when arranged and operating substantially in the manner and for the purpose as described.

No. 26,475.—BETHEL BURTON, of Brooklyn, N. Y.—*Improvement in Breech Loading Fire-Arms.*—Patent dated December 20, 1859.—*f* is a sliding breech supporter, formed hollow and receiving the rear end of the breech pin *d*, which is formed as a pin 7 setting within the breech supporter, and the two are connected by a cross pin or screw entering a groove 8 around said pin, so that the breech supporter is free to turn without revolving the breech itself, but both are tightly connected together and a space is left at 9 to form a chamber for oil or grease.

*Claim.*—The combination and relative arrangement of the breech supporter *f*, with the sliding breech *d*, sectional screw 10, and guide slot 11, and pin 12, substantially as set forth.

No. 26,476.—R. W. CARRIER, of Sherburne, N. Y.—*Improvement in Hold Backs.*—Patent dated December 20, 1859.—This invention consists in the combination and arrangement of the open hold back loop or eye pivoted lever bar, which has an extension or heel on its lower end, and the flat spring.

*Claim.*—The combination and arrangement of the open hold back loop or eye pivoted lever stop bar, which has an extension or heel on its lower end, and the flat spring, substantially as and for the purposes set forth.

No. 26,477.—S. W. CHAMBERLAIN, of Three Oaks, Mich.—*Improved Gate.*—Patent dated December 20, 1859.—This invention consists in connecting together, by means of suitable



levers, two gates in such a manner that they swing open in opposite directions, and that neither will move independent of the other.

*Claim.*—The arrangement and combination of the gates A A<sup>1</sup>, posts B B<sup>1</sup>, arms D, links E, and levers F, in connection with the cords *f h h<sup>1</sup> h<sup>2</sup> and h<sup>3</sup>*, constructed and operated substantially as set forth.

No. 26,478.—MATTHEW CHAPMAN, of Greenfield, Mass.—*Improvement in Attaching Handles to Cutlery.*—Patent dated December 20, 1859.—This invention will be understood by referring to the claim and engravings.

*Claim.*—Securing handles to cutlery and other tools or implements, by having a screw thread *a* formed on the tangs B, and provided with plain longitudinal surfaces *b*, in connection with the cylinder or nut C, fitted in the handle and hammered or compressed to fit the screw *a* and its plain surfaces *b*, substantially as and for the purpose set forth.

No. 26,479.—JOHN B. CORNELL, of New York, N. Y.—*Improvement in the Construction of Vault Lights.*—Patent dated December 20, 1859.—This invention consists in surrounding each one of any desired number of glasses with a thin band of iron, or some other suitable hard metal, then placing the glasses thus prepared in a suitable shape, and pouring a sufficient quantity of fused iron or some other suitable metal into said mould to embrace the peripheries of said glasses and fill the mould.

*Claim.*—Producing an improved illuminated plate by the process of combining the illuminating and the metallic portions of said plate with each other, substantially in the manner set forth.

No. 26,480.—C. W. CORR, of Carlinville, Ill.—*Improvement in Steam Valves.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, providing the extremity of the driving shaft F within the steam chest, with a slot to receive the head *k* of the valve stem, and permit the self adjustment of said head within the slot, as set forth.

Second. The arrangement of the screw threads upon the valve stem, substantially as shown, so that the valve will adjust itself if the friction becomes too great, as set forth.

No. 26,481.—LOUIS MICHEL FRANÇOIS DOYERE, of Paris, France.—*Improvement in Apparatus for Preserving Grain.*—Patent dated December 20, 1859.—By this invention vaults, cellars, and other similar constructions, as well as rooms, may be rendered suitable for preserving corn by lining them internally with the bituminous and metallic cases Y Z, applied one over the other, which form with the material composing the vault or cellar, a strong and impervious granary.

*Claim.*—The method of constructing or arranging air tight chambers or granaries for the preservation of corn or other grain, as described and shown in figures of the engravings.

No. 26,482.—NATHANIEL DRAKE, of Newton, N. J.—*Improvement in Stone Loading Wagons.*—Patent dated December 20, 1859.—This invention consists in a peculiar arrangement of windlasses, placed on a frame mounted on wheels and provided with pawls devised in a novel way.

*Claim.*—The employment, or use, of the shaft D, with one or more drums G placed loosely on it, the shafts and drums being provided with ratchets, in combination with the pawls I and the adjustable bar K, provided with pulleys L, the whole being applied to a mounted frame, and arranged substantially as and for the purpose set forth.

No. 26,483.—JOSEPH L. DUTTON, Sr., of Philadelphia, Pa.—*Improvement in Anti-Friction Boxes.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Interposing between a revolving stationary surface any convenient number of beveled anti-friction rollers, so formed that the portion of each roller on which the revolving surface bears shall be larger in diameter than the portions, or portion, of the roller which bear on the stationary plate, as set forth.

No. 26,484.—THADDEUS FAIRBANKS, of St. Johnsbury, Vt.—*Improvement in Platform Scales.*—Patent dated December 20, 1859.—This invention consists principally in a peculiar application and arrangement of a yoke, stirrup, pivots, and bearings, whereby the lapped ends of the two multiplying levers A B are supported and connected with the depending rod of the steel yard.

The inventor says: I *claim* the arrangement and application of the yoke, stirrup, their concave steps or bearings, and the pivots of the two multiplying and transmitting levers, substantially as specified, the whole being for the purpose and to operate as described.

I also claim, combining with the rod I and the yoke applied thereto, as described, the cap or bonnet *a<sup>2</sup>*, the same being for the purpose as specified.



No. 26,485.—THADDEUS FAIRBANKS, of St. Johnsbury, Vt.—*Improvement in Platform Scales.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* supporting the fulcrum of a transmitting lever D by the platform or an extension therefrom, essentially as specified.

I also claim the combination of the rocker block with the stirrup link and the bearing pins, or knife edges of the connected levers C D, substantially as described.

I also claim, constructing the platform frame with the passages  $a^3 a^3$  through each of its end timbers, and for the reception of the inferior arms of the multiplying levers, as described.

And I also claim, providing such platform with loop passages, leading downward out of the lever passages made in the end timbers, as and for the purpose described.

No. 26,486.—JOHN FIRTH and JOHN INGHAM, of Phillipsburg, N. J.—*Improvement in Pipe Moulding.*—Patent dated December 20, 1859.—The object of this invention is to form the moulds without joints, for casting with belts, or bosses, and blackwash the same in a perfect manner.

The inventors say: We *claim*, first, the employment or use of the flexible, or elastic ring E, in connection with the body pattern D, flasks B C, and bottom plate A or its equivalent, for the purpose specified.

Second. Blackwashing the moulds by means of a brush F, or an equivalent device, supplied with the blackwash and passed through the moulds, substantially as and for the purpose set forth.

No. 26,487.—WILLIAM FOSTER and ROBERT FOSTER, of New York, N. Y.—*Improvement in Screw Taps.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the oblique taps C and slotted collar B, with the tapering or conical stock A, substantially as shown and described, so that by turning the collar the cutting threads of the taps will be released from the nut, and thus allow the tool to be drawn, all as specified.

No. 26,488.—WILLIAM FRAZIER, of Hartford, Conn.—*Improvement in Belt Fastenings.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The arrangement of duplicate plates A B, of raw hide, or leather, or elastic material, and in providing one, or both, of the plates A B with metallic hooks D, which hooks are made to pass through the perforations in the belt F and in the plate A or B, to connect and hold the two ends of the belt F together, in contradistinction with the use of metallic plates, screws, lace leather, &c., substantially in the manner and for the purpose described.

No. 26,489.—DENNIS C. GATELY, of Newtown, Conn.—*Improvement in the Manufacture of Caoutchouc Belting.*—Patent dated December 20, 1859.—The claim explains the nature of this invention.

*Claim.*—The method described of manufacturing belts or bands of India rubber or gutta percha, the same consisting in placing them in contact with sheets, or strips of paper or cloth, having a smooth enamelled, or polished surface, substantially as set forth, and then heating them as described.

No. 26,490.—W. G. GOODALE and R. L. T. MARSH, of Centralia, Ill.—*Improvement in Steam Excavators.*—Patent dated December 20, 1859.—The claim and engraving explain the nature of this invention.

The inventor says: I *claim*, first, the combination, with a locomotive steam engine, of an earth elevator J, or its equivalents, so that the machine may be moved by its own power, under the guidance of an attendant, to the spot to be excavated, then made to load itself and transport the load to the desired place for discharge, in the manner set forth.

Second. The combination, with an excavating machine made as set forth, of a railroad track O, as shown, with or without the turn tables, as set forth.

No. 26,491.—D. B. HALE, of New York, N. Y.—*Improvement in Skirt Supporters.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The waist A in combination with the extension B, expanded by the insertion of hoops  $b b^1 b^2$ , having their ends connected by tying them and forming entire circles, substantially in the manner and for the purposes set forth.

No. 26,492.—HAYWARD A. HARVEY, of New York, N. Y.—*Improvement in Chairs for Railroads.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* forming the chair with lips extending over the web, or base, of the rails, and with a groove or equivalent reception for a wedge to be driven across the



longitudinal plane of the rails, and passing under the base of the two rails to force and hold them up against the lips of the chair, and to form a base or rest for the ends of the two sections of rails to rest on, substantially as and for the purposes specified.

No. 26,493.—ALEXANDER HAY, of Philadelphia, Pa.—*Improvement in Shoes and Gaiters*.—Patent dated December 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim*.—Inserting in the shoe or gaiter, at the points where it is to be fastened, a piece or pieces of elastic rubber cloth for the purpose of fastening the shoe or gaiter, with hooks and eyes, or buttons, or buckles, substantially as described, and thereby dispensing with shoe strings.

No. 26,494.—GEORGE V. HAZARD, of Torrey, N. Y.—*Improved Door Fastener*.—Patent dated December 20, 1859.—To apply this fastener to a door, draw the pivot to the points of A, place the hook or teeth of B against the rabbet of the door and the bar across it, the part A being held in a direct line with B, or nearly so, then shut the door upon the bar, driving the hook or teeth into the jamb, turn down A upon the door or casing and crowd it along upon the pivot, thereby forming a catch resting close against the door and casing and held by the bar B.

*Claim*.—The part A, constructed and arranged as and for the purposes set forth.

No. 26,495.—SIMSON S. HENDERSON, of Oxford, Ohio.—*Improved Rat Trap*.—Patent dated December 20, 1859.—The inventor says: In the operation of this trap I put, in the first place, bait on bait wire *d*, the triggers being self setting. I now take hold of the crank and turn until the springs are almost brought down to the spools H. If now a rat pull on the bait attached to wire *d*, detent *b* will be discharged from dog *a*, which being freed permits striker G to fly round rapidly and strike the rat with force, instantly killing it and throwing it out of the way.

*Claim*.—The combination of springs D with cone spools H, catch *a*, detent *b*, and bait wire *d*, forming the trigger and striker G, the whole operating substantially in the manner and for the purpose set forth.

No. 26,496.—D. K. HICKOK, of Morrisville, Vt.—*Improved Clothes Dryer*.—Patent dated December 20, 1859.—This invention consists in having the shaft of the dryer hollow at the head for the admission of a headed pin which passes through the upper hub to confine it on the shaft.

*Claim*.—The internally grooved hub H and spring catch *c*, in combination with hollow headed shaft S, headed pin P, and securing cord *d*, substantially as and for the purpose set forth, when arranged with hub H<sup>1</sup>, braces B, arms A, and cord *c*<sup>1</sup>.

No. 26,497.—LEVI L. HILL, of Greenport, N. Y.—*Improvement in Hydro-Carbon Vapor Apparatus*.—Patent dated December 20, 1859.—The pressure of air is regulated by the weight N and by the weight on the top F of the air receiver, which must be properly loaded to balance the weight N. By the combination of the two alternately operating bellows with an air receiver a uniform supply of air is obtained.

*Claim*.—The combination, with a vaporizing vessel, of the bellows, air receiver and education pipe, as shown, or in an equivalent manner, for the purpose set forth.

No. 26,498.—EDWIN HOSMER, of Bedford, Mass.—*Improvement in Stump Extractors*.—Patent dated December 20, 1859.—This invention consists of an improved lever and hook stump extractor, as constructed with a combination of a holding tongue and supporter, and with such united by a universal joint in manner and so as to operate, or enable the parts to operate.

*Claim*.—The improved lever and hook stump extractor, as constructed with the combination of the holding tongue H and its supporter K, and with each united by a universal joint, in manner and so as to enable the parts to operate substantially as specified.

No. 26,499.—THOMAS W. HOUCHIN, of Worcester, Mass.—*Improved Machine for Cutting Paper*.—Patent dated December 20, 1859.—A is the frame of the machine, B is the base to which the frame A is attached by means of screws *j* passing through the feet *k* of the frame. The paper to be cut is placed upon the top of the frame, which is covered to form a table, as shown at *d*. The paper is held down firmly on the table while cut, by means of a platen or pressing plate F.

*Claim*.—The combination and arrangement of the knife H, slides I I, and connecting bar L, with coupling arms J J, eccentrics *f f*, and shaft K, substantially as and for the purposes set forth.

No. 26,500.—ENOCH JACOBS, of Cincinnati, Ohio.—*Improvement in Iron Plate Jails*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Improved iron walls for jails and prison houses, consisting of the following parts,



arranged and united as set forth, to wit: The entire wall plates A, having their edges closely abutting the joint plates *e*, united to and uniting the plates A by rivets *i*, which have their riveted ends inwards and countersunk to the depth of the thickness of the plates A, all in the manner and for the purposes set forth.

No. 26,501.—WILLIAM A. KENRICK and GEORGE H. WHITCHER, of Boston, Mass.—*Improvement in Graving Docks*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventors say: We claim the floating dock A and the stationary receiving basin or tank B in combination, and as furnished not only with one or more connection pipes and gates for discharge of water from the dock into the tank, or *vice versa*, but with one or more passages and gates arranged in the tank so as either to discharge water therefrom into the sea, or admit it to pass from the sea into the tank, all substantially in the manner and for the purpose as specified.

And we also claim the elevating slide *d* in combination with a connection pipe of the dock and a deep opening *e* made in the tank, the said side being arranged therewith and connected with the dock, substantially as specified.

No. 26,502.—HENRY KIPPLE and JACOB D. BULLOCK, of Philadelphia, Pa.—*Improvement in Car Trucks*.—Patent dated December 20, 1859.—This invention consists of a bolster and platform with intervening springs of any suitable construction, in combination with combined links having sockets below adapted to pins on the under side of the platform, and having similar sockets above adapted to pins on the permanent beams of the track, the whole being arranged on the beams so that the bolster may have a lateral play limited by the links, thus imparting to the car an easy lateral movement as it passes over the curves and uneven portions of the track.

*Claim*.—The bolster D and platform G with the intervening springs I, of any suitable construction, in combination with the inclined links H H, their sockets *h* and *i*, and the pins *a*, the whole being arranged on the truck, substantially as set forth and for the purpose specified.

No. 26,503.—JOHN G. KUNZE, of New York, N. Y.—*Improvement in Piano Fortes*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I claim, first, supporting the bridge F on columns or distance pieces *n* to admit of any number of braces for the hitch plate D between the strings and the top of the sounding board, and likewise to admit of a greater vibration of the sounding board, in the manner and for the purpose substantially as described.

Second. I claim the arrangement of additional braces G to the hitch plate D, situated between the strings and the top of the sounding board, and connecting said braces with the braces B on the wooden truss work, situated between the frame A, in the manner and for the purpose set forth.

Third. I claim the application of the bottom sounding board P when in connection with a lower metallic frame or hitch plate L covered with strings, in the manner and for the purposes substantially as described.

Fourth. I claim the elastic spring brace J, to connect the two sounding boards together, for the purpose substantially as described.

Fifth. I claim the arrangement of the strings in two rows, and the use of a curved hammer line in piano fortes where the action strikes the strings from above downwards, as set forth.

No. 26,504.—RICHARD S. LAWRENCE, of Hartford, Conn.—*Improvement in Breech Loading Fire-Arms*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of these improvements.

The inventor says: I claim, first, the combination of the detachable plate B between the barrel and the sliding breech, with the expanding ring *c c*, substantially as and for the purpose set forth.

Second. In combination with the sliding breech plate I claim the hollow nipple *f*, situated in the centre of the gas chamber and projecting forward nearly or quite to the face of the breech, substantially as and for the purpose set forth.

No. 26,505.—JAMES LITTLE, of Evansville, Ind.—*Improvement in Stave Machines*.—Patent dated December 20, 1859.—The inventor says: The nature of my invention relates to certain improvements in stave jointing machines, by means of which, with the use of saws, I am enabled to joint staves, of any length or curve required, upon both sides at the same time.

*Claim*.—The adjustable bed *n* in combination with the rod *r* and lever *r*<sup>1</sup>, all being constructed and arranged to operate, substantially as and for the purposes set forth.

No. 26,506.—JAMES A. LOWE, of New York, N. Y.—*Improvement in Water Traps*.—Patent dated December 20, 1859.—These traps are cast in a metallic mould with a metallic core,



constructed and operating as shown in the specifications of a patent granted to James A. Lowe, bearing date September 27, 1859.

*Claim.*—The water trap shown, when cast without a seam, in lead or composition, as a new article of manufacture.

No. 26,507.—JAMES J. MAPES, of Newark, N. J.—*Improvement in Fertilizers.*—Patent dated December 20, 1859.—The claim explains the nature of this invention.

*Claim.*—The production of a fertilizer for soils by the combination of dried blood with the compound specified as the inventor's improved phosphate of lime, or any equivalent therefor substantially the same.

No. 26,508.—M. R. MARGERUM and T. P. MARSHALL, of Trenton, N. J.—*Improved Clasp for Hitching Straps.*—Patent dated December 20, 1859.—This invention consists in arranging one part of the buckle or clasp in such a manner that it slides freely on the strap when required, having a key hole perforated through the upper side thereof. The other part of the buckle, which is firmly secured to the end of the strap, is provided with a key to fit into the aforesaid hole in the sliding part of the buckle.

*Claim.*—The arrangement of the hole H and key K, in combination with the sliding part A B, for fastening hitching straps, substantially as described and for the purposes set forth.

No. 26,509.—CHARLES MILLER, of Utica, N. Y.—*Improvement in Wood Screws.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The construction of wood screws, having a shank or that portion of the wire lying between the thread and the head of the screw reduced in its diameter, so that, without any enlargement of the orifice beyond that made by the stem, the screw may be driven home without increase of friction at the shank, and without injury to the screw or to the hold thereof upon the fibres of the wood, as described.

No. 26,510.—GEORGE MILLER and CALEB M. ANDREWS, of Providence, R. I.—*Improvement in Leather Washers.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—A washer constructed of a leather strip, wound in coil form, and with or without the interposition of other substances between its convolutions, substantially as set forth.

No. 26,511.—G. W. MITCHELL, of Jackson, Tenn.—*Improvement in Shuttles for Sewing Machines.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The shuttle formed with an open cavity through it in a transverse direction to its movement, with a bobbin to fit the cavity, the heads of the bobbin forming a part of the sides of the shuttle, and being kept in position by the sides of the shuttle race or carrier, substantially as described and set forth.

No. 26,512.—AMOS B. MOREY, of St. Louis, Mo.—*Improvement in Platform Scales.*—Patent dated December 20, 1859.—This invention consists in a new way of constructing and bracing the lever of a platform scale.

*Claim.*—The specific arrangement of the braces B B C C d e and f with the lever A and the head H, as shown and described.

No. 26,513.—JOHN NEWELL, of Lowell, Mass.—*Improved Nail Plate Feeder.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, in combination with a magazine for containing a pile of plates, an automatic driver that takes the under plate of the pile and feeds it towards the cutters in regular succession, substantially as described.

I also claim, in combination with the automatic driver, the geared wheel and segment and hinged lever R for turning and moving the nail plate to the driver and to the cutters, substantially as described.

I also claim, in combination with the driver, or the carriage to which it is connected, the lever S with its several connected parts for throwing out and holding out of gear the feeding devices whilst the driver is in the act of bringing up a fresh nail plate, as set forth.

I also claim, in combination with the feeding shaft F and its grooves 1, 2, and 3, the pivoted switch d on the carriage, for the purpose of giving said carriage a rapid retreating and partial advanced motion, and a slow feed motion, substantially as set forth.

No. 26,514.—CÆSAR NEUMANN, of New York, N. Y.—*Improvement in Skeleton Skirts.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The spring joint or hinge, arranged and constructed as specified, by which the hoop can be contracted and expanded, substantially in the manner and for the purposes set forth.



No. 26,515.—CARLTON NEWMAN, of Birmingham, Pa.—*Improvement in Preserve Cans.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The use of the loose or detached elastic band, when used in connection with the flaring rim *c* on lid *b*, rib, or ridge *e* on, and groove *f*, in the neck of the jar, or the equivalents of said rim, ridge, and groove, arranged, constructed, and used as described, and for the purpose set forth.

No. 26,516.—D. G. OLMSTED, of Vicksburg, Miss.—*Improvement in Cotton Gins.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, feeding the cotton into the roll box through a hulling grate *H*, so as to exclude the principal hulls and trash while the seed cotton is admitted, as specified.

Second. I also claim the projections *SS* at the intersection of the ribs of the ginning grate *F* and extension *G*, for the purpose of directing the cotton past the seed space of the lower edge of the hulling grate *H*, in combination with said grate *H*.

Third. I also claim the arrangement of the air directing partition *a*, constructed substantially as described, in combination with the hatchel cylinder *E*, for the purpose specified; at the same time disclaiming its use in any other manner or connection.

Fourth. I also claim the extensions *o o*, when arranged as continuations of the brush wings *d d* around the ends or heads of the brush cylinder, for the purpose specified; while I disclaim the use of wings or fans on the ends of the brush cylinder unconnected with the brush wings *d d*.

No. 26,517.—CHARLES G. PAGE and RALPH J. FALCONER, of Washington, D. C.—*Improvement in Pipe Couplings.*—Patent dated December 20, 1859.—This invention consists in an improvement upon the slide coupling, patented by R. J. Falconer, June 7, 1853.

*Claim.*—Combining with the lateral or transverse movement of the male and female sections *a b*, an endwise movement to effect the tightening of said sections, as set forth.

No. 26,518.—CHARLES GRAFTON PAGE, of Washington, D. C.—*Improvement in Door Bolts.*—Patent dated December 20, 1859.—To effect the purposes of locking and leverage by the loose handle, when the bolt is large and heavy, the inventor says: I use the modification where the handle *c* is in the form of a crank, upon the axle of which is fixed a pinion *s*, which meshes into the rack *t*, this rack being on a part of the guard of the bolt. This bolt is moved back and forth by turning the crank *c* and is locked by the engagement of pawl *x* in the teeth of the pinion *s*.

*Claim.*—The locking of bolts when bolted or shut, by means of rotary handles moving with the bolts, and operating substantially upon the principles set forth.

No. 26,519.—DUBOIS D. PARMELEE, of Salem, Mass., assignor to JOHN A. GREENE, of Beverly, Mass.—*Improvement in the Manufacture of Rubber Articles.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The employment in the manufacture of India rubber sheets, whether combined or not, with cloth, and when the same are to be treated in the cold way to effect the change, as described, on either side of the tank containing the hermizing solution, of a feeding mechanism so arranged and operated, that the sheet may be fed in and out of the tank at a uniform rate, and free from injurious handling and draft or strain, substantially in the manner and for the purpose set forth.

No. 26,520.—WILLIAM PATTERSON, of Constantine, Mich.—*Improved Machine for Forming Hubs.*—Patent dated December 20, 1859.—This improvement relates to the manner of cutting the shoulder on the interior of the hub for short boxes, in a plane parallel to the end of the hub, while the cutter is fed by an inclined screw shaft.

It further relates to the combination and arrangement of an adjustable spring bar, with the cutter shaft and adjusting slide, for the purpose of cutting out the interior of the hub, to cut off the ends of the spokes, and thereby prevent them from resting and pressing unequally on the box.

The inventor says: I *claim*, in combination with the swivel nut *i*, having a yielding or spring seat *M*, the adjustable collar *L* and cutter shaft for causing the cutter to form a shoulder in the hub in a plane parallel to the end of the hub, while the cutter is carried and fed by the inclined screw shaft, as described.

I also claim the combination of the guiding spring bar *I* and its adjusting screws *m n*, with the slide *D*, centre disk *G*, and cutter shaft, for the purpose of boring out the interior of the hub, and cutting off the end of the spokes, and thereby prevent the latter from resting and pressing unequally on the box, or on the exposed part of the axle, as described.

No. 26,521.—CALVIN PEPPER, of Albany, N. Y.—*Improvement in Heating Apparatus.*—



Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the use of fine silicious sand for radiating heat according to the application thereof, substantially as described, the radiation being principally from the sand, and the radiation from the sand coming from between the meshes of the fine wire gauze screens or openings of minutely perforated metal, or other solid substance, the metallic gauze or perforated metal being used for the purpose of retaining the sand while admitting radiation through its meshes, and the sand being heated by fuel of wood, coal, gas, burning fluid or other fuel, or from hot metal, hot air, hot water, or steam, in stoves, tubes, conductors, or other heating apparatus, substantially as described, and subject to the disclaimers and exceptions, as before stated.

No. 26,522.—ALBION RANSOM, of Albany, N. Y.—*Improvement in Stoves*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application and use, with sheet or thin metal stoves, of an independent hood flue, formed and fitted for attachment to such stoves, as described, for the purpose set forth in the specification.

No. 26,523.—ABRAHAM REESE, of Pittsburg, Pa.—*Improvement in Rails for Street Railroads*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Making iron rails for street railways, of the shape, substantially as described, having on each side a head or projection at one edge of the rail with a flat base extending from the projection or head, to the other side, both sides or faces being finished alike so that the rail may be used either side up, and reversed when one side is worn out.

No. 26,524.—CELESTIN RINGEL, of San Francisco, Cal.—*Improved Gold Washer*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of a water wheel with a separating or reducing machine into one apparatus, by using the inner space of a wheel, partly or wholly inclosed as a receiver, dispensing in this manner with couplings or connections, and with a second vessel or receiver, which would have to be set in motion by the water wheel, substantially as and for the purpose described.

No. 26,525.—THOMAS C. ROCHE, of New York, N. Y.—*Improved Stereoscopic Apparatus*.—Patent dated December 20, 1859.—This invention consists in the employment of a skeleton wheel, for the purpose of bringing the pictures one after the other before the eye glasses; and in a particular arrangement of the pictures in such a manner that two pictures are always placed back to back, and that one is upright while the other is upside down, the whole number being connected by tapes into a chain.

The inventor says: I *claim*, first, the employment of a skeleton wheel D, substantially as described, for the purpose of bringing the pictures before the eye glasses.

Second. Placing the pictures C back to back, and so that one is upright while the other is upside down, substantially as and for the purposes specified.

Third. In combination with the chain of pictures C, I claim the arrangement of the sliding partition G, and door F on the slide, and near to the bottom of the box A, substantially as and for the purpose set forth.

No. 26,526.—J. HUNTER SEARS, of Brantford, Canada West.—*Improvement in Breech Loading Fire-Arms*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Combining and applying the hinged breech piece D and the breech screw E, substantially as specified, so that the force applied to a lever attached to a screw, may serve first to withdraw the screw and afterwards throw out the breech piece, as described.

No. 26,527.—JOSIAH SEYMOUR, of Coventry, N. Y.—*Improvement in Working Butter*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The construction and arrangement of the tray to retain the fluids, when desired, in washing and working butter; also the manner of securing the tray to the platform or table, so as to be easily tipped up to drain off the fluids in cleansing; the detachable arch frame and rounded wedged shape butter worker for spreading thin while salting, all in combination as specified for the purposes set forth.

No. 26,528.—GEORGE W. SLATER, of New Haven, Conn.—*Improvement in Ships' Stoves*.—Patent dated December 20, 1859.—This invention consists in hanging the stove by means of adjustable or independent thimbles, whereby said thimbles may be cast separately instead of with the whole flue, as formerly, and perfect joints obtained.

*Claim*.—Turning the joints C D D of the thimble *b* and sockets *c*, attached respectively to



the swinging flue *a*, stove A, and stationary flue C<sup>1</sup>, substantially as and for the purpose set forth.

No. 26,529.—ANANIAS SMITH, of Niagara Falls, N. Y.—*Improvement in Surface Condensers for Steam Engines*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the employment, in connection with a steam engine and its boiler, of a revolving bucket wheel arranged to receive the exhaust steam from the engine, and made to rotate in a reverse direction to its issues in a cylinder or vessel containing water from which the boiler of the engine is fed, the exhaust steam being condensed by direct impingement with and adding to said feed water, essentially as specified.

Second. The combination with the revolving bucket or wheel constructed to receive the exhaust steam from the engine and cylinder, or vessel containing the condensing liquid or feed water in which the wheel rotates, and by direct contact with which water the exhaust steam is condensed in the manner described, of a surface cooling apparatus formed by providing said feed water vessel with a jacket or tubes, or their equivalents, through which a cooling liquid is made to pass or circulate, free from admixture with the water in the vessel that directly effects the condensation of the steam, substantially as specified.

No. 26,530.—GEORGE SMITH, of New York, N. Y.—*Improvement in Pipe Nippers*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination, with the slotted lever A, of the movable claw B, grooved pin C and holding spring D, as shown and described, so that the claw may be readily removed from one side of the lever to the other, thus forming a right or left handed instrument at pleasure, all as set forth.

No. 26,531.—NATHAN SPICER, of St. Paul, Minn.—*Improved Lever Escapement for Time Pieces*.—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combination of the two sets of teeth on the scape wheel and the single pair of pallets, or their equivalent, with two, or more, forks on the lever operating upon and operated upon by a single pin or cylinder, attached to the balance, the whole operating substantially as set forth for the purpose specified.

No. 26,532.—HENRY STEINWAY, of New York, N. Y.—*Improvement in Grand Pianos*.—Patent dated December 20, 1859.—This invention consists in a certain arrangement of the strings of a grand piano forte, whereby, says the inventor, the performer is enabled not only to obtain all the results obtained in piano fortes of other forms by overstringing, but is enabled to bring the bridges nearer to the middle of the sound board than they are in any other grand piano forte.

*Claim*.—The arrangement of the strings *b b* of the lower notes, and those *c c* of the higher notes of a grand piano forte, substantially as shown and described.

No. 26,533.—OREN STODDARD, of Busti, N. Y.—*Improved Device for Feeding the Bolt in Shingle Machines*.—Patent dated December 20, 1859.—This invention consists in a novel arrangement of the feeding device for presenting the bolt obliquely and automatically to the knife, so that the shingles will be rived from the bolt in taper form.

*Claim*.—The ratchets *j j*, attached to the feed shafts H H<sup>1</sup>, provided each with alternate long and short teeth, and operated by the pawls *k k* and slide K from the knife gate, or frame E, in the manner specified.

No. 26,534.—C. L. TAILLANT, of New York, N. Y.—*Improved Invalid Couch*.—Patent dated December 20, 1859.—This invention consists in the mode of constructing and arranging an adjustable back, or head and shoulder supporter, and removable chair back with a couch having drawers and service basins concealed in the bottom thereof, in such a way as to afford the patient any desired change of position.

*Claim*.—The method of constructing an invalid couch, arranged and operating in the manner and for the purposes set forth.

No. 26,535.—ROBERT N. TATE, of New London, Conn.—*Improved Mast Scraper*.—Patent dated December 20, 1859.—This invention consists in having a steel plate provided with a concave edge, or edges, corresponding with the convexity of the mast, or masts, to be scraped, said plate being attached to a suitable tang, or handle, so that the plate may be drawn down against the mast and a comparatively long concentric scraping service made to act upon it.

*Claim*.—An implement, or tool, composed of a steel plate A, provided with one or more concave edges and attached to a suitable tang, or handle, to form a new and useful article of manufacture, for the purposes set forth.



No. 26,536.—JOSEPH THORNE, of New York, N. Y.—*Improvement in Sewing Machines.*—Patent dated December 20, 1859.—This invention consists in the arrangement of the parts for giving the motions to the needle bar, and also to the bar which drives the shuttle.

*Claim.*—The specific arrangement of the parts described, for giving the appropriate motions to the needle bar and to the shuttle driver.

No. 26,537.—E. L. PRATT, of Philadelphia, Pa.—*Improvement in Thread Tension for Sewing Machines.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Separating and holding the coil B<sup>1</sup>, at the openings through which the thread E<sup>1</sup> passes in and out between it and its fellow B, or support, by means of the strips D and D, or their substantial equivalents, for the purpose of allowing a free passage of the said thread without causing friction on the openings, and for the better adjusting or changing the thread whilst the spring remains at the proper working tension, as described.

No. 26,538.—G. TIGNERES, of Covington, La.—*Improvement in Repeating Pistols.*—Patent dated December 20, 1859.—This invention consists in the cock *h* assuming a position to strike on a cap which fires each barrel separately, beginning at the upper one and continuing to the lower one. This movement is effected by the draw on the trigger, which is a sliding one. The trigger is allowed to slide forward after the firing of each barrel preparatory to making the connection required to secure this movement.

The inventor says: I *claim* the rack *t*<sup>1</sup> and dog *u*, in combination with a sliding trigger, when arranged and operated as or substantially as and for the purpose set forth.

I also claim in combination the plate *c*, the arm *o*, the bar *x*, and the plate *a*, when arranged and actuated on as described.

No. 26,539.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Gridirons.*—Patent dated December 20, 1859.—This invention consists in the employment of a gauze wire screen or its equivalent, when the same is used in combination with an ordinary gridiron.

*Claim.*—The employment of the gauze wire screen A or its equivalent, the gridiron C and the cover D, when the same are used substantially as and for the purposes specified.

No. 26,540.—THOMAS SPURR WHITMAN, of New York, N. Y.—*Improvement in Attaching Skates to Boots.*—Patent dated December 20, 1859.—This invention consists in furnishing the soles of boots or shoes with metal plates, the front part of the sole having a plate with a box passing through the sole and flush with its surface, in which box are a recess and a transverse bar for receiving and holding a tongue projecting from the sole plate of the runner, and on the inside of the heel is a recessed plate for receiving a spring pin, which is attached to the heel plate of the skate iron.

*Claim.*—Uniting the skate iron to the sole of the boot or shoe essentially in the manner and for the purposes stated.

No. 26,541.—H. WILVERTH, of Caseyville, Ky.—*Improved Artificial Fuel.*—Patent dated December 20, 1859.—This composition is made in the following proportions: One hundred parts of coal dust, eight parts of coal tar, one part of common salt or alum, and two parts of cream of lime.

*Claim.*—A composition formed by mixing the above mentioned ingredients together, in the proportions and in the manner specified and for the purpose set forth.

No. 26,542.—EDWARD WIRTHS, of New York, N. Y.—*Improvement in Skate Fastenings.*—Patent dated December 20, 1859.—This invention consists in so attaching the side pieces B B to the ordinary skate A, that the same being adjustable by means of the screws G G, shall accommodate the skate to a foot of any size, and at the same time answer as a covering for the front portion of the foot, and serve, in connection with the heel band E, to attach the skate firmly to the foot.

*Claim.*—The mode of attaching the side pieces B B to the skate A, for the purpose of adapting the same to feet of different sizes, when the same shall be arranged and operated as set forth.

No. 26,543.—ROBERT W. WRIGHT, of New Haven, Conn.—*Improvement in Machines for Feeding Up, Cutting, and Pasting Directions on Newspapers.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—In combination with a strip, or fillet of paper, on which the names or addresses are equi-distantly arranged, an intermittent feed motion, and a pasting, cutting, and carrying device working automatically together, substantially as described and represented.

No. 26,544.—JAMES R. BROWN, of Boston, Mass., assignor to Himself and J. HENRY NORTON, of Medford, Mass.—*Improved Pipe Cutter.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.



*Claim.*—The inventor says: I *claim*, as a new or improved article of manufacture, the pipe cutting instrument, as constructed with the hinged and recessed jaws, the movable cutter, the adjusting screw, and the spring shank or shanks, extending from the jaws and having a connection hook, or its equivalent, all substantially as specified.

No. 26,545.—THOMAS H. BURRIDGE, of St. Louis, Mo., assignor to Himself and THOMAS W. USTICK, of said St. Louis.—*Improvement in Printing Presses.*—Patent dated December 20, 1859.—This invention consists in imparting the ordinary motion to the table of a printing press by applying steam power directly to the table of the press, without complex machinery of any kind intervening between the table and the piston rod of the engine.

*Claim.*—The direct application of steam power to the type table of a printing press, and in causing the same piston that actuates the said table to arrest the momentum thereof, substantially as described.

No. 26,546.—LEWIS S. CHICHESTER, of New York, N. Y., assignor to H. G. EVANS, of said New York.—*Improvement in Cotton Packers.*—Patent dated December 20, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Pressing cotton and other fibrous substances into sacks H by placing the same on a hollow cylinder G, fitted over an aperture of corresponding diameter in the flooring A, and having clamps I I bearing or pressing against the sack on the cylinder, and so arranged as to allow the sack to render or give over the cylinder under the pressure of a plunger D while pressing the substance into the sack, substantially as described.

No. 26,547.—HOMER H. DIKEMAN, of New Haven, Conn., assignor to IRA DIKEMAN & SON, of said New Haven.—*Improvement in Shifting Tops for Wagons.*—Patent dated December 20, 1859.—This invention consists in making the bows to sustain the cover of wagons with hinge or knee joints, and in attaching the side or curtain to the bows in such a manner by screw bolts and nuts that the top can be readily removed and attached to another wagon, or stored away.

*Claim.*—The shifting side or curtain rail in combination with the jointed bows, when the whole is constructed, connected, and made to serve the purposes designed, substantially as described.

No. 26,548.—WILLIAM D. HALL, of Hamden, Conn., assignor to the QUINNISSIAK COMPANY, of said Hamden.—*Improvement in Fertilizers.*—Patent dated December 20, 1859.—The claim explains the nature of this invention.

*Claim.*—Preparing concentrated artificial manure by boiling fish in common fresh water until the whole is thoroughly cooked; then removing it from the vessel, and when sufficiently drained, sprinkling on it from one to three per cent., (usually about two per cent.,) by weight, of sulphuric acid, mixing thoroughly and drying by solar or artificial heat, when the whole is effected, substantially in the manner and by the process described.

No. 26,549.—BENJAMIN F. LEE, of New York, N. Y., assignor to the NEW YORK RUBBER COMPANY.—*Improvement in India Rubber Belting.*—Patent dated December 20, 1859.—The claim explains the nature of this invention.

*Claim.*—As a new and useful article of manufacture, the combination belting or banding specified, and consisting of two or more thicknesses or layers of fibrous material cemented and quilted together, substantially as set forth.

No. 26,550.—FREDERICK MATHUSHEK, of New York, N. Y., assignor to Himself and WELLINGTON WELLS, of said New York.—*Improved Piano Forte Action.*—Patent dated December 20, 1859.—The inventor says: The operation and effect of these improvements are, that the auxiliary jack sustains the weight of the hammer, relieving the main jack and allowing it to return easily under the knuckle. It also adds stiffness and force to the blow of the hammer.

*Claim.*—The combination of the auxiliary jack A D, the regulating screw E F and J, the improved but G, and improved arrangement of spiral spring I with the French action, arranged substantially as set forth.

No. 26,551.—DUBOIS D. PARMELEE, of Salem, Mass., assignor to JOHN H. GREENE, of Beverly, Mass.—*Improvement in the Manufacture of India Rubber Hollow Moulded Articles.*—Patent dated December 20, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—Making hollow articles of India rubber, or its equivalent, or their compounds, when the same are to be treated in the cold way after moulding to effect the "change," as described, by shaping the articles in moulds from bags formed of such rubber, and exhausting the air from between said moulds and the bags, substantially as set forth.

No. 26,552.—SYLVENUS WALKER, of Boston, Mass., assignor to D. W. SMITH, of Somer-



ville, Mass.—*Improved Boot Strap Fastener*.—Patent dated December 20, 1859.—This invention consists of a thin metal plate of a convenient form, to which is attached a series of hollow rivets or eyelets, which are to be passed through corresponding holes made through the strap and boot leg, and are then to be riveted, by means of a suitable tool, so that they can be closed down upon the boot leg at a single operation.

*Claim*.—As a new article of manufacture, the above described boot strap fastener, consisting of the plate or shield C and hollow rivets or eyelets *b*, substantially as described.

No. 26,553.—NORMAN ALLEN, of Unionville, Conn.—*Improved Vise and Saw-Set*.—Patent dated December 27, 1859.—This invention consists in attaching a saw-set to a slotted bar, which is hinged to a vise and provided with an adjustable centre, the parts being so arranged that, when the vise is required to be used in order to hold the saw while filed, the slotted bar is allowed to hang by the side of the vise out of the way, and when the saw-set is required for use the bar of the saw-set is allowed to be secured in the vise in a proper working position.

*Claim*.—The vise formed by the bars A A, with the jaws *b b* attached, the movable bar being actuated by the treadle B, rod C, and toggle D, or their equivalents, in combination with the saw-set formed of the bar or bed G attached to the vise by the rod F, and provided with the beveled plate *i*, gauge *j*, and adjustable centre H, substantially as and for the purpose set forth.

No. 26,554.—WILLIAM H. BAKER, DANIEL DEAN, and B. L. FETHEROLF, of Tamaqua, Pa.—*Improvement in Straw Cutters*.—Patent dated December 27, 1859.—This invention consists in the employment of a double edged reciprocating knife, feed mechanism, and pressure bed.

The inventors say: We *claim*, first, the double edged reciprocating knife C, in connection with the bed P, arranged to operate substantially as and for the purpose set forth.

Second. The arrangement of the eccentric H, yoke I, slide J, lever frame M, and bars O, substantially as shown and described, for operating conjointly the feed bar L and pressure bar P.

Third. The eccentric plate *o*, placed in the shaft *i*, when used in connection with the slide J, to control its longitudinal movement, for the purpose set forth.

No. 26,555.—WILLIAM BANHAM, of San Francisco, Cal.—*Improvement in Machines for Pulverizing Quartz*.—Patent dated December 27, 1859.—This machine consists of a circular cast-iron trough, seen at T, made in segments or sections, four or six segments completing the circle, having flanges on each end of the segment on the under side, by which they are bolted together, forming one continuous circle, without obstruction or unevenness on the inside; four cast-iron drags or grinders D made to conform upon the bottom with the inside of the trough.

*Claim*.—The circular troughs T T<sup>1</sup>, constructed as described, in combination with the drags D D<sup>1</sup> at the extremities of the radial arms *a*; the whole constructed and operated substantially in the manner and for the purpose set forth.

No. 26,556.—RUSSELL D. BARTLETT, of Bangor, Me.—*Improvement in Veneering Machines*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application of the throat gauge to the main and secondary cutters, so that both the gauge and the secondary cutters can be turned upward away from the log, under circumstances and for the purpose or object substantially as set forth.

No. 26,557.—GEORGE W. BEARDSLEE, of Flushing, N. Y.—*Improved Magneto-Electric Machine*.—Patent dated December 27, 1859.—This invention consists in the employment of two oppositely vibrating conductors, insulated from each other and simultaneously operated by the alternately reversed currents from a magneto-electric machine, which conductors vibrate between two sets of conductors, each set of which is connected with one of the terminal wires of a magneto-electric machine, so that each vibration shall break the connection between one of the vibrating conductors and one of the terminal wires, and establish the connection with the other terminal of the machine, and *vice versa* with the other vibrating conductors.

*Claim*.—The mode of operation of the pole charger, by which the current is made to travel in the same direction, substantially as described.

No. 26,558.—GEORGE W. BEARDSLEE, of Flushing, N. Y.—*Improved Magneto-Electric Machine*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the compound magnet described, consisting of radial poles arranged about a common centre and connected together at their inner ends, substantially as and for the purpose described.



I also claim forming such a compound magnet with radial poles connected at their inner ends by cutting out the radial poles and connecting rings from a single plate, substantially as and for the purpose specified.

I also claim, in combination with rotating magnets, the insulated rings to which the terminal wires of the helices are connected, substantially as described.

No. 26,559.—JAMES BOUTON, of Macon City, Mo.—*Improvement in Seeding Machines.*—Patent dated December 27, 1859.—The scraper for covering the seed is shown at E; it is attached to the end of the beam G by means of a pin, the attaching end being made in the form of a crotch, so as to straddle the pipe D; the scraper is kept upon the ground with more or less force by means of a fixed spring F fastened to the beam G; the distance the valve *f* is open is regulated by the lever *t*, which is held in notches *r r* in any required position.

*Claim.*—The arrangement of the wheels *b b*, pipes C D, coverers E, springs F and *n*, and the yielding beam *c*, in the manner described; and also, the arrangement of the valve *f* in the hopper P, in the manner described, for the purpose specified.

No. 26,560.—SAMUEL BOYD, of Brooklyn, N. Y.—*Improvement in the Manufacture of Hoes.* Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination with the drop G and anvil B, of the drop opening *f* and mandrel C, so that after the drop has given its blow, it will hold the hoe in place and allow the mandrel C to be passed through into the hoe to form and finish the eye thereof, all as shown and described.

No. 26,561.—OLIVER G. BRADY, of New York, N. Y.—*Improvement in Guiders for Sewing Machines.*—Patent dated December 27, 1859.—This invention consists in a certain construction and arrangement, relatively to each other, of a guiding tube and a grooved presser, whereby the cord can be inserted within a fold, or between two thicknesses of fabric, in straight, curved, or zigzag lines, in such manner as to bring all the fullness produced by the cord on one side of the fold or plait, leaving the opposite side perfectly even or flat.

*Claim.*—The combination of the presser, having its sole formed with a curve *d*, a grooved toe *f*, and a recess *e*, as described, and the curved guide tube *g*, arranged relatively to the edge and toe of the presser, as described, and operating as and for the purpose specified.

No. 26,562.—RHODOM M. BROOKS, of Greenville, Ga.—*Improvement in Cotton Seed Planters.* Patent dated December 27, 1859.—H is the seed box; I is the driving wheel, which has an iron tire or band around its periphery; J J are iron scrapers, intended to cover the seed; they are attached by bolt V to an arm K, which is connected with the handles; the action of J J is governed by the elevation or depression of the handles D D; L L represent guards and braces for the seed box.

*Claim.*—The arrangement of the wheels I E F G and N, the seed box H, the handles D D, the bar S, the braces L, coulter or opener B, coverers J, arm K, and brace W, as described, and for the purpose set forth.

No. 26,563.—RHODOM M. BROOKS, of Greenville, Ga.—*Improvement in Ploughs.*—Patent dated December 27, 1859.—A is the plough hoe or scraper, which is so arranged that it can be turned and sharpened by its operation in ploughing; B is the turning wing or share, secured to the plough beam J by clamps U and screw bolt C; D is a piece of iron attached to the plough foot and extending back to protect the rod F from damage; E E are the nuts and washers on the end of rod F, by which the plough hoe A is confined.

*Claim.*—The arrangement of beam J, screw foot F, notch *v*, plough hoe A, opening P, mould boards O, openings W, nuts E E, holes I I I, constructed as described for the purpose set forth.

No. 26,564.—GEORGE COOK and HANNIBAL I. KIMBALL, of New Haven, Conn.—*Improvement in Top Props for Carriages.*—Patent dated December 27, 1859.—This improvement consists in passing the shank of the screw bolt (which is the standard of the prop) through the bow of the carriage top, and passing a loose collar on this screw bolt or standard, this thimble reaching through the whole extent of the socket of the joint bar of the carriage top.

*Claim.*—The combination of the thimble or pipe *e* or *g*, with the screw bolt or standard *a* or *b*, and the joint bars B or C, when the whole is constructed and used substantially as described.

No. 26,565.—SAMUEL F. COVINGTON, of Indianapolis, Ind.—*Improved Register for Railroad Cars.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The indicator A, when operated in connection with the telegraph instrument, or its equivalent, using the Roman numerals or their equivalents, and operating the same substantially as and for the purposes set forth.



No. 26,566.—ISAAC R. CRANE, of Warsaw, Me.—*Improvement in Ditching Machines.*—Patent dated December 27, 1859.—This invention consists in constructing, arranging, and combining certain mechanical devices in a machine for the purpose of ditching.

*Claim.*—The arrangement of the guide wheel P with the frame A, and with the arrangement of devices for operating the said wheel, as described.

No. 26,567.—LEBBEUS B. MILLER, of Newark, N. J., assignor to AARON D. CRANE, of Boston, Mass., D. F. TOMPKINS and L. B. MILLER, and C. T. TOMPKINS, of Newark, N. J., and DANIEL HOLSMAN, of Passaic, N. J.—*Improved Machine for Turning Irregular Forms.* Patent dated December 27, 1859.—In operating this machine, the cutter head A A<sup>1</sup> and material E being set in motion at a high rate of speed, the centrifugal force will throw the cutters c as far out as they can go, and until the small rollers in O O are brought in firm contact with the consolidated cams former B. The material is then brought up into contact with cutters c, and the cutter head is made to move along the shaft S in a direction longitudinal to the work, and the consolidated cams or former B are brought also along the shaft S in a longitudinal direction at the proper speed, and into or out from the cutter head by means of the contact of the rollers in c.

The inventor says: I *claim*, first, the double disk cutter head A A<sup>1</sup>, constructed substantially in the manner and for the purposes described.

Second. I claim the consolidation of the separate cams b b, Figs. 5 and 6, into a solid former or consolidated cams B, Figs. 1, 2 and 7, and the use of such consolidated cams or former, in combination with the said Crane's lathe.

Third. I claim the use of the levers m m, Figs. 1 and 2, formed and adjusted in the cutter head, substantially as described.

No. 26,568.—I. G. GOSHON, of Shippensburg, Pa., assignor to Himself, H. RUBY, JOHN WONDERLICH and H. R. RUBY, of said Shippensburg.—*Improvement in Railroad Car Couplings.*—Patent dated December 27, 1859.—This invention consists of a longitudinally moving shaft held in position by a semi-circular spring, and to which the bolt is attached.

*Claim.*—The longitudinal moving shaft A, in combination with the spring s, bolt a, arm b, and projection c, substantially as and for the purpose set forth.

No. 26,569.—GEORGE W. DANA, of Durand, Ill.—*Improved Lock.*—Patent dated December 27, 1859.—The object of this invention is to obtain a burglar proof and powder proof lock, one admitting of change or permutation, and one also that may easily be manipulated, both as regards the effecting of the change and the locking and unlocking of the lock.

The inventor says: I *claim*, first, the employment or use of a series of spindles G K, provided with slots or recesses h m, and with lettered caps Q, connected by catches p, the spindles being arranged directly with the bolts as with C, or indirectly by means of a wheel F as with B, either or both, for the purpose set forth.

Second. The slide bar D provided with the projections f f, arranged relatively with the slots B C, and connected with the guard wheel H, as shown, in connection with the wheel F and spindles G, arranged to operate as and for the purpose set forth.

No. 26,570.—NEWELL DANIELS, of Milford, Mass.—*Improved Cloth Holder in Needle Work.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—As a new article of manufacture, a lady's work holder to hold the work by the action of the piece B, towards and in connection with the solid part of the frame A, when constructed and operating substantially in the manner and for the purpose as set forth and described.

No. 26,571.—JOHN DANNER, of Canton, Ohio.—*Improvement in Sleeping Chairs for Railroad Cars.*—Patent dated December 27, 1859.—A represents the floor of the car to which are fastened the frames B of the seats C. The frames B and seats C do not differ materially from the frames and seats in common use. To the top of the inside of the frames B are attached the back supporting pieces b, having long slits or openings c, and curved bottom openings d.

The inventor says: I *claim*, first, the link supporting device F G H, in combination with the seats, constructed substantially as described and for the purpose set forth.

Second. I claim the combination with the seats C and frames B of the backs D, folding head rests I, slotted pieces b, arranged and operating in relation to and in combination with the limb supporting device F G H, substantially as and for the purposes set forth.

No. 26,572.—L. A. DOLE, of Salem, Ohio.—*Improved Washing Machine.*—Patent dated December 27, 1859.—This invention consists in the combination of the slotted arms of the rubbing board with the hinged inclined suspending links of the pivoted lever frame, whereby as the lever frame is moved forward the rubber is caused first to move downward in the path of the vertical circle, until it is resisted by contact with the clothes and the stationary vertical board, and then by reason of a continuance of the pressure, caused to rise perpendic-



ularly, and thus subject the clothes to a rubbing action similar to that performed by the hand on a washboard.

*Claim.*—The arrangement, consisting of the tub A, rubber B, hinged rubber C, slotted arms *a b*, lever frame D, and hinged inclined links E E, in the manner and for the purpose described.

No. 26,573.—FRANCISCO DOMENECH, of Ponce, Island of Puerto Rico.—*Improvement in Clarifying Cane Juice.*—Patent dated December 27, 1859; patented in the Island of Puerto Rico, August 17, 1858.—This invention consists of a method of determining with accuracy the quantity of lime necessary to be added to the raw juice or syrup as it comes from the mill to defecate or purify the same.

*Claim.*—The method of determining the amount of lime necessary to be added to the raw juice to defecate the same, by the employment of the volumetric method, as set forth.

No. 26,574.—EUGENE DUCHAMP, of St. Martinsville, La.—*Improvement in Apparatus for Evaporating Sugar Juices.*—Patent dated December 27, 1859.—This invention consists in arranging in the front end of the furnace a vertical boiler which shall serve as a steam boiler to generate steam for the machinery employed in the crushing of the cane, and to construct this vertical boiler so that the cane trash, or bagasse, may be fed down through its centre and be supplied to the fire in a state fit for combustion, so that the bagasse may be used directly from the crushing mill as a suitable fuel.

The inventor says: I *claim*, first, the arrangement of a vertical boiler F in front of the furnace having a funnel I, spiral conveyer J, and cone K, when the whole are combined for the purpose and in the manner set forth.

Second. I claim in combination with the above vertical boiler, the semi-cylindrical concentrating boiler N, when the same is constructed and arranged in the manner and for the purposes represented and specified.

No. 26,575.—A. M. DYE, of Clinton, Ill.—*Improved Bed Bottom.*—Patent dated December 27, 1859.—This invention relates to an improvement in that class of bed bottoms in which wire upholstery springs are used to impart a requisite degree of elasticity; its object is to obtain a facile mode of straining or tightening the webbing of the bottom.

*Claim.*—The attaching of the traverse bars *d d* of the frame A to the side strips *c c*, by means of the dovetail slides *e* and sockets or guides *f*, provided with the screws *g*, and attaching the bars *a* of the frame B to the side strips *b b* by means of the set screws *k*, substantially as and for the purpose specified.

No. 26,576.—LUCIUS EDDLEBLUTE, of Garden Valley, Cal.—*Improved Amalgamator.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The combination of the bars *b* with the inclined or beveled slats *a* and inclined top A and bottom B, as shown, so that the water has an easy access, and its fall first strikes the edges of the bars *b*, and thus avoids the washing out of the quicksilver, all as set forth.

No. 26,577.—SERAPHIN ESPACH, of Cincinnati, Ohio.—*Improved Bedstead.*—Patent dated December 27, 1859.—This invention consists in the arrangement and combination of parts for the construction of bedsteads, as shown in the claim.

*Claim.*—The described arrangement and combination of parts consisting essentially of the foundation J and its springs L M, the posts A, rails C D, hooks F and their sockets, the braces P Q and their adjusting screw O, and the lattice work head and foot boards, all substantially as and for the purpose set forth.

No. 26,578.—FRANCIS J. FLOWERS, of Rahway, N. J.—*Improvement in Extension Seats for Carriages.*—Patent dated December 27, 1859.—This invention consists in folding a seat so that the space occupied by the permanent seat is filled, forming a level surface to receive its cushion when the extension seat is folded. When open the width of the extension seat is decreased and its height raised, whereby foot and leg room is gained.

The inventor says: I *claim*, first, the operation and combination of the raising bar H, or its equivalent, with the parts A and B.

Second. I claim the combination of the recess J J with the legs B B.

Third. I claim forming the joints L L L L, in combination with the boot, for the purpose set forth.

No. 26,579.—HENRY GARBANATI, of Brooklyn, N. Y.—*Improved Carving Fork.*—Patent dated December 27, 1859.—This invention consists in providing the carving fork with two guards, spurs, or projections, one on each side of the fork, to be used as guards or fulcrum when the fork is operated as a lever, and so made permanent, or a part of the body of the fork that no space is offered for the lodgment of dirt.

*Claim.*—The permanent spur guard *c* and the fulcrum guard *b*, in combination with a carving fork, substantially as described.



No. 26,580.—DENNIS C. GATELY, of Newtown, Conn.—*Improvement in the Manufacture of India Rubber Belting*.—Patent dated December 27, 1859.—The claim explains the nature of this invention.

*Claim*.—The improvement in the manufacture of machine belting or banding, composed wholly or in part of India rubber or gutta percha, the same consisting in rolling or winding up the belt or band with any suitable non-adhesive substance or composition interposed between its folds or layers, and then heating it, substantially in the manner and for the purpose described.

No. 26,581.—HENRY GILLIARD, of Mount Hope, Wis.—*Improvement in Cultivators*.—Patent dated December 27, 1859.—This invention consists of a circle fastened permanently to the beam, and provided with holes for the bolts which hold the jointed bars carrying the cultivator teeth, which bars are hinged to the beam in the centre of the circle, so that they can be vibrated and arranged to stand forward opposite to or behind the centre of the circle.

*Claim*.—The arrangement of the permanent circle G and jointed bars J J, when the whole is constructed for joint operations, as set forth.

No. 26,582.—JOHN GORE, of Brattleboro, Vt.—*Improvement in Harvesters*.—Patent dated December 27, 1859.—In the construction of this invention, D is the oscillating draw bar of the cutting apparatus; E is the curved guide to which the bent foot lever is connected for raising or lowering the cutter bar; F is the lower guide or bearing; I is the foot lever for opening the segment or curved guide E, and by it elevating the cutters; N is the hook, on which the draw bar D turns.

*Claim*.—The use of the lever M<sup>1</sup>, constructed as described, in combination with the tapering draw bar D for elevating the cutting apparatus of the harvesters, in the manner described.

No. 26,583.—JOHN GRAY, of Nashville, Tenn.—*Improvement in Self Adjusting Counter Braces of Truss Bridges*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The application to counter braces in truss bridges of a socket at the top, a heel and key at the bottom, by which the counter braces in truss bridges are made self tightening and adjusting, as described.

No. 26,584.—J. P. GROSVENOR, of Lowell, Mass.—*Improved Machine for Planing Curved Surfaces*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the employment or use of the adjustable or yielding feed rollers L L, when combined with a bearing roller M or a proper bearing surface, and arranged relatively with each other, as shown and described, to admit of the feeding of circular, oval, and serpentine form to the cutters.

I further claim placing the rollers L L in an adjustable frame or box G fitted in an adjustable box E, and used in connection with the elastic bars N N or their equivalent and the bearing roller M, whereby the frame or pattern may be properly adjusted and retained in proper position between the rollers while being acted upon by the cutters.

No. 26,585.—JOHN A. GRUMWALD, of New York, N. Y.—*Improvement in Circular Looms*.—Patent dated December 27, 1859; patented in France, September 20, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the manner of weaving in a horizontal circular plane by means of two or more wefts, and an arrangement of warps placed alternately above and below the weft threads, arranged and constructed in the manner substantially as described.

Second. I claim the arrangement of the weft bobbin carriage, in combination with the arrangement of regulating the extension of the weft thread, substantially as described.

Third. I claim the arrangement and construction of the tension levers for the purpose of maintaining the tension of the warp threads as well as the friction against the warp bobbins, acting together in the manner and for the purpose substantially as set forth.

Fourth. I claim the arrangement of the serrated pulley W, in combination with the rollers W<sup>1</sup> and W<sup>2</sup>, operating together in the manner described, and for the purpose of delivering the manufactured article as fast as finished and at a regular tension, substantially as specified.

Fifth. I claim the arrangement of the disengaging gear, constructed as described, and for the purpose of throwing the loom out of gear as soon as one of the weft threads breaks, the same being operated by a lever attached to the weft bobbin carriage and acted upon by the weft thread, in the manner substantially as set forth.

No. 26,586.—JAMES HARRISON, Jr., of New York, N. Y.—*Improvement in Sewing Machines*.—Patent dated December 27, 1859.—The claim and engravings give an idea of the nature of this invention.

The inventor says: I *claim*, first, the rotary needle guide disk c, constructed and operated in the manner and for the purpose described.

Second. The arrangement of the following devices for holding and operating the shuttle,



viz: the arm *l*, the revolving button *m* slotted to receive the arm *l*, the shuttle case *o*, rod *i*, and its head *j*, spring *k*, and legs *h*, all constructed and operating substantially as described.

Third. Constructing the shuttle with the ridge and holes and thread space, as described.

Fourth. Inserting the lever bar *x* in the needle bar *w*, and operating it as described.

No. 26,587.—T. S. HEPTINSTALL, of Mendota, Ill.—*Improvement in Gang Ploughs*.—Patent dated December 27, 1859.—The front wheel A and hind wheels B, by means of the front shaft C, the rod G, the triangle F, its spindle E, and the hind shafts D, and their crank axles X, are connected with each other, and the triangle F and hind shafts D being fastened to and made firm on the hind spindle E, the action of the front wheel A and the hind wheels B is mutually dependent and regulated by the action of each other.

*Claim*.—The arrangement of the wheels A B B, shafts C and D D, spindle E, triangle F, rod G, lever pole H, regulator I, and rollers K K, as described and for the purpose set forth.

No. 26,588.—HOMER HOLLAND, of Westfield, Mass.—*Improved Process of Making Sulphuric Acid*.—Patent dated December 27, 1859.—The claim explains the nature of this invention.

*Claim*.—The generation of sulphuric acid by treating sulphides and nitrates commingled in close vessels in connection with the ordinary sulphuric acid chamber, in the manner and for the purpose substantially as set forth.

No. 26,589.—HOMER HOLLAND, of Westfield, Mass.—*Improved Process for the Production of Sulphate and Oxides of Copper*.—Patent dated December 27, 1859.—The claim explains the nature of this invention.

*Claim*.—The production of the sulphate of copper, together with oxides of copper from its various sulphurets, by the use of nitrate of soda, according to the process described.

No. 26,590.—HOMER HOLLAND, of Westfield, Mass.—*Improvement in the Mode of Treating Metalliferous Sulphurets*.—Patent dated December 27, 1859.—This invention consists in the use of the nitric acid of certain specific bases which control the decompositions of the metallic sulphides in the ores to be treated.

*Claim*.—The treatment of metalliferous sulphides with the native nitrate of lime, or nitrate of lime and magnesia, in iron vessels, in the manner and for the purpose substantially as set forth.

No. 26,591.—JESSE JACOBS, of Yellow Springs, Ohio.—*Improvement in Bee Hives*.—Patent dated December 27, 1859.—The valve pedal is so shaped as to allow the bees to step on and off readily. A case C surrounds the valve, or valves, the top *f* thereof serving as a platform for the bees to alight upon before stepping on the valve pedals. A cover *g* over the valves protects them from the weather.

*Claim*.—The valve, composed essentially of the vestibule D and adjustable counter-weighted valve pedal G, arranged and operating substantially in the manner and for the purposes specified.

No. 26,592.—AARON E. JAMES, of Decatur, Ill.—*Improvement in Straw Cutters*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Feeding the straw towards the knife by means of two feed rolls between which the straw passes, when said rolls or cylinders are both operated simultaneously by the positive action of separate pawls or their equivalents, working in ratchets made and arranged in said rolls, substantially in the manner and for the purpose described.

No. 26,593.—HENRY BOEHM, of Trenton, N. J.—*Improvement in Watches*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—Controlling the active length of the pendulous, or hair spring of a watch, or other time keeper governed by a balance, by means of combined laminæ of different metals so applied to act upon the end of the spring which has been commonly fixed, that by an increase or diminution of temperature, the said spring is caused to be taken up or let out through the curb pins or their equivalent, and so to compensate for the expansion and contraction of the said spring and the balance, substantially as described.

No. 26,594.—GEORGE JAQUES, of Somerville, Mass.—*Improvement in Preparations of Tobacco*.—Patent dated December 27, 1859.—In this invention, or discovery, after the tobacco is sufficiently boiled, the contents of the still are discharged, the liquid drawn off and the residue pressed to extract all the juice, which is mixed with the solution which is afterwards concentrated by the evaporation if necessary; to this extract is added the nicotine and volatile oils which have been produced or separated by distillation.

*Claim*.—As a new article of manufacture the described preparation of tobacco, consisting of the soluble and volatile portions, as set forth.



No. 26,595.—JAMES M. JAY and JOHN DANNER, of Canton, Ohio.—*Improved Apparatus for Heating Water*.—Patent dated December 27, 1859.—This invention is operated as follows: A suitable quantity of alcohol, or other fluid which will burn, being put into the chamber *a* and a wick introduced into or through the hole *f* and lighted, the flame and heated air rise up against the bottom of *D*, which contains the water to be heated, the air to support the combustion being admitted through the openings *b c* in the base *A*, while the gas and vitiated air pass out of the openings in the case *C*.

*Claim*.—The combination and relative arrangement of the parts composing the water heater, substantially as and for the purposes set forth.

No. 26,596.—CHARLES KESLER and FRED. REINHARD, of Columbus, Texas.—*Improvement in Cotton Seed Planters*.—Patent dated December 27, 1859.—This invention consists in arranging in a hopper a roller armed with stirring and feeding teeth, in combination with an inclined perforated partition and a distributing roller with seed cells, which latter are filled by the action of the toothed roller so as to insure a correct distribution of seed.

*Claim*.—The arrangement in a hopper of the roller *B* with stirring teeth *a* and feeding teeth *b*, in combination with the perforated partition *C* and the distributing roller *D*, substantially as and for the purpose specified.

No. 26,597.—JOHN R. KING, of Raleigh, Tenn.—*Improvement in Cotton Cultivators*.—Patent dated December 27, 1859.—The claim and engravings will give an idea of this invention.

*Claim*.—The arrangement of the frame *p q b c* and wing or mould board *m*, cast solid together, extra landside *s* with its tenons *d n n* and brace *a*, with the cotton scrapers *g*, as described for the purposes specified.

No. 26,598.—JOHN P. KOCH, of New York, N. Y.—*Improved Folding Bedstead*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The combined arrangement of the shoulder *S* and eccentric *E*, both situated below the rails and inside of the bedstead, to secure the side rails in their proper place when the bedstead is unfolded, and at the same time to relieve the pins *C* of the strain, in the manner and for the purpose substantially as specified.

No. 26,599.—SAMUEL LESSIG, of Reading, Pa.—*Improvement in Horse Hay Rakes*.—Patent dated December 27, 1859.—In using this rake the operator is seated in seat *h*, and when it is desired to discharge the load, he merely presses the foot spring *n* down with his foot, releasing the sliding bar, and causing it to move forward by the horse pulling thereon, which instantly throws the rake into a discharging position, as seen in the dotted lines in the engraving. When the load is discharged the operator brings the teeth down by pulling the handle or shaft *O* toward himself, which brings the sliding bar back, and the foot latch enters the slot in the sliding bar, and the rake is again ready to proceed.

*Claim*.—The singletree *g*, sliding bar *3*, spring *n*, braces *6*, axles *z*, bar *g*, sleeves *r*, beam *8*, braces *j*, slotted guides *i*, rollers *c*, arms *f*, and connecting bars *l l*, the whole being constructed and arranged for operation conjointly as and for the purpose set forth.

No. 26,600.—S. M. LOGAN, of Richmond, Ind.—*Improved Roofing Composition*.—Patent dated December 27, 1859.—This composition is made of the following ingredients: Copal varnish, two pints; Japan dryer, one pint; eggs, seven, or one pint; lamp black, 4½ ounces, or three pints dry; yellow ocre, two pounds; common salt, one pint.

*Claim*.—The described composition, constructed and used substantially as and for the purpose specified.

No. 26,601.—THOMAS R. MARKILLIE, of Winchester, Ill.—*Improvement in Excavating Machines*.—Patent dated December 27, 1859.—This invention consists in the arrangement and combination of a plough, with an elevating wheel of peculiar construction; and also in combining therewith a carrier for elevating and transporting the dirt to the place required at which it is to be deposited.

The inventor says: I *claim*, first, the combination of the carrying wheel *C*, as constructed and operated with the reversible plough, as arranged for the purposes set forth.

Second. In combination with the carrying wheel *C* and plough *M*, I claim the elevator *D*, as arranged and operated for the purposes described.

Third. I claim the hinged wheel frame *b*, as arranged and combined with the lever *d* and rack bar *f*, for the purposes set forth.

No. 26,602.—V. L. MAXWELL, of Wilkesbarre, Pa.—*Improvement in the Manufacture of Gunpowder*.—Patent dated December 27, 1859.—The claim explains the nature of this invention.

*Claim*.—The employment of alcohol in lieu of water as the vehicle to unite the particles of the ingredients of which the powder is composed, substantially as and for the purposes shown and described.



No. 26,603.—THOMAS J. MAYALL, of Roxbury, Mass.—*Improvement in Apparatus for Making Rubber Belting.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, the use of the two rollers *u* and *v* acting together, so as to form the belt into a gutter shape, whereby the first step in the process of folding the outside sheet or covering of rubber or gutta percha over the body, or inner fabric of the belt or band, is effected as set forth.

Second. The roller *x* having two taper surfaces and a central disk, whereby the overlapping of the covering or outer sheet over the inner fabric is completed, and the edges of the outer sheet or covering, brought to a true and even line before being united.

Third. Bringing the two edges of the outer sheet or covering evenly together, so as to form a complete and perfect joint, and complete the formation of the belt or band, by the employment of two or more rollers arranged in relation to each other, so that the said belt or band shall be drawn partially around the periphery of either of all the said rollers, substantially in the manner as set forth.

Fourth. In combination with the machinery for forming the belt or band, I claim the devices for cutting both the outer and inner sheets into strips of any desired width, as described.

No. 26,604.—WILLIAM McLENDON, of Greenville, Ga.—*Improvement in Cotton Gins.*—Patent dated December 27, 1859.—This improvement has reference to the roll box of cotton gins, and consists in beveling the ends of the roll box, so that the cotton will expand on the outside, and thus cause the saw to pass through it at different points every turn.

*Claim.*—Beveling the ends of the roll box from the saws, substantially as and for the purposes set forth.

No. 26,605.—JAMES T. MERCER, of Seneca Township, Ohio.—*Improvement in Seed Planters.*—Patent dated December 27, 1859.—The inventor says: I construct a shoveling plough with the beam *m* and the stock, as represented in the engravings; and to the same I attach a wheel *K* by arms or shafts *L* framed together, which serve likewise for handles *L*, and are fastened to the beam or stock by the bolt or pivot *i* and stirrup *J*, thus permitting an up and down motion to the wheel, &c.

*Claim.*—The arrangement of the handles *L*, beam *m*, pivot *i*, stirrup *J*, wheel *K*, arms *b*, lever *e*, slide *d*, hopper *c*, spring *f*, markers *a a*, and coverers *h h*, the whole being constructed as described for the purpose set forth.

No. 26,606.—PETER MONAGHAN, of Camak, Ga.—*Improvement in Cotton Cultivators.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—In combination with the hinged frame of a cotton cultivator, the spring *H*, which is secured to the tongue of said cultivator for the purpose of automatically raising the rear end of the machine, when the same is released by the operator, substantially in the manner described.

No. 26,607.—RICHARD MONTGOMERY, of New York, N. Y.—*Improvement in Rolling Corrugated Metal.*—Patent dated December 27, 1859.—*A* represents the frame which supports the corrugating rolls *E E*, and *D D* the frame which supports the holding and smoothing rolls *G G*, together with the arched forming roll *H*. Both frames are securely fastened to a base *C*.

*Claim.*—The combination and relative arrangement of the corrugating rolls *E E* with the holding and smoothing rolls *G G*, forming roll *H* and carriage *e*, operating in relation to each as and for the purposes set forth.

No. 26,608.—CONRAD NORPEL, of Newark, Ohio.—*Improvement in Railroad Car Couplings.*—Patent dated December 27, 1859.—This coupling will connect itself by simply pushing the cars together, and disconnect itself in case a car gets off the track, or in case of the breaking of a bridge or culvert, prevent that part of the train which remains on the track from being thrown down.

The inventor says: I *claim*, first, the jaw *A*, with the beam *B* and pin *D*, for the purpose described.

Second. The jaw *K*, with the pin *L*, combined with the coupling bar *q*, and fish tailed end *R*, for the purpose described.

Third. The two wings *G G*, combined with the slide *E*, for the purpose described.

No. 26,609.—A. B. NORRIS, of St. Louis, Mo.—*Improved Mode of Operating Saw Mill Blocks.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—The use of a lever with a vibrating fulcrum in combination with the dog or reciprocating carriage *f* or its equivalent, as the means of communicating to the sides or knees *P P* of saw mill head blocks, substantially as described; and, also, the combination of the cam lever *u* with the knee *P*, and the manner of operating the same for the purpose of securing the said knees, substantially as described.



No. 26,610.—Suspended.

No. 26,611.—WORDEN P. PENN, of Belleville, Ill.—*Improvement in Seeding Machines.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Arranging the grass seed hopper in front of the grain hopper, with the reflector *d* fixed against its under side in relation to the grass seed box and the grain box, and the pipe *H* and leader *J*, as shown and described.

No. 26,612.—WORDEN P. PENN, of Belleville, Ill.—*Improvement in Seed Drills.*—Patent dated December 27, 1859.—The claim and engraving explain the nature of this invention.

*Claim.*—The arrangement of the endless chain *f* with the eccentric bar *T*, and valve bar *t* with the valves *r*, thereto attached, for the purpose of closing and opening the said valves and raising the flukes simultaneously, in the manner described.

No. 26,613.—NAPOLEON B. PHELPS, of Rochester, N. Y.—*Improved Augur.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Uniting and combining the terminating coil with the preceding one, by means of the thin supporting wall *d* acting as a brace to sustain and strengthen the cutting portion of the bit or augur, substantially in the manner and for the purpose shown and described.

No. 26,614.—BRADFORD S. PIERCE, of New Bedford, and MASON R. PIERCE, of Mansfield, Massachusetts.—*Improvement in the Manufacture of Porous Ware.*—Patent dated December 27, 1859.—The claim explains the nature of this invention.

*Claim.*—The manufacture of porous drain pipes and other vessels which require to possess the property of porosity when formed from the ingredients set forth and made to cohere by the process of tamping, or other equivalent mode of pressure, as described, and receiving its porosity from the small proportion of water used in mixing the ingredients, as set forth and described.

No. 26,615.—JOSIAH W. PRENTISS, of Pultney, N. Y.—*Improvement in Seeding Machines.*—Patent dated December 27, 1859.—*A* is the cylinder, with the axle passing through the centre and securely fastened to the heads of the cylinder; the cylinder has holes made in lines, or rows, to allow the seed to pass out when it is revolved; it is made in two parts and secured with hinges, or otherwise, so that it may be opened to put in the seed; *B* is one of a series of slides that cover the holes in the cylinder, *G* is one of a series of drilling instruments, made so as to receive the seed as it drops from the cylinder and allows the same to pass through it to the place prepared in the earth.

*Claim.*—The divided revolving cylinder *A* and slides *B*, when made, arranged, and operated as set forth, in combination with the peculiar formed spring teeth *G* within their cups, when made and used substantially as specified.

No. 26,616.—SAMUEL N. PURSE, of Ashley, Mo.—*Improvement in Harvesters.*—Patent dated December 27, 1859.—This invention consists in a novel arrangement and combination of devices for changing the velocity of the knives.

*Claim.*—The arrangement and combination of shafts *o* and *j*, with the driving wheel and cutter, and the pinions *l m* and *n*, as shown, for the purpose of changing the velocity of the knives, in the manner described.

No. 26,617.—CLINTON RICE, of New York, N. Y.—*Improved Stair Carpet Fastener.*—Patent dated December 27, 1859.—In order to use the fastener the eye *c* and the slot headed catch being in their proper places, and the stair carpet being laid upon the stairs, the hook *b* is placed in the eye *c*, and the main piece brought down over the carpet pressing it forcibly into the slot headed catch until the spring bolt catches, and thus all hold firmly.

*Claim.*—The general combination and application of the main piece with the hook and eye, and the spring bolt and catching apparatus, as described and for the purpose set forth.

No. 26,618.—MORGAN L. ROGERS, of Spring, Pa.—*Improvement in Cultivators.*—Patent dated December 27, 1859.—The blades are attached to the plough frame as follows: Two bolts 7 and 8 pass through the blades and frame, and also through a flat bar of iron 9, and the plough blades by the screw bolts are held firmly in their places; by this arrangement the blades are raised or lowered, or turned out as desired.

*Claim.*—The arrangement of the hooked and double curved central bar *C N*, curved slotted arm *F*, wheel *G*, handles *H I*, sliding plates *E D*, frame pieces *A B*, and cross piece *D*, substantially as and for the purpose shown and described.

No. 26,619.—ROBERT E. ROGERS, of Philadelphia, Pa.—*Improvement in Steam Engines for Land Carriages.*—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim.*—Connecting the safety valve, the gauge, or try cocks, and all the steam escape



orifices of an engine and boiler with a condensing apparatus, whereby the steam which may escape, or be let off either occasionally or continuously, may be prevented from producing its peculiar harsh noise, as described.

No. 26,620.—GEORGE W. RONEY, of Bailey's Mill, Fla., assignor to Himself and WALTER F. LLOYD, of said Bailey's Mill.—*Improvement in Ploughs*.—Patent dated December 27, 1859. A is the plough beam, B a standard, and C C the handles united to each other; to the bottom of the standard is bolted a shoe D, and the parts A B C D are permanent.

*Claim*.—In combination with a beam, standard, handles, and shoe, rigidly connected together, as shown, the hinging of the coulter E to the shoe at *a* by its lower end, and the adjusting devices in the beam at its upper end, as stated, and for the purpose set forth, the whole being constructed, arranged, and operating as represented.

No. 26,621.—RILEY ROOT, of Galesburg, Ill.—*Improved Surveying Instrument*.—Patent dated December 27, 1859.—A represents the plate to which are attached a graduated half circle, the double spirit level, the sights or telescope, and the axle around which the plate revolves; B a graduated circle; C a double spirit level; D the sights; E the axle; F the double spirit level.

*Claim*.—The arrangement of a revolving double spirit level adapted to a graduated circle, as seen in the drawing and set forth in the specifications, for astronomical and engineering purposes.

No. 26,622.—CHRISTOPHER E. RYMES, of Charlestown, Mass.—*Improvement in Retainers for Hydraulic Presses*.—Patent dated December 27, 1859.—A is the bed plate, from which two metallic bars or posts D D<sup>1</sup> extend upward vertically, or at right angles to the top surface of the bed. Each bar D D<sup>1</sup> is furnished with a toothed rack *a*, which is made to receive and engage with one of two gears or pinions *b b*, fixed on a key shaft *c* that extends through and is supported on a platen or follower F, through which the bars D D<sup>1</sup> pass.

The inventor says: I *claim* the arrangement and application of the two wedges and their operative screw shaft (provided with screws as described) in the follower and with respect to, and so as to operate with, slots formed and arranged in the bars D D<sup>1</sup>, substantially as specified.

And in combination with the slots and the wedges, and their operating mechanisms, applied to the follower as described, I claim the elevating racks and pinions *b b*, arranged in, and applied to, the follower and its upright bars, essentially in manner as set forth.

No. 26,623.—RICHARD S. SCHEVENEL, of Athens, Ga.—*Improvement in Hernial Trusses*.—Patent dated December 27, 1859.—*c c* are two clamps, one for each pad, composed of a piece of brass or other metal plate, folded to receive within it the belt *a*, and each having a screw *d* passing through its open end, said screws also passing through eyes formed at the extremities of the springs *b b*, and being furnished with nuts *e*, which serve to attach the pads to the clamps.

*Claim*.—Combining one or more spring pads A A, and one or more thigh straps with the belt by means of one or more clamps *c*, screws *d*, and nuts *e*, applied substantially as described.

No. 26,624.—LEANDER SHEARER, of Duncannon, Pa.—*Improvement in Railroad Chairs*.—Patent dated December 27, 1859.—The body B being fastened to the ties by spikes, the rails A A are placed against the lip C, so that the cavities *e e* on the side towards the lip C interlock with its lugs *d d*. The securing block E is then slid in between the ears *e e* until its lugs *d<sup>1</sup> d<sup>1</sup>* enter the cavities of the rails A A.

*Claim*.—In the combination with the chair B, formed with a lip C and ears *b b*, the sliding securing block E, and lugs *d<sup>1</sup> d<sup>1</sup>* and *d d*, and cavities *e e* in the ends of the rails, the whole constructed and arranged to operate substantially as specified, for the purpose set forth.

No. 26,625.—FRANCIS O. J. SMITH, of Westbrook, Me.—*Improvement in Electric Telegraphing Apparatus*.—Patent dated December 27, 1859.—With the keys throughout the circuit at rest upon their respective anvils *g*, the metallic circuit is complete without any generator in action; and whenever the key of either station is pressed downwards, and the metallic points *h* and *i* are brought into contact, the aforesaid metallic circuit is broken at *g* at that station only, and the circuit is reformed through the generator *k* of that station, and the sectional conductors connected with the opposite poles of that generator, and the current of electricity or galvanism acts throughout the entire circuit, and brings into use each aforesaid instrument or machine combined therewith at each of the stations in the circuit, but leaves every other generator in the circuit out of action.

*Claim*.—The new and improved mode and combination of apparatus, instruments, and machines, used conjointly in the manner and for the purposes above described, and dispensing therein with all artificial insulations of conducting circuits for telegraphic purposes.

No. 26,626.—JOHN STEPHENSON, of New York, N. Y.—*Improvement in Brakes for Horse*



*Cars*.—Patent dated December 27, 1859.—This invention relates particularly to brakes applied to one horse city cars.

*Claim*.—Arranging the brakes of a reversible car or other vehicle, substantially as described, so that the same can be applied from the driver's seat with equal facility in whatever direction the car or vehicle may be turned.

No. 26,627.—B. F. STURTEVANT, of Boston, Mass.—*Improved Lathe Attachment for Cutting Veneers*.—Patent dated December 27, 1859.—This invention consists in applying a considerable amount of pressure to the surface of the wood in the immediate vicinity of the cutting edge of the knife, by which means the splitting or crippling of the wood is prevented.

The inventor says: I *claim* compressing the wood in the immediate vicinity of the edge of the knife by means of the presser bar C or its equivalent, arranged and operating substantially as set forth.

Second. I claim the cutters E E<sup>1</sup> E<sup>2</sup>, or their substantial equivalents, for the purpose specified.

No. 26,628.—CHARLES F. TAYLOR, of New York, N. Y.—*Improvement in Apparatus for Relieving Spinal Curvature*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim*, first, a spinal supporter or assistant, in which the longitudinal dorsal plates or supports are jointed together in sections in the manner described for the purpose set forth.

Second. Arranging the dorsal plates, in the manner described, by which the pressure which is exerted in a forward direction is thrown upon the angles of the ribs, as set forth, instead of upon the vertebræ and vertebral column, as formerly.

No. 26,629.—WILLIAM THOMSON, of Buffalo, N. Y.—*Improved Brush for Finger Nails*.—Patent dated December 27, 1859.—The object of this invention is to form a neat and compact finger nail brush, with which the nail of each finger and thumb of one hand may be cleaned at the same operation.

*Claim*.—The combination of a stationary or movable cylinder D, with a circular brush, as described, forming a new article of manufacture.

No. 26,630.—SAMUEL D. TRACY, of Vernon, N. Y.—*Improvement in Seeding Cultivators*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* giving the zigzag or alternate opposite inclinations to the blades of the spur wheels C C, in the manner and for the purpose herein set forth.

I also claim the combination of the movable or adjustable cutters D D and their slotted supports g g with the zigzag spur wheels C C, in the manner and for the purposes herein specified.

I also claim the arrangement of the seed box H, in grooves, in the underside of the hinged seat G, so as to be adjustable beneath it, removable therefrom, or turning up therewith, substantially as herein described.

I also claim the vibrating seed distributor I, constructed, operated, and operating substantially as and for the purpose herein specified.

No. 26,631.—JOHN G. TREADWELL, of Albany, N. Y.—*Improvement in Stoves*—Patent dated December 27, 1859.—This invention will be understood by reference to the claim and engravings.

*Claim*.—Arranging the dampers a and c, with the ventilating flue E, and with the draft flue in such a manner that the ventilating flue may be opened or closed, while the draft flue is either open or closed, or *vice versa*, the damper a being made to subserve a double purpose, substantially as set forth.

No. 26,632.—WALTER J. VAN HORN and WILLIAM ALEXANDER, of Louisiana, Mo.—*Improvement in Machines for Preparing Plug Chewing Tobacco*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—A machine for pressing and cutting tobacco, consisting of a central cylinder B, endless belts C G, belt rollers D, pressing rollers F, receiving table J, and cutting rollers I I M N or their equivalents, constructed, arranged, and operating substantially as herein shown and described, so that the leaf tobacco on being fed from the table will be pressed, cut, and delivered in the form of plugs, as herein set forth.

No. 26,633.—SAMUEL WALKER, of Kingston, Ga.—*Improvement in Ploughs*.—Patent dated December 27, 1859.—This invention is designed for what are known as "shovel-ploughs," used in the cultivation of southern crops, but it may be applied to other small ploughs used as cultivators in tilling growing crops.

*Claim*.—The arrangement of the beam A, bars D D, foot B, and handles E E, as shown



and described, in order to admit of the adjustment of the parts, as and for the purpose set forth.

No. 26,634.—J. W. WETMORE, of Erie, Pa.—*Improvement in Railroad Chairs*.—Patent dated December 27, 1859.—The inventor says: I propose to prevent the irregularities in the vertical and lateral variations of the adjacent ends of the rails by means of an iron adjustable yoke, forming the bearing surface and sides of the joint, and a plate and wedge key under the ends, to complete the band surrounding the joint.

*Claim*.—The use of the yoke band as "C," passing through notches in the heads and webs of the T or H rail, at the joint, and keyed by a wedge plate F; all combined, constructed, and arranged, substantially as described.

No. 26,635.—PAUL WILLIAMS, of Lodi, Miss.—*Improvement in Cotton Presses*.—Patent dated December 27, 1859.—A piston rod or beam E connects the platen G with a sliding crosshead D, which is held in place by guide pieces D<sup>1</sup> as it slides back and forth between the upper and lower timbers of the main frame, while on the rear of the crosshead D are hinged the levers H H and J J, as seen at *h*; the levers H H are hinged to levers I I by links H<sup>1</sup> H<sup>1</sup>, as seen at *i*; the levers I I are in turn hinged at their inner ends to the inner ends of levers K K by joints *k*, while the levers J J are hinged by joints *j* to the outer ends of the levers K K, which turn on journals *m m* in the main frame.

*Claim*.—The combination of the levers H H and J J with the levers I I and K K, links H<sup>1</sup> H<sup>1</sup>, and projections I<sup>1</sup> I<sup>1</sup>; the whole arranged and operating substantially as and for the purposes set forth.

No. 26,636.—CYRIEL E. BROWN, of Millbury, Mass., assignor to Himself, JOHN TENNEY, and JOHN RHODES, of said Millbury.—*Improvement in Spindles and Fliers*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

The inventor says: I *claim* the arrangement of the secondary or tubular stationary bearing *d* with the flier and spindle, as specified; also, the combination of a helical eye with the flier arm and its hook, and to open into the hook; also, making the top of the bearing *d* and that of the flier neck with an oil channel, so arranged as not only to receive or catch the oil that runs off the spindle, but direct or conduct it between the rubbing surfaces of the said neck and bearing.

I do not claim an oil cup as ordinarily applied to the foot of a spindle, nor as applied to a cop tube and spindle, as shown in the United States patent No. 16,298; but I claim combining or arranging an oil receiver and bearing *e* with the secondary bearing tube *d*, and so as to surround it, the spindle, and the flier neck, substantially in manner and for the objects and purposes as specified.

No. 26,637.—FRANKLIN B. HUNT, of Cincinnati, Ohio, assignor to R. D. VAN DEURSEN and J. B. GIBBS, of said Cincinnati.—*Improvement in Straw Cutters*.—Patent dated December 27, 1859.—The material to be cut is placed in the spout B, and is carried forward by feed rollers Q L, and, passing over the shear blade T, is cut by the revolving knife or knives J, and falls into any suitable receptacle arranged below.

*Claim*.—The feeding device, consisting essentially of the rolls Q L, link bearings M, rest blocks V, and springs W; all arranged with reference to each other, and so as to operate conjointly as and for the purpose set forth.

No. 26,638.—JAMES ROWE, of Cincinnati, Ohio, assignor to Himself and MARTIN B. EWING, of said Cincinnati.—*Improvement in Sewing Machines*.—Patent dated December 27, 1859.—The claim and engravings will explain the nature of this invention.

*Claim*.—The bar or bracket *h*, on the lower end of the needle bar, so that it shall drive, in combination, the looper bar *k k*<sup>1</sup> and the feeding levers *j* and *o*, by positive movement, when it is driven by the crank pin *b*<sup>1</sup>; all operating in the manner and for the purpose set forth.

No. 26,639.—CHARLES S. WATSON, of Philadelphia, Pa., assignor to Himself, ALBERT S. ASHMEAD, and E. W. CARR, of said Philadelphia.—*Improved Portable Register*.—Patent dated December 27, 1859.—This invention consists in the arrangement, within a small portable outer case, of a number of concentric annular plates L M N, with mechanism for moving the same, and for announcing audibly each movement for the purpose of registering any succession of numbers that it may be desired to record.

The inventor says: I *claim*, first, a portable alarm register, constructed and operating substantially as described.

Second. The dogs on the annular plates, in combination with the pins on the inner front plate, as described.

Third. The combination of the dog *r* with the notches or pins *x x* of the annular plates L M N, and the openings in the rims through which the dogs operate, as described.

No. 26,640.—MARY E. HERMANS, of Henderson, Texas, administratrix of the estate of



Alva Hermans, deceased.—*Improved Peach Parer*.—Patent dated December 27, 1859.—This invention consists in the employment or use of a revolving holding fork provided with elastic tines or prongs, in connection with a paring knife attached to or fitted in a stock.

*Claim*.—The combination of the rotating and elastic or yielding tines or prongs *b b*, knife stock *I*, frame *H*, and plate or bed *G*, arranged for joint operation, as and for the purpose set forth.

No. 26,641.—JOSEPH GRULER and AUGUSTUS REBETY, of Norwich, Conn., assignors to THE MANHATTAN FIRE-ARMS COMPANY.—*Improvement in Revolving Fire-Arms*.—Patent dated December 27, 1859.—The claim and engravings explain the nature of this invention.

*Claim*.—The use of the intermediate recesses *r r*, in combination with the stop *d*, actuated by the hammer in pistols where the cylinder is revolved in the act of cocking the pistol, as described, thereby effecting a self-acting lock of the cylinder, midway or otherwise, between any two cones.

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## CLAIMS OF REISSUES GRANTED DURING THE YEAR 1859.

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No. 643.—*Improvement in Regulating the Flow of Oil to the Wick in Carcel Lamps*.—What I claim as my invention and improvement in lamps, in which the oil is forced to the wick so as to overflow, is regulating the supply of oil to the burner by means of the self-emptying drip cup operating upon the supply valve as herein set forth.

I claim also placing the fountain or reservoir for the oil above the lens, with its draft opening *B* and its supply pipe *d* within the barrel or chamber of the lens, all arranged and operating substantially as set forth.

ABR. COATES.

No. 644.—*Improved Machine for Making Hames*.—What we claim and wish to secure by letters patent is the forging of metal into useful forms by the employment of two or more pairs of rolls having their surfaces cut away as described, and combined and rotating and pressing the metal progressively into shape as described, being conducted from one pair of rolls to another through the agency of the guides, substantially as described.

HENRY BURT.  
J. T. HEDDEN.

No. 645.—*Improvement in Machinery for Dressing Screw Heads*.—What is claimed as the invention of the said Thomas W. Harvey is, first, the employment of a pair of spring pincers, which receives the blanks one at a time, and presents them to the jaws point foremost, substantially as described.

Second. In combination with the mandrel and jaws, or equivalent means for receiving and holding the screw blanks, the employment of a punch or driver for inserting the blank to the required distance, substantially as described.

Third. The combination of the pincers for transferring and presenting the blank to the jaws, or equivalent therefor, with the punch or driver, substantially as described, for driving the blanks out of the pincers and into the jaws, as set forth.

Fourth. The combination of the movable rest with the movable cutter head, substantially as described, and for the purpose of giving support to the blank while under the operation of the cutter, and to relieve the blank and get out of the way so soon as the cutting operation is completed; and this is claimed, whether the cutting operation be performed on the head or any other part of the blank.

Fifth. The particular manner herein described of constructing the adjustable turning head, the slide or seat piece *C*, the tool holder *D*, sliding on the piece *C* between the check pieces *B*<sup>1</sup>, with the respective adjustments thereof combined, arranged, and operating so as to effect the setting of the tool, substantially as herein set forth.

The manner of operating the grinding dies and of separating the blanks in the hopper and conveying them to the feeding fingers, being similar to those described and used in the machine for cutting the threads, are not herein claimed.

H. A. HARVEY,  
*Assignee.*



No. 646.—*Improvement in Sewing Machines.*—What is claimed as new and desired to be secured by letters patent as the invention of William Lyon, is as follows:

First. The combination of a feeding foot *i* pressed on to the cloth and moved to feed the cloth, and then released from said cloth and returned to its former position, with a clamping foot *G* that is raised when the feed of the cloth takes place, as set forth.

Second. The vibrating bar *H*, feeding foot *i*, arm *k*, and revolving studs *m n*, arranged and acting substantially as specified, to communicate motion to the feeding foot, as set forth.

Third. A looping instrument constructed with cavity or notch, and an eye carrying the second thread, and receiving a side wise movement after the said looper has passed through the loop of needle thread, for the purpose of carrying the second thread across and beyond the descending path of the needle, when said looper remains in a position for the needle to enter said cavity or notch as it descends between the looper and the second thread, and then said looper receives a sidewise movement to its original position to clear the needle in drawing back, as described and shown.

Fourth. The reciprocating looper *I* formed with the cavity, as set forth, and with an incline *p*, in combination with a stationary screw, or its equivalent, to communicate the required sidewise movement to the looper, as specified.

Fifth. The arrangement of the segmental spring looper *I* and arm *O* on the rocking shaft *K*, for the purpose of adjusting and securing by the screws  $x^1$  and  $x^2$  the looping point in the desired position with great ease and accuracy, as set forth.

In witness whereof we, the assignees of the patent of William Lyon, of December 12, 1854, have hereunto set our signatures, in the presence of the witnesses subscribing hereto.

A. W. GOODELL.  
NELSON R. SCOVEL.

No. 647.—*Improvement in Safety Indicators for Steam Boilers.*—What I claim as my invention and desire to secure by letters patent, is a feed apparatus controlled by expansion and contraction, in combination with an expansion "tell tale," placed below the desired water level and above the level to which it would not be safe for the water in the boiler to descend, substantially as set forth.

Second. I claim the within described arrangement of the vessels *C* and *D*, as applied and connected with the feed pumps and steam whistle, for the purpose of regulating the pump and sounding an alarm, as set forth.

Third. I claim connecting the pipe *I* with the boiler, by means of the feed pipe *B*, as set forth, for the purpose described.

L. J. KNOWLES.

No. 648.—*Improvement in Lamps.*—What I claim as my invention, and desire to secure by letters patent, is securing the chimney to the removable deflector, and both of them to the lamp cap by means of a spring operating in the manner substantially as set forth.

Second. I claim a detached deflector in combination with a chimney, when the chimney is secured to the cap independently of the deflector, as set forth.

EDWARD F. JONES.

No. 649.—*Improvement in Ventilating Windows for Railroad Cars.*—I therefore claim the convergent ventilating window, as made with deflecting and light penetrating sides or surfaces, and an air opening *F*, and a closing window or cover *E*, essentially as above explained, and to be applied to the opening of a side of a railway car, substantially as specified.

And I claim the arrangement of a deflector guard entirely around the window opening, and in respect to the deflecting sides *A B C D*, as specified, not intending to claim a deflector or guard as applied to a car window opening, but to claim its arrangement on four deflecting sides or planes, and entirely around the opening between them, as set forth.

GEORGE NEILSON.

No. 650.—*Improved Reclining Chair.*—I claim, first, the general arrangement of devices, herein described, for actuating and sustaining both the back and foot rest, the same consisting of the arms  $f^1 f^1$  attached to the back in a projection thereof, and having a shaft which travels in grooves, formed in the supporting frame work of the chair and the arms, the whole being combined with the foot rest and frame, as set forth herein.

Second. I claim the combination of devices herein described, whereby the back can be placed and held in any desired position, and at the same time the proper length of arms retained; the same consisting of the hinged rails *p p*, sliding arms *s s*, locked upon said rails in any desirable manner, and mortises to receive the said rails, as set forth.

Third. I claim the foot rest, constructed and arranged substantially as described, when combined with a spring or weight, or its equivalent, to operate as set forth, so that the said foot rest may be raised or lowered at will, to adapt itself to the length of the limb of the occupant, substantially as described.

Fourth. In combination with a reclining chair, constructed as described, I claim the peculiar joint between the back and arms; the same consisting of the arm  $g^1$  attached to the



back, and turning upon a pivot in the groove or mortised sliding arm, whereby a very long arm may be obtained, as set forth.

AUGUSTUS ELIERS.

No. 651.—*Improvement in Hulls of Steam Vessels.*—What we claim under this patent as our improvement in steam vessels, is constructing the hull in form of a spindle, substantially as above described.

ROSS WINANS.  
THOMAS WINANS.

No. 652.—*Improvement in Revolving Fire-Arms.*—I claim, first, the combination of revolving breech and stationary barrel, with a lock so constructed as that the trigger used to fire the pistol, when drawn back, raises the hammer to full cock, and there holds it, the revolving breech being at the same time rotated so far as to bring one of the chambers in a direct line with the bore of the barrel, and fastened in that position preparatory to firing the piece, substantially in the manner described.

The peculiar arrangement of the parts of my lock, hereinbefore described, whereby the trigger is drawn back to raise the hammer, the heel of the hammer, on the point against which the main spring bears, is brought so nearly under the centre of motion of the hammer, that the force of the main spring is counterbalanced by the pressure of the trigger on the toe of the hammer, and thus it will stand at full cock, or may be fired at once, as may be desired.

The use of the tubular extension on the fore part of the rotating breech, extending beyond and underneath the breech end of the stationary barrel, through which tubular extension the end of the spindle projects, and into which the spindle fits closely, for the purpose of preventing the fouling of the spindle by the residuum of the smoke in firing.

The use of the collar at the end of the tubular extension, for the purpose of forming, in combination with the spindle, a locking connection between the revolving breech and the stationary barrel, with a corresponding recess for the reception of the collar, as hereinbefore set forth.

Forming that part of the spindle which enters the bore of the rotating breech of smaller diameter at the front extremity than at the end nearest the lock, but by reducing its diameter suddenly, so as to form a step or shoulder at one or more points within the rotating breech, in combination with the rotating breech having a bore of correspondingly diminished diameter, for the double purpose of sustaining the recoil of the breech in firing, and of aiding to prevent the fouling of the spindle by presenting an obstruction to the passage of the smoke between the spindle and the surface of the bore of the rotating breech.

Also, the connecting and locking the barrel and breech to the lock plate by means of a bracket and spring extending in front of the lock plate, in the manner described.

I disclaim originality in the combining of a rotating chambered breech with a barrel and lock, excepting in the particular manner set forth. Neither do I claim the use of the recoil shield as such, the collar on the tubular extension, or if the collar is not used the spindle of the shape hereinbefore described, sustaining or preventing the actual recoil of the breech. I also disclaim originality in the use of the vibrating tooth and spring in the hammer.

JOSIAH ELLS.

No. 653.—*Improvement in Vault Lights.*—What I claim in the continuation of illuminating vault covers is the open frame with its large aperture or apertures closed with glass, substantially as herein described, in combination with the protection grating, substantially as and for the purpose described.

THADDEUS HYATT.

No. 654.—*Improvement in Devices for Putting Up Caustic Alkalies.*—I claim the putting up of the caustic alkalies of soda and potassa in small quantities in airtight wrappings, cases, or boxes, in the manner hereinbefore described, or its equivalent, for the purpose of introducing into general use for domestic and other purposes these articles, which, owing to their peculiar chemical properties, have not heretofore been susceptible of general use in small quantities.

GEORGE THOMPSON.

No. 655.—*Improved Steam Valve.*—I claim, first, the valve D with a projecting hollow stem E, which is reduced so that its end presents an area only equal, or nearly so, to the receiving ports in the face of the valve, in combination with the main steam chest or chamber J, and an auxiliary steam chest or casing I, furnished with a stuffing box *d*, and constructed so as to cover the whole of the back of the valve, excepting the end of the stem or a portion of the back equal or nearly equal to the receiving ports in its face, substantially as and for the purposes set forth.

Second. In combination with the above, the peculiar manner herein specified of making the face of the valve D with six ports F F<sup>1</sup> F<sup>2</sup> G G<sup>1</sup> G<sup>2</sup>, three for receiving and three for ex-



hausting, said ports being arranged in such relation to each other that when the valve is applied to an oscillating engine, one receiving port always stands in line with an exhaust port, and that only four of the ports shall be in use when the engine is working, the other two being kept in reserve, so that by shifting the valve the engine will be instantaneously reversed under a full pressure of steam without shutting off the steam between the engine and the boiler, as herein described and set forth.

GEORGE RIESECK.

No. 656.—*Improved Machine for Threading Bolts.*—What I claim is the use of rotating dies in combination with cams, or their equivalent, when both are so arranged as to be capable of revolving about a common centre at different velocities, for the purpose of opening and closing the dies, substantially as described.

I claim the arrangement of cams with open spaces between them in combination with the die box and dies, substantially as described, to facilitate the changing of the dies.

I also claim the mode of attaching the lap holder to the revolving die box, substantially as described.

WILLIAM SELLERS.

No. 657.—*Improvement in Boxes for Preserving Alkalies.*—I claim the use of metallic boxes constructed as described, and united with cement infusible at the degree of heat at which the caustic alkalies of soda and potassa remain fluid, for the purpose of putting up those caustic alkalies in small quantities, as described.

GEORGE THOMPSON.

No. 658.—*Improvement in Self Dumping Coal Buckets.*—What I claim is the combination of a bucket suspended by the handle at points below its centre of gravity in combination with self acting detachable latch operated by the bucket touching the ground.

JOHN WÜST.

No. 659.—*Improvement in Lamps.*—I claim the arrangement of small tapers or wick tubes below and on both sides of the main or illuminating burner, in combination with a suitable cap, for the purpose of producing a more complete combustion, substantially as set forth.

WM. W. BATCHELDER.

No. 660.—*Improvement in Machines for Folding Paper.*—I claim, first, the employment of adjustable points or register pins, or their equivalents, for the purpose of correctly presenting printed sheets to a paper folding machine, substantially in the manner and for the purpose set forth.

Second. The combination of a registering apparatus with a paper folding machine, substantially in the manner described.

Third. The combination of the register pins with the fingers, reciprocating carriage, and slotted bar, for the purpose specified.

Fourth. The combination of the slotted reciprocating carriage with the knife *d*, as described.

Fifth. The combination of the slotted reciprocating carriage with the first pair of folding rolls and knife *d*, as specified.

Sixth. The combination of a folding knife, the edge of which is smooth, with one or more needle points projecting beyond and in a line with the edge thereof, as shown.

Seventh. Securing the needle points to the folding knife, in the manner and for the purpose specified.

Eighth. Securing the needle point or points to the folding knife in such a manner as that they shall have their main support back of the edge of said knife, as specified.

Ninth. So constructing paper folding machines, as that the sheet while being folded shall occupy the same time, or nearly so, while passing from the position for receiving its first fold, to that of the next and succeeding folds; as specified.

E. N. SMITH.

No. 661.—*Machine for Folding Paper.*—I claim as the invention of North the use of a stationary folding knife in a machine for folding printed sheets of paper, substantially as herein described, and as the invention of said North.

I also claim the combination of the folding knives *k k*, with the reciprocating carriage, as set forth, and as the invention of the said North.

I also claim giving to the reciprocating carriage its proper motion by means of the crank *K*, and slotted connection rod *M*, in combination with lever *N* and link *P*, substantially as described, and as the invention of the said North.

I also claim the device for raising and depressing the fingers, as fully shown Fig. 6, and as the invention of the said North.

I also claim the combination of the folding and carrying nippers with the stationary folding knife, substantially as described, and as the invention of the said North.



I also claim releasing the sheet from the nippers by means substantially as described, and as the invention of the said North.

I also claim the circular knives  $c^1$   $c^1$ , for separating the sheets, when operated substantially in the manner described, and as the invention of the said North.

I also claim the combination of the levers T and T<sup>1</sup>, with double concentric rock shafts D and E, substantially in the manner and for the purposes set forth, and as the invention of the said North.

I also claim the adjustable check, and the mode of releasing its hold by the absence of the nippers, as set forth.

STEUBEN T. BACON,  
*Assignee of John North.*

No. 662.—*Improvement in Machines for Folding Paper.*—I claim, first, forcing the paper required to be folded between the first set of folding rolls by the knife while the sheet is on the run.

Second. Forcing the paper to form the first fold between two converging and continuously moving, flexible, yielding surfaces.

Third. Forcing the sheet of paper required to be folded upwards, for the purpose specified.

Fourth. The use of a cord or curved edged knife for the purpose of forcing the sheet between the folding rolls.

Fifth. The stops for determining the proper position of the sheet for receiving its second and succeeding folds.

Sixth. The combination of the carrying bands with a stop for regulating the sheet in proper position to receive its second and succeeding folds, as specified.

Seventh. The combination of the rolls and endless aprons or bands with the guides, substantially as described.

Eighth. So arranging the knives, aprons, and rolls in a paper folding machine, as that the sheet may receive two or more parallel folds in succession.

Ninth. So arranging the carrying and folding rolls in a paper folding machine as that only a single series of endless aprons, or bands, shall remain in contact with the sheet, to conduct it while it is receiving more than one fold.

Tenth. The tightening pulleys and cords or bands hung upon the movable bar, for the purpose of giving proper direction to the sheet for receiving the next fold, after having received a parallel fold, as described.

Eleventh. So constructing a machine for folding paper as that one or more folds may be omitted at pleasure, and the folded sheet delivered outside of the frame and working parts of the machine, by simply detaching the knives and removing the stops, as described.

Twelfth. Supporting the folding rolls in adjustable boxes, bearings, or frames, for the purpose of squaring them with the print or register of the sheet to be folded, and providing for the contraction and expansion of the endless aprons or bands.

Thirteenth. The movable guides for the purpose of squaring the knives to correspond with the print or register of the sheet.

Fourteenth. Conveying motion to any pair of folding rolls, running at right angles to the preceding pair, by means of bevel gears placed at or near the centre of a roll and between the apron or bands, substantially as shown, whereby the machine is rendered more simple and perfect in its operation.

Fifteenth. Pressing the folded sheet previous to its delivery for passing it between two converging and continuously moving yielding surfaces.

E. N. SMITH.

No. 663.—*Improvement in the Distillation of Oils from Coal.*—We claim the destructive distillation of coal or other bituminous substances for the obtaining the liquid products thereof, in what is known as coal oils, by the process hereinbefore described, viz: combining the use of a low temperature not exceeding a low red heat, say about eight hundred and fifty degrees Fahrenheit, with the use of retorts so constructed as to have a rotary or other equivalent motion for the purpose of agitating their contents, substantially in the manner and for the purposes hereinbefore set forth.

DAVID ALTER,  
SAMUEL A. HILL.

No. 664.—*Improved Arrangement of Means for Working and Stopping Chain Cables.*—I claim the flaring and radially flanged annular recess in the capstan of working a cable of any given size or cables of several different sizes, the same being constructed and operating in the manner and for the purposes substantially as set forth herein.

I also claim, in combination with a capstan, a windlass which is capable of working a chain cable when only a partial turn is taken, a set of removable rollers so arranged in relation to the capstan, the deck pipes, and hawser holes, that either a port or starboard chain cable can be continuously hove in by means of said capstan and rollers, or can be directly run out of its locker without any previous overhauling, substantially as herein set forth.



I also claim the within described arrangement of bow stopper and after stoppers whereby more cable can gradually and controllably be given to a vessel whilst riding heavily at anchor, substantially as set forth.

I also claim the clearing guide in combination with the annular recess of a capstan or windlass which is capable of working a chain cable when only a partial turn is taken, for the purpose and in the manner substantially as set forth.

THOMAS BROWN.

No. 665.—*Improvement in Bandages.*—I claim the exterior spring frame *a*, constructed and arranged substantially as described, so that when the sides are closed by the pressure of the limbs the rear of the frame will remain open, for the purpose set forth.

I also claim the combination with the exterior frame, or when constructed and arranged substantially as described for the purpose herein set forth.

N. JENSEN.

No. 666.—*Improvement in Machines for Making Nuts, Washers, &c.*—I claim, as the improvement of William Kenyon, first, making nuts for bolts by subjecting the blanks of which the nut is to be formed, at a welding heat, to compression between swages or dies in a close die box or matrix, and punching the eye of the nut during the continuance of such pressure for the purpose of welding up any imperfections in the iron and giving a symmetrical shape and smooth finish to the nut, and of the preventing any injury to the nut which it might suffer by the passage of the punch through it, if it were not thus sustained by the sides of the die box, and forcibly compressed between the dies.

Second. The use of a die box, closed at the sides, for surrounding the nut, and sustaining its sides while it is subjected to pressure, substantially in the manner hereinbefore described.

Third. The combination of the compressing dies P and T, with the die box M, for the purpose of compressing the nut while it is sustained at the sides, and thus welding up any imperfections in the iron, and compacting its fibre so as to give strength as well as exterior finish and symmetry to the nut.

Fourth. The combination of the punch L, with the die box M, and compression dies P and T, for the purpose of compressing, confining, and restraining the opposite faces of the nut during the passage of the punch through it, and thus preventing any injury to the nut during the process of punching; and also for the purpose of ensuring the making of the nut in the proper relative position to its upper and lower surfaces.

Fifth. The combination of the die box M, the compressing dies T and P, and punch L, constructed and arranged substantially as hereinbefore described, for the purpose of making hot pressed nuts at a single operation by severing a blank from a bar of heated metal, compressing it into shape, and punching a hole, or eye, through it while under compression and delivering the finished nut from the machine.

Sixth. Arranging the compressing dies in relation to the punch, and regulating their relative motion in such manner substantially as hereinbefore described, that any excess of iron in the blank shall be forced into the path of the punch in the compressing dies, thus securing the compression of the nut without risk of damage to the machine.

JAMES WOOD.

No. 667.—*Improvement in Railroad Car Springs.*—We claim, as the invention of Henry M. Paine, a railroad car spring, consisting of a body of felt or other fibrous material condensed to a given density between two rigid plates, and prevented from expanding beyond that density by a bolt or bolts, substantially as herein set forth.

H. G. LEISENRING,  
NATHAN MIDDLETON,  
WILLIAM S. NOBLE.

No. 668.—*Extension Finger Ring.*—We claim a divided springing finger ring, constructed substantially in the manner and for the purposes specified, whereby the springing of the ring permits the same to pass the joints as set forth.

SAMUEL FRIEND,  
GEORGE SEILER.

No. 669.—*Improved Shutter Operator.*—I claim the employment of a single shaft operated internally and operating externally upon a window blind, when said shaft is made to effect the double purpose of operating both the blind and the slats; and this whether I construct and arrange the hinge and levers in the manner herein specified or not.

CHARLES R. EDWARDS.

No. 670.—*Improvement in Grinding Mills.*—I claim constructing a grinding mill with flat plates dressed on both sides, having a longitudinal reciprocating vertical and oscillating motion, in combination with flat stationary plates likewise dressed on both sides, the whole constructed and operated substantially as described.



Second. I claim the notched form of the upper edges of the plates for the purpose of preventing the mill from choking, and to facilitate the feeding of the article to be ground between the grinding surfaces, as described.

GELSTON SANFORD.

No. 671.—*Improved Handle for Table Cuttlery.*—I claim forming the handle of two parts *a b*, which are encompassed at their junction by a ferrule *d*, the tang *A* passing through both parts of the handle, and the parts being secured thereon by a nut or washer *e* or a rivet *e*<sup>1</sup>, substantially as described.

JOSEPH W. GARDNER.

No. 672.—*Improvement in Machinery for Preparing Oval Picture Frames.*—I claim a lathe, with a face plate revolving in an oval path, in combination with a scraper adapted to the form of the desired moulding of the oval frame when the said scraper is so arranged as to be self-adjusting laterally with the said moulding, substantially as and for the purpose herein set forth.

WILLIAM GARDNER.

No. 673.—*Improvement in Harvesting Machines.*—I claim, first, the combination of the single plate *H* and main wheel, substantially as described.

I also claim the combination of the main wheel *K*, single plate *H*, and rim *L*, when connected together, and operating in the manner and for the purpose set forth.

I also claim placing the vibrating wheel on the outside of the frame, or so that the outside of the frame does not bear on the outside of the wheel, in combination with the triangular shaped frame on the inside of the wheel, substantially as described.

I also claim hanging the seat to the plate *H* and to the standard *S*, in the manner and for the purpose set forth.

I also claim a hinged lever seat and outside stirrup or supporter, in combination with a wheel having no outside frame or support, substantially as herein represented.

WM. A. KIRBY.

No. 674.—*Improvement in Machinery for Enamelling Mouldings, &c.*—What I claim in coating or enamelling the surface of mouldings is the employment of a plate whose lower edge is formed the reverse of the transverse form of the moulding to which it is applied, when such plate is made self-adapting to the surface of the moulding during the longitudinal movement substantially as herein described and for the purpose set forth.

I also claim the employment of a hopper to contain the composition for enamelling when the lower edges of the end plates thereof are formed the reverse of the transverse form of the moulding, and the moulding to be enamelled is employed as the bottom of such hopper, substantially as described and for the purpose set forth.

ROBERT MARCHER.

No. 675.—*Improved Amalgamator.*—I claim, first, the use of elongated amalgamating chambers *I*, when arranged to operate in the manner and for the purposes specified.

Second. The arrangement of the amalgamating chambers *I*, within a heated chamber *A*, for the purposes specified.

LEWIS SOLOMON.

No. 676.—*Improvement in Steam Gauges.*—I claim the combination of a case, perforated at both ends, with a spring valve, the spring forming the sides of the valve being arranged so as to cut off communications between the perforations in the opposite ends of the case, and perform the duty of a manometer spring, as described.

I also claim the combination of valve stem, disk, and gland, with the interposed rubber spring, arranged substantially as described, so as to press the valve towards its seat, and pack the valve stem, without the spring binding the valve stem on the valve case.

THOS. STUBBLEFIELD.

No. 677.—*Improved Smelting Furnace.*—I claim constructing furnaces, with the hearth and boshes of an elliptical or elongated form, substantially as described, in combination with the application of the blast at sides, so arranged as to introduce the blast in the direction of the breadth, and for the purposes specified.

I also claim, in combination with the hearth and boshes made of an elliptical or elongated form, substantially as described, the construction of such furnaces with two mouths, one at each end, for working and tapping, substantially as and for the purpose specified.

CHAS. C. ALGER.

No. 678.—*Improvement in Reclining Chairs for Railroad Cars and Other Uses.*—What I claim as the invention of Samuel M. Perry is, first, to so combine the back *D* with the two end frames *B C*, by means of bars *E F* jointed to it, one, or two studs *a*, and one or two series of notches *d d*, or equivalents therefor, that the said back, when not a reversible one, may be



raised and inclined in various positions so as to not only support the back but the head of a person at the same time.

Second. Making the back reversible by means of two series of notches *d d* and *e e*, &c., and two sets of studs *b* or their equivalents, the same being arranged on opposite sides of the chair, and made to operate as specified.

Third. The improvement of making each arm or bar *E F* with a rack or racks of teeth, or succession of notches, or equivalents therefor, for the purpose of adjusting and securing the back in the desired position, whereby the occupant can alter or vary said position without rising from the seat, substantially as set forth.

ISAAC L. DEVOE,  
Assignee

No. 679.—*Improvement in Making Illuminating Gas.*—I claim the process which consists, first, in mixing materials, substantially such as are herein specified:

Second. In introducing them into a chamber, substantially such as is described, located when the process is going on within retort.

Third. In causing the products of distillation of the mixture to pass out of such interior chamber, and then be subjected to a higher degree of heat by passing in contact with the heated surface of the retort itself, substantially as specified, not intending to claim any one step of the process separately, but only the process substantially as herein set forth as a whole.

N. AUBIN.

No. 680.—*Improvement in Gas Generators.*—I claim the combination with a gas retort of a removable interior chamber, open at bottom, and having such relative shape with regard to the retort and so located therein, substantially as is specified and for the purposes hereinbefore set forth; and this I claim irrespective of the location of the opening through which said removable chamber can be introduced or withdrawn, and either with or without an apparatus for introducing steam into the retort.

N. AUBIN.

No. 681.—*Improvement in Tight Joints for Gas Retorts.*—I claim a joint between a gas retort and its cover, made by fusible metal contained in a groove into which enters a rim; the joint being substantially such and for the purposes hereinbefore set forth.

N. AUBIN.

No. 682.—*Improved Tubular Elastic Valve.*—I claim, first, the flexible valves herein described, for the purposes specified.

Second. The method herein described of adapting the said flexible valves to pump or other tubes of any kind, whether rigid or elastic, and inserting them therein, in the manner set forth and shown, or in any equivalent mode.

FRANKLIN PEALE.

No. 683.—*Improvement in Spring Bed Bottoms.*—I claim the within described spring bed bottom, consisting of the combination: the frame *a*, slats *b*, and radial springs *c*, essentially as described.

HIRAM TUCKER.

No. 684.—*Improvement in Machinery for Making Wood Screws, &c.*—What is claimed as the invention of Cullen Whipple, is: In combination with a mandrel, which carries chuck or griping jaws, an automatic mechanism for closing said jaws upon the blank, keeping them closed to hold the blank while being dressed, and then opening them to release the dressed blank, arranged and operating in such manner to leave the mandrel (during the time the blank is being acted on by the cutter) free from endwise pressure by the chucking mechanism; also, the combination of toggle levers carried by the mandrel; a stop or hold-fast, also carried by the mandrel, to lock and hold the toggle levers when pushed beyond a straight line; and griping jaws, with shanks having sufficient elasticity to maintain a firm hold of the jaws upon the blank, when the toggle levers have passed a straight line, substantially as herein set forth.

NEW ENGLAND SCREW COMPANY,  
By HENRY L. KENDALL, *Agent*.

No. 685.—*Improvement in Machinery for Making Wood Screws, &c.*—What is claimed as the invention of Cullen Whipple, is: A feeding punch, and mechanism for causing it to approach within different distances of the griping jaws; griping jaws adapted to receiving and holding screw blanks in variable positions and of different lengths, in combination with a suitable tool holder and cutting tool, substantially as herein set forth.

NEW ENGLAND SCREW COMPANY,  
By HENRY L. KENDALL, *Agent*.



No. 686.—*Improvement in Machinery for Making Wood Screws, &c.*—What is claimed as the invention of Cullen Whipple, is: The spring discharging punch, in combination with the mandrel and griping jaws, when the punch and spring are both carried by the mandrel, substantially as herein set forth.

NEW ENGLAND SCREW COMPANY,  
By HENRY L. KENDALL, *Agent*.

No. 687.—*Improvement in Machinery for Making Wood Screws, &c.*—What is claimed as the invention of Cullen Whipple is, first, the feeder, composed of a sectional trough, with a close bottom and open top, into which the blank drops and arranges itself before a traversing rod, which pushes it into the griping jaws, as described.

Second. The combination of an adjustable automatic feeding punch and a spring discharging punch, with an intermediate trough or equivalent means for bringing the blank into line with the two punches, substantially as herein set forth.

Third. The arrangement of a spring discharging punch, with its end far enough within the end of the grooves in the griping jaws to leave an opening for admitting the end of a blank and guiding it against the end of the discharging punch, thereby rendering the chucking more certain, substantially as herein set forth.

NEW ENGLAND SCREW COMPANY,  
By HENRY L. KENDALL, *Agent*.

No. 688.—*Improvement in Printing Presses.*—I claim, first, the combination and arrangement of the feed table, the fly or pile board, the platen and bed, with the set or sets of independent revolving nippers or grippers, for the purposes described.

Second. I claim the fly board, with its adjustable gauge or guide, in combination with the grippers or nippers, to ensure the even piling of the sheets of paper, or their equivalents, whatever the size of the sheet may be.

Third. I claim the vibrating double cam for throwing off and on the impression.

Fourth. I claim two or more distributing rollers, having a lateral motion upon a main distributor, which shall move independent of, and in opposite direction to, each other, and thus alternately cross and recross each other's distribution, for the purpose of giving a uniform inking to the form.

Also, the two distributions given to the inking rollers, upon one cylinder, for each impression, (heretofore patented by me,) in combination with the rotating reciprocating bed, with the spring extensions attached; all of which is herein described and set forth.

GEO. P. GORDON.

No. 689.—*Automatic Grippers for Carrying Sheets of Paper in Printing Presses.*—I claim, first, one or more sets or grippers, nippers, or fingers, to revolve, independent in themselves, upon an axis, for the purpose of carrying the sheets of paper to the place of impression, or for carrying the sheet, after it has received the impression, to its place of deposit upon the pile board or fly board, or for either or both of these purposes; thus receiving and piling the sheets of paper in an even and regular heap, by the acts of my automatic grippers, or independent revolving nippers, or their equivalents.

Second. I claim the combination of the independent revolving grippers with the vibrating feed board, or its equivalent.

Third. I claim the combination of the independent revolving grippers with a pile or fly board, to be used as described, or in some equivalent way.

Fourth. I claim the combination of the independent revolving grippers with a feed board and a pile or fly board, or their equivalents, substantially as herein described.

GEO. P. GORDON.

No. 690.—*Improvement in Harvesters.*—I claim, first, the shoe piece *v*, and rack 14, to adjust the height of the outer end of the finger board, substantially as and for the purposes specified.

I also claim the shaft *f* passing across the end of and nearly at right angles to the shaft *I* of the main wheel *a*, when fitted in such a manner that its pinion *i* can be thrown into and out of gear with the face wheel *K*, for the purposes and substantially as specified.

THOMAS D. BURRALL.

No. 691.—*Improvement in Coffee Roasters.*—I claim, first, the within specified arrangement of the plates or shelves *D D*<sup>1</sup>, for the purposes set forth.

Second. The combination of a window or windows in a coffee roaster, with agitating or elevating plates or shelves, substantially as and for the purposes set forth.

THEO. HEERMANS.

No. 692.—*Improvement in Grain and Grass Harvesters.*—I claim, first, the device for adjusting the cutting apparatus, which may be raised or lowered without changing the height of



the main frame, in combination with the finger bar, either with or without the removable platform, substantially in the manner specified.

Second. The combination of the inner projecting ends of the main frame, with the adjustable cutting apparatus, substantially in the manner and for the purpose specified.

Third. Supporting the clamp and finger bar by means of the slotted iron frames *K K*, and locking bolts *i i*, in combination with the cross pieces *T T*<sup>1</sup> of the main frame, substantially as described.

Fourth. The mould board *L*, constructed and arranged substantially in the manner and for the purpose set forth.

Fifth. Extending or widening out the upper part of the guard finger, substantially as represented by the overhanging bars *m m*, in combination with the central bar *n*<sup>1</sup>, in the manner and for the purposes specified.

Sixth. Arranging the three pronged fingers above described, so that they mutually brace each other in front of the finger bar, as set forth; and are also braced and supported at each end of the cutter bar by the projections *J* and *m*<sup>3</sup>, substantially in the manner and for the purpose specified.

Seventh. The raking apparatus, constructed and operating in the manner substantially as described.

Eighth. The movable fulcrum upon which the rake is suspended and operated, in the manner substantially as described.

ELIAKIM B. FORBUSH.

No. 693.—*Improvement in Grain and Grass Harvesters.*—I claim, first, the manner of constructing and uniting the inner rear corner of the main frame, so as to depress or drop the shoe and cutting apparatus, and serve as a continuation of the shoe for treading down the stubble and mown grass, in the manner and for the purposes specified.

Second. The combination of the guide stirrup *B B* with the front of the main frame, so as to permit the draft pole *P* to play above and below the front of the main frame, substantially as described.

Third. Connecting the draft pole to the machine by the oscillating pendant, substantially as and for the purposes described.

Fourth. So connecting the draft pole to the machine as that the draft shall be from the axle or centre line of the driving and supporting wheel, in connection with rear extension of the pole, in the manner and for the purposes specified.

Fifth. The combination of the extended finger bar with the adjusting shoe *E*, and adjustable hinged runner *q*, substantially as described for the purpose specified.

Sixth. The combination of the main frame, draft pole *P*, guide stirrup *B*, and adjustable shoe *E*, arranged with each other in the manner and for the purpose substantially as specified.

Seventh. The adjusting shoe *E*, constructed and operating in the manner above set forth.

Eighth. The arrangement of the caster wheels *d* and *d d*, with adjustable connecting bars, in relation to the finger bar platform and frames of the machine in the manner and for the purpose substantially as described.

ELIAKIM B. FORBUSH.

No. 694.—*Improved Washing Machine.*—I claim, first, the vessel *B*, with its yielding valved diaphragm *J* and the perforated diaphragm *I*, or its equivalent, in combination with a pipe *G*, communicating with the vessel at a point above, and the pipe *H* at a point below the said diaphragm, and both pipes communicating with any suitable heating apparatus, substantially as and for the purpose set forth.

Second. The reciprocating plunger *C*, with its enlarged end constructed as set forth, namely, with the recess *m*, flanch *n*, and perforations *p*, in combination with the yielding diaphragm *I*, for the purpose specified.

Third. Providing the plunger *C* with an upper enlargement *q*, concave on the under side, and arranged in respect to the lower plunger, substantially as and for the purpose set forth.

HAMILTON E. SMITH.

No. 695.—*Improvement in Grain Harvesters.*—I claim, first, the additional apron, to convert the usual rear discharge into a side discharge of the cut grain, substantially as herein described.

I also claim the combination of the curved supports and the adjustable journal box piece, to preserve the relative positions of the cogs in the mitre gearing, and at the same time allow of raising and depressing the driving wheel, substantially as described.

I also claim the notches in the back corners of each knife, to prevent clogging or lodgement of fine grass in the cavities of the guards, said notches effecting a good purpose and not weakening the cutter, as herein represented.

THOMAS D. BURRALL.

No. 696.—*Improvement in Grain Harvesters.*—I claim the location of the raker's seat with regard to the drive wheel and platform, as described and for the purpose set forth.



I also claim, in combination with a raker's seat, located as described, extending off the rear of the platform far enough back to allow the raker from his seat to turn the grain upon the platform and rake it off in an arc of a circle by a circular sweep or quarter turn movement of his rake, substantially as described.

THOMAS D. BURRALL.

No. 697.—*Arrangement of Buckets of Paddle Wheels.*—I claim arranging the floats or buckets of a paddle wheel upon its arms or the equivalent thereof, whereby the buckets shall be continuously increasing and diminishing their depth in the water as the said wheel revolves, as and for the purposes herein set forth.

M. A. CROOKER.

No. 698.—*Improvement in Machines for Pegging Boots and Shoes.*—What I claim is driving the pegs into boot and shoes automatically by means of a peg driver operated up and down by a positive mechanical movement, whether impelled by a cam, eccentric, or crank, or other equivalent, substantially as and for the purposes specified.

J. J. GREENOUGH.

No. 699.—*Improvement in Machines for Pegging Boots and Shoes.*—What I claim is the moving the sole of the shoe along by means of the awl that forms the hole in which the peg is inserted, in combination with the peg driver, whether the peg driver be or be not employed to perform the additional function of presenting the peg, whereby each hole made by the awl is brought in succession in line for inserting the peg before the awl is withdrawn, as set forth.

J. J. GREENOUGH.

No. 700.—*Improvement in Machines for Pegging Boots and Shoes.*—What I claim is cutting off shoe pegs from a strip of peg wood or other material by means of a lateral or side cut that will cut straight across, substantially as and for the purposes set forth, when combined with suitable ways, in which the strip slides, and machinery for driving the pegs, as specified.

I also claim inclosing the peg by the cutter until it is driven as specified, by making the cutter, when in position, a part of the guiding tube, substantially as set forth.

I also claim the combination of the endless feed, with a cutter for severing the pegs in a shoe pegging machine, as above specified.

J. J. GREENOUGH.

No. 701.—*Improvement in Machines for Pegging Boots and Shoes.*—I claim connecting the last with a horizontal slide or plate capable of presenting the shoe or boot, substantially as described, so that the shoe or boot attached thereto may be turned and moved in any direction in a horizontal or inclined course, in combination with a mechanism, substantially such as described, which tends constantly to force it upward against a rest or guide, but which will permit it to yield downward, as described; but this combination I claim only when combined with the pegging mechanism above described or any equivalent therefor.

And I also claim, as an automatic means of moving and guiding the last to present it to the pegging apparatus in the required line of pegging, the guide groove and guide and pinion and curved rack, substantially as described, in combination with the mechanism above described or the equivalent thereof, which permits the last to be moved in any desired direction, as set forth.

J. J. GREENOUGH.

No. 702.—*Improvement in Machines for Pegging Boots and Shoes.*—I claim the combination of the universal movement carriage and lateral awl movement for properly presenting the shoe to receive the pegs in succession, as herein specified.

I also claim the combination of the mechanism for the cutting and feeding of the pegs, as herein described, or any equivalent therefor, with the automatic peg driver, as described.

I also claim the combination of the following elements or their mechanical equivalents, namely, the peg former, the peg feeder, the peg driver, and the mechanism for moving the shoe, herein described; thus constituting an automatic machine for pegging shoes, as set forth.

J. J. GREENOUGH.

No. 703.—*Improvement in Machines for Pegging Boots and Shoes.*—I claim the pegging of boots and shoes with nails, or pegs of drawn wire, substantially as above described.

I also claim driving the pegs by means of the cutting nippers, said nippers cutting off the peg after it is driven, substantially as specified.

J. J. GREENOUGH.

No. 704.—*Improvement in Tailor's Shears.*—I claim the oblique rectilinear slot C in the elongated shank of the lower blade A, in combination with the fulcrum D and a lever con-



necting the two portions of the shears behind the fulcrum, the whole constructed and operating substantially as and for the purposes set forth.

R. HEINISCH.

No. 705.—*Improved Machine for Making Paper Bags and Envelopes.*—First. We claim the bar K to relieve the end of the under sheet of the weight of the pile, partially or wholly.

Second. The friction bar I to separate the under sheet.

Third. The guide bar L, in connection with bar I, to hold the sheet in place for the jaws.

Fourth. The lifter M to relieve the sheet from the weight of the pile.

Fifth. The feeding from the bottom of the pile.

Sixth. The combination of weight bar, friction bar, guide bar and lifter, constituting a feeding apparatus.

Seventh. The jaws to place the paper in position.

Eighth. In combination with machinery for making bags from paper of any size, we claim a former, of the shape and dimensions required by the nature of the work to be done, over or around which the paper is to be folded for the purpose of producing the bag or bags, substantially as described. We wish it understood, however, that we distinctly disclaim the use of a series of moulds in a machine for making paper boxes, such a series having been used in the paper box machine of R. L. Hawes, patented January 16, 1855. Nor do we claim moulds placed at the extremities of the arms of a wheel, and used in the manufacture of paper boxes, such an arrangement having been employed in the box machine of Louis Koch, patented March 13, 1855.

Ninth. The pasters and side folders.

Tenth. The combination of the table, the bar B, the side folders and pasters, all constructed as herein set forth, or any other substantially the same.

JOHN H. LEWARS, *President.*

CHARLES C. BERGMANN,

*Secretary and Treasurer.*

No. 706.—*Improvement in Sewing Machines.*—I claim as the invention of George W. Stedman, deceased, first, the tube herein described, receiving thread in the manner specified and acting in combination with the needle, so that each forms a series of loops, each of which loops receives one, and is received by the next one of the other series, as set forth.

Second. I claim the auxiliary plate carrying the guide for the looping tube, and secured to the bed plate substantially in the manner specified, so as to be adjustable to any desired position relatively with the needle, for the purposes set forth.

Third. I claim a reciprocating tube or equivalent device coöperating with an eye-pointed needle to concatenate or form the stitch, and produce sewing essentially as specified, combined with and receiving its motion from one end of a lever, the fulcrum of which is at or near the bed or table of the machine, while the other end carries the said needle, substantially as described.

Fourth. I claim feeding the cloth by means of a needle which is made to pass through the same in a position, with respect to its length, diagonal to its line of movement, as specified, in combination with a spring to throw the needle into position to feed the cloth the next stitch, and the screw, or its equivalent, to determine and regulate the length of the stitch, substantially as specified.

EMELINE M. STEDMAN,

*Executrix of George W. Stedman, deceased.*

No. 707.—*Improvement in Grain and Grass Harvesters.*—I claim, first, the arrangement and connection of the rear cross timber X in relation to the main frame, in the manner and for the purposes specified.

Second. The peculiar construction and arrangement of the gear frame B, in relation to the main frame, driving wheel, and gearing, in the manner and for the purpose specified.

Third. The gear key D, in combination with the gearing shaft, constructed, arranged, and operated substantially in the manner described, for the purpose specified.

Fourth. The locks *n* and *r s* in the clamp, as and for the purpose set forth.

Fifth. The track clearer M *m* provided with the arms *y y*, arranged in relation to each other and socket piece *m*, to operate in the manner and for the purpose substantially as described.

Sixth. A recess IX made in the outside shoe, in the rear of the cutter bar, as and for the purpose specified.

Seventh. The second angle (at *c r*) formed by the brace bars of the guard finger, substantially as herein described.

ELIAKIM B. FORBUSH.

No. 708.—*Improvement in Gas Burners.*—I claim producing a light which may be increased or diminished at pleasure, by means of the adjustable heater D, or heat receivers *ee*, operating



in connection with a wick tube or holder B and the flame of the lamp or burner, substantially as herein specified; or within the meaning and intention thereof.

JOHN K. O'NEIL.

No. 709.—*Improvement in Knitting Machines.*—I claim stopping a knitting machine when the yarn accumulates in the needles, by the action of the accumulated yarn, substantially as herein set forth.

NELSON P. AIKIN.

No. 710.—*Improvement in Shuttles for Weaving Cloth.*—I claim furnishing the shuttle with a spring and catch, so arranged that the bobbin will be received or released at one operation, substantially as described.

JAMES BALDWIN.

No. 711.—*Improvement in the Mode of Converting the Backs of Car Seats into Beds or Lounges.* I claim, first, the use of the backs of car seats for forming upper horizontal beds or lounges, substantially as set forth.

Second. So arranging the backs of contiguous seats that they may meet and remain in the same horizontal plane, substantially as and for the purposes set forth.

Third. The use of a cushioned surface intermediate between the cushioned surfaces of two car seats, so as to form with the same a horizontal bed, berth, or lounge; said intermediate cushion forming an attachment to and appearing as part of the car seat when not adjusted to aid in forming a berth, bed, or lounge, substantially as set forth.

Fourth. Forming a continuous line of lower horizontal beds, berths, or lounges of a series of car seats in railroad cars, by uniting the several seats so as to fill up the entire space between the seats with adjustable cushioned attachments of the seats, whatever be the character or disposition of said attachments, so long as they form and appear as parts of the seats, when not adjusted to form said continuous line of lower beds, berths, or lounges, substantially as and for the purposes set forth.

HENRY B. MYER.

No. 712.—*Improvement in Retorts for Distilling Oils from Coal.*—I claim, first, the use of a straight or curved blade or blades placed on the agitators or arms *h* of shaft *e* for the purpose of agitating, lifting, mixing, and bringing all parts of the mass within the retort in contact with the heat, as herein described and set forth.

Second. The arrangement near the outer edge of one end of a retort of four or more supply and discharge openings, and on the other end near the outer edge of four or more exit pipes placed on a line with and opposite to the supply and discharge openings as herein described.

JOHN NICHOLSON.

No. 713.—*Improvement in Coffee Pots.*—I claim, first, the combination of boiler *a*, still worm condenser *b*, conducting plate *g*, and the external opening of the still worm at *g*<sup>1</sup>, when these devices are so arranged in relation to each other that an opening to the external air shall be provided for the non-condensable gases, while the condensable vapors are reduced to a liquid, without coming in contact with the condenser water, and then turned by conductors into the boiler, as and for the purposes specified.

Second. The arrangement of the joint *c*, below the spout, so that no vapor can pass through the spout without first entering the joint, as set forth.

Third. The employment of conductors in combination with the condenser, for the purpose of filling the water joints or keeping it full, as and for the purpose specified.

W. H. ELLIOT.

No. 714.—*Improvement in Mowing and Reaping Machines.*—I claim, first, connecting the frame of the platform with the frame carrying the driver and raker's seat, in the manner substantially as set forth, namely: securing the relative position of the two frames by means of the brace *S* in the rear, and the laterally inclined draw shoe in the front, when the above parts are constructed and arranged, as described.

I claim, secondly, the shoe *K*, in combination with the tongue attachment in front thereof, the said shoe being constructed and arranged, substantially as described, to perform the functions as set forth herein.

I claim, thirdly, the rod *4* and the rails *5*, connected in the manner described, in combination with the pole *N*, the rocking shaft *3*, and the lever *2*, the whole being constructed, arranged, and operated in the manner specified, and for the purpose set forth.

I claim, fourthly, the arrangement, in relation to the driver's seat, of the lever and mechanism connected therewith for raising and lowering the cutter bar, substantially as set forth herein, whereby the sickle may be raised in the manner described.

J. W. MULLEY.



No. 715.—*Improvement in Grain Separators.*—I claim the endless chains  $d$ , composed of metallic links provided with protuberances or depressions, when used in combination with suitable driving chain gears, to impart a positive motion to the straw carrier of a threshing and separating machine, as explained.

J. R. MOFFITT.

No. 716.—*Improvement in Grain Separators.*—I claim in combination with a receptacle in which the tailings are deposited by the winnowing apparatus, the arrangement of the screw elevator  $O$ , in relation to the threshing cylinder, for the purpose of returning the tailings to be rethreshed, as set forth.

J. R. MOFFITT.

No. 717.—*Improvement in Grain Separators.*—I claim the reversible screen  $k^2$ , and delivery spout  $l^2 m^2$ , arranged, adapted, and constructed substantially in the manner described, with and to the discharging spout of the “fanning mill” or “shoe” of a threshing machine, so as to be isolated from the winnowing arrangement, and made to deliver at either one side or the other of the machine, as set forth.

J. R. MOFFITT.

No. 718.—*Improvement in Grain Separators.*—I claim the construction and arrangement, substantially as described, of the rotary beater  $A$ , within the apron, in combination with the falling sections  $B^3$ , operating in the manner and for the purposes set forth.

J. R. MOFFITT.

No. 719.—*Improvement in Grain Separators.*—I claim the arrangement of disconnected shafts  $H H^1$  carrying pinion chain gears  $E e, E^1 e^1$ , rotated at equal speeds from a single shaft or driver, and acting to drive the endless apron from its lower end, while permitting the escape of the straw through the lower openings of the apron, as set forth.

J. R. MOFFITT.

No. 720.—*Improvement in Machinery for Preparing Oval Picture Frames.*—I claim the combination of a scraper adapted to the form of the moulding with the revolving face plate of a lathe, when the said scraper is arranged to be self adjusting laterally to the said moulding, for the purpose herein set forth.

WILLIAM GARDNER.

No. 721.—*Improvement in Grain and Grass Harvesters.*—What is claimed as the invention of Sylla & Adams is, first, an elevated binding table in combination with the platform for receiving the grain as it is cut, substantially as set forth.

Second. The combination with the binding table of more binders' stands on a lower level than that of the table, substantially as set forth.

Third. The combination of a binding table with a binders' stand, having an elevated side for the binder to rest his legs against, and thereby steady himself without the aid of his arms, both of which are thus left at liberty to do the binding, substantially as set forth.

Fourth. The arrangement of the rakers' and binders' stands, substantially as herein set forth, so that grain may be raked from the platform and delivered upon the binders' table before the several binders' stands, in the manner substantially as set forth.

Fifth. The arrangement of the dumping tray with the rakers' and binders' stands, substantially as set forth.

CORNELIUS AULTMAN,  
LEWIS MILLER,  
THOMAS R. TONNER,  
JACOB MILLER,  
GEORGE COOK,

Composing the firm of C. Aultman & Co.

No. 722.—*Improvement in Grain and Grass Harvesters.*—What is claimed as the invention of Sylla & Adams is, first, the combination of the finger beam and the main frame with a yielding coupling arm  $J$ , whereby the progressive movement of the finger beam over the ground will be controlled by the main frame, and its upward and downward movements by the undulations of the ground over which it is drawn, substantially as herein set forth.

Second. The combination of a yielding coupling arm  $J$ , and a yielding brace bar  $K$ , with the finger beam and main frame, substantially as herein set forth.

Third. The combination of the yielding bars  $J K$  and  $K^1$ , and the removable bolts  $L^1 L^2$ , or the equivalent thereof, with the finger beam and main frame, whereby the finger beam may



be allowed to slide loosely on the ground, to adapt the machine to mowing, or be held firmly above the ground to adapt the machine to reaping, substantially as herein set forth

CORNELIUS AULTMAN,  
LEWIS MILLER,  
THOMAS R. TONNER,  
JACOB MILLER,  
GEORGE COOK,

*Composing the firm of C. Aultman & Co.*

No. 723.—*Improvement in Grain and Grass Harvesters.*—What is claimed as the invention of Sylla & Adams is, the short finger beam, in combination with the yielding connection with the main frame or its equivalent, substantially as herein set forth.

CORNELIUS AULTMAN,  
LEWIS MILLER,  
THOMAS R. TONNER,  
JACOB MILLER,  
GEORGE COOK,

*Composing the firm of C. Aultman & Co*

No. 724.—*Improvement in Grain and Grass Harvesters.*—What is claimed as the invention of Sylla & Adams is, the combination of the finger beam, with the hinges by which it is drawn, arranged above the plane of the cutter, substantially as herein set forth.

CORNELIUS AULTMAN,  
LEWIS MILLER,  
THOMAS R. TONNER,  
JACOB MILLER,  
GEORGE COOK,

*Composing the firm of C. Aultman & Co.*

No. 725.—*Improvement in Grain and Grass Harvesters.*—What is claimed as the invention of Sylla & Adams is, the combination of a counterpoise weight, or the equivalent thereof, with that end of the finger beam next the main frame, to equalize its pressure upon the ground, substantially as set forth.

Also, the combination of a counterpoise weight or the equivalent thereof, with each or either end of the finger beam to diminish its pressure, upon the ground substantially as set forth.

CORNELIUS AULTMAN,  
LEWIS MILLER,  
THOMAS R. TONNER,  
JACOB MILLER,  
GEORGE COOK,

*Composing the firm of C. Aultman & Co.*

No. 726.—*Improvement in Grain and Grass Harvesters.*—What is claimed as the invention of Sylla & Adams is, the combination of a stop with the mechanism for connecting the finger beam with the main frame and allowing it to rise and fall, substantially as herein set forth.

CORNELIUS AULTMAN,  
LEWIS MILLER,  
THOMAS R. TONNER,  
JACOB MILLER,  
GEORGE COOK.

*Composing the firm of C. Aultman & Co.*

No. 727.—*Improvement in the Manufacture of India Rubber Goods by means of Zinc Compounds.*—What is claimed as the invention of Tyer & Helm is, India rubber fabrics made by the combination of caoutchouc in its several varieties with the sulphuret of zinc, or the bisulphuret of zinc, or the hyposulphite of zinc, or the sulphite of zinc, and also with zinc compounds in their several forms, as herein set forth, and sulphur, and in combination with these in either case, the submitting said compound to the action of steam at a high temperature, the whole being combined and manufactured substantially as above described.

HORACE H. DAY.

No. 728.—*Improvement in Apparatus for Raising Water.*—I claim, first, the combination of a casing whose sides slope outward from the induction opening, with a revolving piston, the edge of whose blades conform to and run near to the sloping sides of the casing or the spiral rib, substantially as described for the purpose set forth.

Second. In combination with a casing whose sides slope outward from the eduction open-



ings, I claim a rotating piston with fixed blades inclined upon the face to the axis of the piston rod, for the purpose set forth.

Third. Dividing the stream of liquid as it enters the casing containing the rotating piston by causing it to pass through two or more induction openings, arranged substantially as described, so that the blades of the piston pass over these openings.

WILLIAM T. BARNES.

No. 729.—*Improvement in Ink Stands.*—I claim, first, the arrangement for flexing the elastic diaphragm, by so attaching a mechanism in connection with the cover for the ink cup that the opening and closing thereof shall effect the raising or discharge of the ink or other fluid into or from said cup, as specified.

Second. The cover arranged and operating, as above set forth, in combination with the elastic or flexible diaphragm and a non-corrosive fountain or ink cup, when operating as and for the purposes hereinabove specified.

Third. The combination and arrangement of cam lever *d* and plunger *i*, or the equivalents thereof, for effecting the raising or discharge of the ink by raising or closing the cover of the non-corrosive fountain cup, substantially as specified.

Fourth. Arranging the cam centres in such relation to each other that by raising the cover the requisite depression of the diaphragm will be produced to obtain the required result as specified.

THOMAS ROBJOHN.

No. 730.—*Improvement in Cracker Machines.*—I claim the combination of adjustable springs with a cracker cutter and its resisting surface or bed, substantially as hereinbefore described, and substantially for the purposes hereinbefore set forth.

JOHN McCOLLUM.

No. 731.—*Machine for Creasing and Blacking Leather for Harnesses.*—I claim, first, the pressure roller *F*, and the creasing and embossing rollers *i*, in combination with the color fountains *K* and *L*, and felt rolls *M M*, arranged to operate as and for the purpose set forth.

Second. The arrangement of the embossing rollers *i*, with their projecting flanges *K<sup>1</sup>*, to operate in combination with the guides *d d<sup>1</sup>*, substantially in the manner and for the purpose specified.

ADOLPH STEMPEL.

No. 732.—*Improvement in Plates for Boiler Holes and Tops of Stoves.*—We claim, as the invention of John B. Chollar, constructing a cross piece for cooking stoves and ranges with a hollow chamber and with the openings *e e*, to allow air to pass into the said chamber, substantially as set forth.

DAVID STUART.  
RICHARD PETERSON.

No. 733.—*Improvement in Grinding and Polishing Knives.*—What I claim, is grinding and polishing articles and forming their surfaces upon or against the periphery of a grindstone or polishing wheel, or other analogous reducing surface, by attaching them to the periphery of a revolving drum or cylinder, substantially as herein set forth.

I also claim making matrices in the periphery of a wheel, to which a series of articles to be ground are attached, said matrices being adapted to give the required shape to the articles to be ground so as to grind, polish, and shape such articles in a uniform manner, substantially as and upon the principles herein set forth.

I also claim, in combination with said matrices, attaching and supporting the articles to be ground upon the cylinder in such manner as to allow them to rock or to accommodate themselves thereon, whereby their surfaces may be shaped either convex, flat, or concave, substantially as herein set forth.

JAMES DODGE.

No. 734.—*Improvement in Gas Lamps.*—I claim as the invention of Horatio G. Sickels, first, forming a valve within the adjustable gas chamber *P*, and a seat for the said valve on the tube which contains the wick *t*, so as to regulate and extinguish the light when required, whether the said valve be made and arranged in the manner described or other modes, substantially the same, by which similar results may be produced.

Second. The employment of the safety valve *C D E*, in combination with the guard *T*, constructed substantially as described.

Third. I also claim the guard *T*, in combination with the combined burner and generator, arranged and operating in the manner and for the purpose set forth.

Fourth. I likewise claim combining the generator *Q R*, burner *P*, ring *U*, and guard *T*, in a single piece, made to ascend and descend simultaneously in the manner and for the purpose substantially as herein set forth.

GEO. H. BECHTEL.



No. 735.—*Improved Shingle Machine.*—I claim, first, the combination of the vibrating frame 2<sup>1</sup>, with the obliquely slotted side piece 11, and the cam wheel 12, arranged and operating substantially as and for the purpose set forth.

Second. The relative adjustment of ratchet *o* and sheave *g*<sup>1</sup>, substantially as and for the purpose specified.

Third. The arrangement of the pinions 7 7, with levers 7<sup>1</sup> 7<sup>1</sup>, and dog 6 6, as herein set forth.

Fourth. I claim raising and securing the weighted arm of lever L<sup>1</sup>, prior to the engagement of the traversing mechanism, substantially as hereinbefore set forth.

E. WEBBER

No. 736.—*Improvement in Cotton Gins.*—I claim the revolving screen, cylinder, or shaft, situated in the hopper or roll box, so that the "roll" moves around it, when constructed and arranged substantially in the manner described, whether as a single or double device, so as to perform any or all of the functions, as herein specified.

I also claim discharging the hulls and trash from the roll box through the sides of the cotton gin, as above set forth.

DAVID G. OLMSTED.

No. 737.—*Improvement in Fastening Centre Bits.*—I claim fastening a bit in its stock by means of a projection on one and a suitable recess for it on the other, when combined with mechanical pressure or friction that will hold the projection and recess together, substantially as described.

ABEL W. STREETER.

No. 738.—*Improvement in Water Backs for Ranges.*—I claim protecting the water backs of ranges by the introduction of a movable fire brick, soap stone, or equivalent material between the fire and said water back, substantially as specified.

I also claim arranging said water back, substantially as set forth, whereby the same can be moved away from the fire to allow space for introducing said protecting fire brick or its equivalent.

And in combination with said water back I claim the lever *k* and weight *g* or their equivalents to move the intervening soap stone or fire brick, substantially as specified.

JAMES INGRAM.

No. 739.—*Improvement in Bridges.*—I claim so combining the arch chord or beam, the arch brace, and the abutment or pier of a bridge, so that the thrust of the arch shall be thrown down upon the abutment or pier, and any deflection in the lower chord be counteracted by an upward force at the upper ends of the arch braces, substantially as described.

I also claim the method of lengthening or shortening the braces of a bridge truss or girder, by which the truss may be elevated or depressed, as required, by means of the yoke *a*, the plate *b*, on the end of the brace, and the straining pieces *c c*, with their nuts *d*, substantially in the manner herein described.

D. C. McCALLUM.

No. 740.—*Improvement in Governors for Steam Engines.*—First, in combination with arms and very small balls or their equivalents, revolving at a velocity several times greater than would be due or natural to them considered as a conical pendulum, I claim the employment of a counterpoise, applied substantially as described, and so proportioned in weight as to balance or nearly so the centrifugal force developed by the revolution of the said arms and balls or their equivalents.

Second. I claim the employment, at the connection between the arms and the central spindle of the governor, of a joint, constructed substantially as described, and illustrated in Fig. 2, whereby each arm is brought to the outside of the joint on one side, and made to thrust against the joint pin close to one end thereof at a right angle and at a distance from the axis of revolution, as herein described.

CHAS. T. PORTER.

No. 741.—*Improvement in Veneers.*—I claim the embossed veneers described, the same being adapted for subsequent application in the construction and ornamenting of furniture and other articles to which veneers are or may be applicable.

ISRAEL AMIES.

No. 742.—*Improvement in Reaping Machines.*—I claim the combination of side and cross bearings of the guards, with flush edges at and near the forks of the blades, substantially as described.

OBED HUSSEY.



No. 743.—*Improvement in Reaping Machines.*—I claim scalloped cutters, with their blades beveled, as herein described.

OBED HUSSEY.

No. 744.—*Improvement in the Process of Grinding Paper Pulp* —What I claim is the process of reducing fibrous substances to pulp suitable for making paper, while such fibrous substances are suspended in water, by subjecting them to the operation of grinding or beating action in a closed vessel to which it is supplied by the hydraulic power of a descending column of water so charged with the fibrous substance, and permitting it to escape and be discharged so soon as it is sufficiently reduced, substantially as set forth.

And I also claim separating the fibres from the mass, so soon as they are sufficiently reduced, and discharging them by the hydrostatic pressure of the column of water in which the fibres are suspended, and which, in flowing upward to the discharge, carries with it only the fibres which are sufficiently reduced, substantially as described.

JOSEPH KINGSLAND, JR.

No. 745.—*Improvement in Machinery for Grinding Paper Pulp.*—What I claim in machinery for reducing fibrous substances to pulp suitable for making paper, is the combination of the rotating grinder, with and inclosed in a surrounding case, which constitutes the opposing grinding surface, and which is provided with a feeding pipe and discharge aperture, suitable for feeding and carrying the fibrous substances to and from the grinder in the inclosed vessel by the hydraulic pressure of a descending column of water, as set forth.

JOSEPH KINGSLAND, JR.

No. 746.—*Improvement in Brick Machines.*—I claim, first, the yoke constructed of the form above described, by which the converging planes are held firmly in the same position relative to each other, whether the same be composed of one or more pieces of metal.

Second. The radial, sliding, and revolving chargers, in combination with the mould wheel.

Third. The arrangement of the guide stem on the side of the pressers instead of on the end, whereby I am enabled to place the pressing roller in the cavity of the piston.

Fourth. What I claim is making the piston or presser hollow, and inserting the pressing roller in the cavity thereof, instead of placing it upon the guide stem as heretofore done.

JOSEPH W. JAYE.

No. 747.—*Improvement in the Process of Manufacturing Wire Grating, &c.*—I claim manufacturing screens or other articles from metallic wires or bars that are bent or crinkled at the point of intersection previously to being laid or woven up, whereby I am enabled to form meshes of any desired size or shape by such intersecting bars or wires, so that they shall be rigid and durable, as set forth, and this I claim irrespective of the mechanism for bending or crinkling said wires, or interweaving them to form the requisite meshes.

HENRY JENKINS.

No. 748.—*Improved Washing Machine.*—I claim, first, providing a stop board at the lower portion of the rear end of the rubber, substantially as and for the purposes set forth.

Second. Providing an oblong slot, the lower termination of which is of scroll form, in each of the pendulous arms of the rubber, substantially as and for purposes set forth.

Third. The combination with said slot of a back trip board, substantially as and for the purposes set forth.

M. VAN AUKEN.

No. 749.—*Improved Machine for Finishing Brush Handles.*—I claim, first, the combination of the crown wheel saw O, with the adjustable platform Y Y and stop g, substantially as and for the purpose set forth.

Second. The wheel K, provided with the oblique cutters y, in combination with the guard or gauge piece L, the cutter wheel and gauge piece being arranged relatively with each other, substantially as and for the purpose set forth.

Third. The arrangement and combination of mechanical devices herein set forth and described, to wit: the platform D, with revolving cutters shaped and operating as described, crown saw O, with the arms d d, and the adjustable platform and cutter wheels K and M, with their cutters, substantially as described.

JOHN AMES.

No. 750.—*Improvement in Valves for Dry Gas Meters.*—What we claim as the invention of Lloyd is, first, the construction of the rotary valve c c, with series of breaks or edges as at f p p and q q, arranged and operating so as to scrape the upper surface of the valve seat.

Second. The drip K and the valve seat g g, arranged and operating so as to collect and carry off any liquid deposit in the meter.

Third. The valve carriage D D, arranged and operating substantially as above described.

Fourth. The combination of the valve c c, the valve seat g g, the shafts E E E, attached to



the diaphragms, arranged and operating as above described for the purpose of restraining a reverse movement in the meter, and thus dispensing with the click and ratchet.

WILLIAM HOPPER.  
ROBERT H. GRATZ.

No. 751.—*Improvement in Ice Cream Freezers.*—I claim a scraper or scrapers which act or bind during the process of freezing cream with a yielding spring force against the inner surface or surfaces of the cream chamber, substantially as and for the purposes set forth.

H. B. MASSER.

No. 752.—*Improved Faucet.*—I claim the elastic plug valve, attached to a stem when operated by an eccentric or its equivalent, substantially as set forth, for the purposes described.

Second. I claim the elastic plug valve, constructed as described, in combination with the cup shaped cap to prevent the plug from spreading, substantially as described.

ALBERT FULLER.

No. 753.—*Improvement in Faucets.*—I claim the described arrangement of the cam F, flanges J and J<sup>1</sup>, longitudinal slot *i*, and spurs K, combined and operating in the manner and for the purposes set forth.

JAMES POWELL.

No. 754.—*Improved Billiard Table Cushion.*—I claim that order in the arrangements of the materials composing a billiard table cushion, which places the cork in the rear, the rubber in front of it, and the paper, leather, and cloth, or equivalents thereof outside, in the manner and for purpose set forth.

JOHN M. BRUNSWICK.

No. 755.—*Improvement in Fire Engines.*—We claim placing the cylinders diagonally to the line of the rock shaft, substantially in the manner and for the purpose herein set forth.

We claim combining with the water way or channel *i*, the chamber *d*, divided into two compartments by the contraction *r*, at or about one half the height of said air chamber above its base or point of attachment to said water way, substantially in the manner and for the purposes herein set forth.

We claim in combination with the hour glass contraction of the air chamber the ring enlargement *s* of the rock shaft, as herein set forth.

LYSANDER BUTTON,  
ROBERT BLAKE.

No. 756.—*Improvement in Cleansing Caoutchouc.*—I claim the use of alkali, or its equivalent, for separating bark, sticks, and other foreign bodies, from crude caoutchouc and other vulcanizable gums to prepare them for manufacturing.

AUSTIN G. DAY.

No. 757.—*Improvement in the Treatment of Crude Caoutchouc.*—I claim charging the caoutchouc or other like gum with alkaline liquor or its equivalent, by means of the exhausting apparatus herein described and represented.

AUSTIN G. DAY.

No. 758.—*Improvement in Cut Off and Working Valves of Steam Engines.*—I claim the method, substantially as described, of operating the slide valves of steam engines, by connecting the valves that open and close the ports at opposite ends of the cylinder, with separate crank wrists or other mechanical equivalents, so that from the motion thereof each valve, while its port is closed, shall move a less distance than it moves in opening and closing its port, while at the same time the two wrists by which the two valves are opened have the same range of motion, as described, whereby I am enabled to save much of the power heretofore expended in working the slide valve of steam engines, and by which also I am enabled to make a greater proportion of the movement of the valve available for effecting a free passage of the steam through the ports of the cylinder.

GEORGE H. CORLISS.

No. 759.—*Improvement in Cut Off and Working Valves of Steam Engines.*—I claim the combination of liberating valve gear with valves which are moved parallel to their seats and continue their closing motion after their ports are closed, and commence their opening motion before their ports open, substantially as described.

GEORGE H. CORLISS.

No. 760.—*Improvement in Cut Off and Working Valves of Steam Engines.*—I claim the combination, substantially as described, of an air cushion with the liberating valve gear of steam engines.

GEORGE H. CORLISS.



No. 761.—*Improvement in Cut Off and Working Valves of Steam Engines.*—I claim the combination with the port of the valve gear that appertains to a liberated steam valve, of an instrument moved by the power of the engine in such manner as to effect the closing of the liberated valve, whenever the independent means provided for that purpose fail to act in time.  
GEORGE H. CORLISS.

No. 762.—*Improvement in Cut Off and Working Valves of Steam Engines.*—I claim the combination of a helical cam, with the opening and closing mechanism of the steam valve substantially as described.  
GEORGE H. CORLISS.

No. 763.—*Improvement in Cut Off and Working Valves of Steam Engines.*—I claim the method, substantially as described, of regulating the velocity of steam engines, by combining a regulator with a liberating valve gear.  
GEORGE H. CORLISS.

No. 764.—*Improvement in Harvesters.*—I claim hinging the finger beam to the main frame, so that it can be folded up thereon, substantially as herein described.  
LEWIS MILLER.

No. 765.—*Improvement in Harvesters.*—I claim hinging the coupling arm to the frame of one side of the main axle, and supporting it by a brace hinged to the frame on the opposite side of the axle, in such manner as to obtain, among other things, a wide basis for bracing on a short frame, without interfering with the folding up the finger beam against or upon the frame to render the machine more portable, substantially as described.  
LEWIS MILLER.

No. 766.—*Improvement in Harvesters.*—I claim the combination of the crank and the bearing for its journal, the cutter, the coupling arm, and the hinge of its inner end, with a hanger, which is made the common support for the hinge of the coupling arm and the journal of the crank, arranged and operating substantially as herein set forth.  
LEWIS MILLER.

No. 767.—*Improvement in Harvesters.*—I claim the method of folding the finger beam upon the frame by aid of the coupling arm with a lifting lever and cord, or the equivalent thereof, substantially as herein set forth.  
LEWIS MILLER.

No. 768.—*Improvement in Harvesters.*—I claim, first, the combination of knuckle with the joint which connects the finger beam and coupling arm, and the lever for raising the finger beam off the ground, the several parts being constructed and arranged as set forth.

Second. The combination of a lever arranged to turn on a pivot and to vibrate laterally, with notches and a catch to support the lever at any required elevation, together with the coupling arm and finger beam suspended to it, substantially as herein set forth.  
LEWIS MILLER.

No. 769.—*Improvement in Harvesters.*—I claim the arrangement of the hand lever R, driver's seat V, and foot lever P, whereby the driver may when necessary employ both his hands and his feet to raise the finger beam, substantially as set forth.  
LEWIS MILLER.

No. 770.—*Improvement in Harvesters.*—I claim the combination of the spring pawl and the teeth with the gib and key of the connecting rod, the connecting rod and cutter, substantially as herein set forth.  
LEWIS MILLER.

No. 771.—*Improvement in Mowing Machines.*—We claim the combination of the shoe which carries the end of the finger beam next the main frame, with a hinged brace bar, whose axis of motion at the end connected to the main frame is in a line with that of the corresponding end of the hinged coupling arm, substantially as herein set forth.  
CORNELIUS AULTMAN.  
LEWIS MILLER.

No. 772.—*Improvement in Mowing Machines.*—We claim the combination with the hinged coupling arm of a hinged base, whose axis of motion at the end next the main frame coincides with that of the corresponding end of the coupling arm, substantially as herein set forth.  
CORNELIUS AULTMAN  
LEWIS MILLER.



No. 773.—*Improvement in Mowing Machines.*—We claim the construction and arrangement of the finger beam and the main frame, so that the beam may be turned on its hinge into an upright position, and then raised and leaned against the frame to elevate it out of the reach of obstructions, and distribute the weight more equally upon the carrying wheels, when the machine is to be removed from one place to another where the mowing is to be done, substantially as described.

CORNELIUS AULTMAN.  
LEWIS MILLER.

No. 774.—*Improvement in Mowing Machines.*—We claim the combination of a hinged coupling arm, the finger beam, and catch, substantially as described, whereby the finger beam can be turned, raised, and held up, to render the removal of the machine from place to place more convenient and secure.

CORNELIUS AULTMAN.  
LEWIS MILLER.

No. 775.—*Improvement in Mowing Machines.*—We claim mounting the two driving wheels and one main gear wheel upon a common axle, in combination with a ratchet wheel for each driving wheel, each ratchet wheel fitted with a pawl that can be made to stand in or out of gear with the ratchet teeth at will, the whole arranged and operating substantially as described.

CORNELIUS AULTMAN.  
LEWIS MILLER.

No. 776.—*Improvement in Mowing Machines.*—We claim the combination of a ratchet wheel, a ratchet pawl, a spring acting on the pawl, and a bearing pin, or the equivalent thereof, for the spring, with the driving wheel and the axle of the main gear wheel, whereby one spring is made to perform the two duties of holding the pawl both in and out of gear with the ratchet wheel, substantially as described.

CORNELIUS AULTMAN.  
LEWIS MILLER.

No. 777.—*Improvement in Harvesters.*—I claim the combination of the inner shoe with a leading wheel, arranged substantially as herein set forth.

LEWIS MILLER.

No. 778.—*Improvement in Harvesters.*—I claim the combination with the shoe of an adjustable sole of the peculiar double runner form herein described, whereby the sole can be adjusted directly to the heel of the shoe without the intervention of a link rod and joint, as herein set forth.

LEWIS MILLER.

No. 779.—*Improvement in Harvesters.*—I claim connecting the handle of the rake to a transverse shaft in such a manner that the rotation of the said shaft when aided by the curved guiding rod R, or its equivalent, will impart the within described movements to said rake, viz: a sweeping axial movement from the inner edge of the sector shaped platform (or a little beyond the same) over to the forward portion of said platform, and at that point instantly changing to an axial horizontal movement across the platform to the starting point, and so onwards in regular succession, substantially as herein set forth.

McCLINTOCK YOUNG, JR.

No. 780.—*Improved Cut Off Gear.*—I claim combining with the rocking levers or their equivalents for operating the valves, the shoulders on the spring bars, or their equivalents, substantially as described and for the purpose specified.

And I also claim, in combination with the shoulders on the spring bars that operate the rocking levers, substantially as described, the employment of the gauge bars, or any equivalent therefor, to regulate the periods of closing the valves, whether the said gauge bars be regulated by a governor or by other means, as set forth.

GEORGE H. CORLISS.

No. 781.—Suspended.

No. 782.—*Improvement in Railroad Car Springs.*—I claim constructing a carriage or car spring of a series of two or more plates of steel, each of which is so curved or twisted that the longitudinal curve on one edge or side of each leaf or plate shall be the reverse of the curve on the other side or edge, a longitudinal section through the centre of the plate, midway from either edge is a straight line or nearly so, said plates being so arranged relatively to each other that on both sides the curve at the edge of each leaf or plate shall be in the reverse direction to the curve at the edge of the leaf or plate next above or below it.

DAVID B. ROGERS.



No. 783.—*Improvement in Trigger Operating Revolving Breech Fire-Arms.*—I claim, first, so constructing the lock of revolving breech fire-arms, in the mode substantially as hereinbefore described or its equivalent, as that the trigger used to fire the pistol, when drawn back, raises the hammer to full cock, and there retains it, the revolving breech or barrels being at the same time rotated so far as to bring the nipple of one of the chambers or barrels in the proper position to be struck by the hammer on its descent, and the trigger being held in a drawn position ready for instantaneous firing.

Second. The use of a fly-tumbler, or vibrating tooth intermediate between the hammer and trigger, in trigger operating fire-arms, and the peculiar arrangement of the parts of the lock in connection therewith, hereinbefore described, whereby the tendency of the main spring to cause the descent of the hammer is neutralized when the hammer reaches the point of full cock, so that the hammer having been raised by the trigger, may either be permitted to stand cocked or fired immediately, at pleasure, and greater ease in firing and steadiness of aim are secured, substantially as hereinbefore described.

JAMES M. COOPER.

No. 784.—*Improvement in Skeleton Skirts.*—I claim a skirt formed of elastic hoops and tape, or equivalent material, when the tapes are disposed across the hoops in opposite diagonal directions and interlock on opposite sides of the hoops at the point of crossing and are confined thereto, substantially as described.

I also claim connecting the hoops by means of a series of loops formed by a continuous tape, or equivalent material, passing around the skirt from one hoop to the other in opposite diagonal directions without interlooping or interlocking between the hoops, substantially as described for the purpose set forth.

E. G. ATWOOD.

No. 785.—*Improvement in Skeleton Skirts.*—I claim a skirt formed of elastic hoops and tape, or equivalent material, disposed across the hoops in opposite diagonal directions without being connected between the hoops, but connected to the hoops at suitable intervals, substantially as described.

E. G. ATWOOD.

No. 786.—*Improvement in Balancing Mill Stones.*—I claim the employment or use of weights *i*, placed within boxes or recesses in the back of the stone and arranged substantially as described, so that they may be adjusted vertically and more or less be used in each box or recess, to admit of the balancing of the stone or runner both while in motion and at rest.

JOHN FAIRCLOUGH.

No. 787.—*Improved Nail Machine.*—I claim making cut nails in such a manner that each nail will be seized the instant after it is cut from the nail plate and be compressively operated upon at the point thereof in the manner as herein specified, to bring the flat point of said nail to an equal sided sharp point, or to substantially the same character of point that is ordinarily given to wrought nails.

JAHAZIAH S. KING.

No. 788.—*Improved Machine for Matting the Ends of Match Blocks.*—I claim matting the ends of match blocks by pressure of a roller or rollers, for the purpose set forth, and in this claim I wish to be understood that I do not confine myself to the precise arrangements of the parts herein described, but shall vary them at pleasure, while I attain the same ends by means substantially the same.

HENRY E. PIERCE.

No. 789.—*Improved Clothes Dryer.*—I claim the combination of the slotted perforated hub B, and slotted, bored, cap hub C, with the arms D, and braces E, connected with the hubs by wires as described, and the arrangement the same with the shaft A, collar F, and ratchet catch G, as specified.

S. H. TIFT.

No. 790.—*Improvement in Ploughs*—I claim constructing mould board and landside of cylindrical surfaces of equal diameters intersecting along the cutting edge of the plough in combination with the standard S, curving landward from the top of the mould board to a position nearly over the base of the landside, as herein set forth.

GEORGE WATT.

No. 791.—*Improvement in Breech Loading Ordnance.*—I claim combining the movable breech pin with the bore of the cannon by means of movable locking or abutting pieces or segments, substantially such as described, and which after the breech pin is inserted are shifted and made to cross the joint of the breech pin and bore, to hold the breech pin against the force of the discharge, as set forth.

G. W. BISHOP.



No. 792.—*Improvement in Ash Sifters*.—I claim the employment of a conical sieve, or sieve of an equivalent form, in combination with the two receptacles, one for the sifting and the other for the substance sifted, substantially as and for the purpose described.

I also claim the conical deflector, for deflecting the substances to be sifted and concentrating them, in combination, with the spreader, substantially as described, whether the spreader be itself the sieve, or employed with a sieve below, as described.

I also claim, in combination with the sieve, the under conical surface of the deflector, for preventing the escape of dust from the apparatus, as described.

And I also claim, in combination, the deflector, the spreader, the conical sieve, and the receptacles, for the siftings and the substances sifted, substantially as and for the purpose specified.

ALLAN CUMMINGS.

No. 793.—*Improved Sash Fastener*.—What I claim, in window fasteners of the class above specified, is extending the cap portion  $m^1$  of the catch  $m$  over and along the front edge of the catch plate  $n$ , to form a catch opening  $x$ , flush with the edge of plate  $n$ , so that the window cannot be unfastened without having the point of the hook  $a$  withdrawn entirely clear from the meeting rail of the upper sash and out of the way of the bars above when the lower sash is raised.

Second. And, in combination with the catch  $m$ , hook  $a$ , and plate  $e$ , I claim the check  $a^1$ , or equivalent thereof, for the purposes herein above specified.

RALPH J. FALCONER.

No. 794.—Suspended.

No. 795.—*Improvement in Valve Cocks*.—We claim, first, the method of constructing valves, valve cocks, and gates, substantially as specified, so that, when the port or ports therein are uncovered, there shall be a straight passage or passages from the induction port or ports in the valve chamber to the eduction port or ports in the same, for the purposes described, whether the valves in such valves, valve cocks, and gates, are made in one or more than one piece; and, second, making the valves, in valves, valve cocks, and gates, in separate or detached pieces, substantially as and for the purposes described.

J. R. ROBINSON.

H. S. ROBINSON.

No. 796.—*Improvement in Machines for Making Paper Bags*.—I claim, first, the combination of the creaser  $C$  and lappers  $F G$ , arranged and operating substantially in the manner and for the purpose herein described and set forth.

Second. The folding of a lap in the manufacture of a bag of paper or other material, by means of a creaser blade and two rolling surfaces operating in combination with each other, substantially as herein described.

Third. The revolving lapper shaft  $U$ , in combination with the creaser  $V S$ , the feed roller  $M$ , and aprons  $u q$ , substantially as herein described, the creaser being brought into operation on the lap during the intermission in the motion of the feed rollers.

FRANCIS WOLLE.

No. 797.—*Improvement in Treating Caoutchouc and other Vulcanizable Gums*.—I claim the mode of operation, or mode of procedure, substantially such as herein described, which said mode of operation consists in the employment of a pliable or flexible envelope, substantially such as herein described, or the equivalent thereof, applied by pressure to the hard compound of vulcanizable gum, while in the green or plastic state, so as to insure the contact of such covering with the surface of the compound, and, while thus covered or protected, subjecting it to the vulcanized heat, and when vulcanized stripping off such covering; the whole process being substantially such as specified.

L. OTTO P. MEYER.

No. 798.—*Improvement in Refining Iron in the Hearth of a Blast Furnace*.—I claim the employment, immediately before the tapping of the furnace, of an auxiliary tuyere pipe or pipes, within the hearth of the common blast furnace, when charged with molten iron, at such an inclination as to cause the blast of air to commingle with the particles of iron, and give to the whole mass in the hearth a spiral or rotary motion, substantially as described.

CHRISTIAN SHUNK.

No. 799.—*Improvement in Billiard Table Cushions*.—I claim composing cushions for billiard tables with a body or back of what is known as the soft compound of vulcanizable India rubber or allied gum, in combination with a facing of India rubber or allied gum, rendered less compressible by fibrous matter, or the equivalent thereof, substantially as described.

HUGH W. COLLENDER.



No. 800.—*Improvement in Railroad Station Indicators.*—I claim presenting a movable sign or symbol to passengers of a railroad car, so that both sides of said sign shall be visible, and utilized as annunciators, by passing each sign in turn through an opening of the case, by the revolving of the drum, to which the said signs are attached.

C. A. McEVOY.

No. 801.—*Improvement in Faucets.*—I claim, first, the valve stem H, formed with projecting flanges J and J<sup>1</sup>, when confined to a rectilinear path and operated by a cam or eccentric, which engages with it at two opposite points, in the manner and for the purpose set forth.

Second. The described arrangement and combination of the slotted head I, *i*, pivot *c*, socket E, and cam F, operating in the manner set forth, to prevent lateral motion of the valve stem.

JAMES POWELL.

No. 802.—*Improvement in Lamps.*—I claim combining the deflector with the chimney band by mechanical devices, so as to retain the former in its proper relative position without the use of solder.

MICHAEL A. DEITZ.

No. 803.—*Improved Device for Converting Reciprocating into Intermittent Rotary Motion.*—I claim, first, arranging the lever C and dog B, in combination with the grooved wheel A or its equivalent, in such a manner that said lever and dog act on the wheel without a connection to the centre or hub of the wheel, substantially as and for the purpose specified.

Second. In the combination with the lever C, dog B, and wheel A, I claim the arrangement of the groove *d* or its equivalent in the hub of the wheel, substantially as and for the purpose specified.

Third. I do not claim the arrangement of the lever and dog in the relative position to each other which has been described, except when the two are made of one piece, or if the dog is permanently attached to the lever; but I claim arranging the lever C with the dog B permanently attached to it in such a manner that the direction of said lever, when it is in its place, makes an angle of ninety degrees, or nearly so, with a line drawn from the centre of the wheel through the dog, substantially as herein specified.

H. EHRENFELD.

No. 804.—*Improvement in Harrows.*—I claim causing the points of the teeth of a rotating harrow to descend deeper into the ground on one side of their axis of rotation than they do upon the opposite of the same, for the purpose of enabling the dragging force which may be exerted upon said harrow to impart a positive rotary motion thereto without the aid of gearing wheels.

SIDNEY S. HOGLE.

No. 805.—*Improved Eraser and Pencil Sharpener.*—I claim, first, the curved blade eraser, as above specified, forming on one side a convex surface, substantially as and for the purposes set forth.

I also claim, in combination therewith, the pencil sharpener and pointer, as described.

A. G. SHAVER.

No. 806.—*Improvement in Revolving Fire-Arms.*—I claim, first, the use of a stud in the trigger vibrating laterally in combination with a bevel edged hammer, for the purpose of raising the hammer to full cock and firing the piece by simply pulling the trigger, which, after the discharge of the piece, will regain its position for repeated action; or (as a mere modification of arrangement) the use of a stud in the hammer vibrating laterally, in combination with a bevel edged trigger, for the purpose above specified.

Second. The use of a bevel edged hammer, with or without a notch in its toe, and trigger with vibrating stud, and cam for the trigger spring, constructed and arranged substantially as hereinbefore described, for the purpose of causing the hammer, trigger, and revolving breech to assume their proper relative positions at full cock by simply pulling the trigger; and retaining them in that positions, and securing the breech from rotation or displacement preparatory to firing.

Third. The notch or depression in the toe of the hammer at the point of contact of the stud and edge of the hammer, in combination with the laterally vibrating stud for the purpose of preventing the slipping of the stud and the more easy retention of the hammer at the point of full cock.

Fourth. The mode hereinbefore described of locking the rotating breech at the moment of firing, by means of the locking bolt operated by the trigger, in combination with the hexagonal neck of the rotating breech, which, nevertheless, permits the breech to be freely rotated by hand or otherwise, when the trigger is not drawn back.

Fifth. The use of a double trigger spring or spring and lever, for the purpose hereinbefore set forth.

JOSIAH ELLS.



No. 807.—*Improved Ornamental Connection of the Parts of an Iron Fence.*—I claim forming the ornament or cast-iron connections for a railing fence, or other article of iron, cast into a divided iron mould, substantially as and for the purposes specified.

HENRY JENKENS.

No. 808.—*Improvement in Straw Cutters.*—I claim the combined application, to straw cutting machines, of a changeable feed gear, with two edged revolving cutters or blades, when so made as that, by changing them end for end on their arms or supports, they shall bring a different cutting edge into action, or when run in either direction shall always feed in the material in one and the same direction, substantially as and for the purpose stated.

I also claim the combination of the feed rollers, acted upon by tappets, and the crushing rollers, controlled by gum elastic springs, when arranged in relation to, and acting in connection with, the cutting apparatus, as herein described and represented.

JACOB H. MUMMA.

No. 809.—*Improvement in Sewing Machines.*—First. I claim the combination of a slide A, provided with its guard E and its slot, or slots C D, with the foot piece M, with its guide N and slots, arranged and operating substantially as described.

Second. I claim the combination, with the sewing apparatus or its equivalent, of a movable knife, operated by a connection with the sewing machine, so as to trim or cut the work whilst being sewed, substantially in the manner and for the purposes as above set forth and described.

JOHN W. MARSH.

No. 810.—*Improvement in Lamps.*—I claim, first, the perforated plate or air distributor C or its equivalent, as shown in Fig. 2, for the purpose of regulating the elastic force of the air, so that it may be presented evenly to the flame, (when applied to flat wick lamps,) it being placed horizontally.

Second. I claim the perforations *b*, in the lower part of the cap D, as shown at Fig. 1, in combination with the perforated or air distributing plate C, as shown in Fig. 2.

Third. I claim the register, formed of the perforations *e* in the top A, as shown in Fig. 3, in combination with the perforated plate or air distributor C, as shown in Fig. 2, and the holes *b* in the lower part of the cap D, as shown in Fig. 1; the whole being arranged substantially as and for the purpose described.

WILLIAM FULTON.

No. 811.—*Improvement in Heating Elevated Ovens.*—I claim the arrangement and combination of revertible flues in elevated ovens of cook stoves with partition walls, in the manner and for the purpose herein described and set forth.

I also claim the arrangement and combination of the oven plate *c* in and with the inner plate and ends of the oven, as and for the purpose herein described and set forth.

I claim the arrangement of the damper *e*, immediately between the main part of the stove and the bottom and lower part of the elevated oven, thereby combining it with said oven, the stove, and the double flue *c*, for the purpose of controlling and regulating the heat in its passage into the flues of the said elevated oven, as herein described.

P. A. PALMER.

No. 812.—*Improvement in the Manufacture of India Rubber Fabrics.*—I claim as the invention of Nelson Goodyear, deceased, making fabrics by thoroughly intermingling and incorporating the shearings or clippings of fibrous substances with the gum, while rendered plastic by heat, substantially as and for the purpose specified.

H. B. GOODYEAR,

*Administrator of the estate of Nelson Goodyear, deceased.*

No. 813.—*Improvement in Magnetic Printing Telegraphs.*—I claim, first, a series of keys, each corresponding to a character, in combination with a revolving part of a circuit, so that the touching of one of the former may cause circuit to be broken or closed for the purpose of printing, substantially as specified, when the revolving part of the circuit is in a certain required angular position, properly corresponding to the key struck.

Second. I claim a series of keys, each corresponding to a character, in combination with a revolving portion of a circuit and a shaft provided with pins arranged in a helix, all substantially such as specified, or the equivalents of the whole acting to cause circuit to be broken or closed when the revolving part is in a certain angular position, in proper correspondence with the key struck, for the purpose of printing a proper corresponding letter by means of any suitable machinery.

Third. I claim a key board or series of keys, in combination with a rotating portion of a circuit, and a type wheel, or its equivalent, so governed as to present a proper letter corresponding with a key touched to produce an impression, the combination being substantially such as set forth.



Fourth. I claim in combination a single circuit of conductors, a key board, or series of keys, a revolving portion of a circuit, and a type wheel, substantially such as specified; and these also in combination with a printing press, and with a key shaft, or either of them, each part being substantially such as described.

Fifth. I claim a series of keys, each corresponding to a character in combination with a type wheel having similar corresponding characters, both substantially as specified, when so connected by any appropriate devices that a certain type shall be in a certain locality, when a corresponding key is actuated; and I claim these two elements in combination with a single circuit of conductors, and with a printing apparatus, or either of them.

Sixth. I claim actuating or driving a revolving portion of a circuit, or a key shaft, or both of them, by means of a prime mover acting upon them through a friction connection, the mode of operation being substantially as specified, and doing away with sudden jars and increasing rapidity of operation, when contrasted with a positive connection between such parts and a prime mover, and also permitting the two to move with varying velocities.

Seventh. I claim actuating or driving a key shaft and a revolving portion of a circuit, or either of them, by means of a friction connection with a prime mover, when the velocity of such prime mover is controlled by a governor, or some equivalent, for the purpose which either prevents its moving too fast, or increases its velocity when going to slow, or performs both these duties substantially under the mode of operation described.

Eighth. I claim governing or controlling the motions of a prime mover, which actuates a printing apparatus by the breaking and closing of an electric or galvanic circuit, so that such apparatus is put in operation both by the breaking of a circuit and by the closing thereof, substantially in the manner specified, and also the controlling of a printing apparatus, so that it shall be permitted to print when a spring returns to its normal position, at the time when a circuit is broken, the mode of operation being substantially such as set forth.

Ninth. I claim in a printing telegraph moving the paper to the types to produce an impression on the former, substantially in the manner described, as distinguished from the former modes of operation by which the types were moved towards the paper.

Tenth. I claim in combination a revolving type wheel and a roller, or its equivalent, charged with coloring matter so as to deposit such matter on the types as they in succession come in contact with the roller, the combination being substantially such as set forth, and this I claim also when the roller is grooved as described.

Eleventh. Being aware of the facts that type wheels have been permitted to revolve step by step, when controlled by escapements, and when such escapements have been actuated either by a prime mover governed by a pendulum, or by electro-magnetic force, I claim actuating an escapement which controls the motions of a type wheel by a prime mover whose motions are regulated by the breaking and closing of a circuit, under a mode of operation substantially such as described, whereby a small force derivable from magnetism controls any necessary power of a prime mover, there being a breaking and a closing of circuit corresponding with each vibration of the escapement.

Twelfth. I claim a hydraulic regulator, substantially such as described and for the purposes set forth.

Thirteenth. I claim a hydraulic regulator in combination with a type wheel and a printing apparatus and a prime mover, the combination being substantially as specified, and causing the press to point when the type wheel ceases to move for a longer time than usual.

Fourteenth. In combination with a type wheel and a printing press or apparatus, I claim apparatus substantially such as specified, for making an alarm when that apparatus is permitted or caused to act by the breaking and closing of the same circuit of conductors, which by its breaking and closing permits the printing apparatus to come into action.

ROYAL E. HOUSE.

No. 814.—*Improved Machine for Bending Metal Pipe.*—We claim the mandrel *d*, substantially as described, and therewith the traversing roller *b*, or its equivalent, for bending coils of metal pipe, and in combination therewith the furnace, in the manner and for the purposes set forth.

JAMES PERKINS.  
WILLIAM H. BURNET.

No. 815.—*Improvement in Cultivator Teeth.*—I claim making the shank or upper part of cultivator teeth of thin plate steel, U shaped, or curved round in front, substantially as hereinbefore described, for the purpose of securing the necessary strength to permit the tooth to be made, entire shank and blade, of a single piece of metal, and also of enabling the tooth to be secured in its place in the beam by means of a wedge driven into the cavity of the shank, substantially as hereinbefore described.

DAVID B. ROGERS.

No. 816.—*Improvement in Reaping Machines.*—I claim the arrangement, substantially as described, of a cutting apparatus and a reel, with respect to a driving wheel and a grain wheel, or its equivalent, and a raker's seat, or its equivalent, so that the major part of the



weight of the cutting apparatus and reel shall be in advance of the axis of oscillation of the machine on the said wheels, while the raker's seat or stand shall be located behind that axis and the machine, with the raker thereon, nearly balanced on its axis of oscillation, substantially as described.

C. H. McCORMICK.

No. 817.—*Improvement in Reaping Machines.*—I claim the combination of a tongue or its equivalent, to draw the machine by a driving wheel and gearing arranged at the side of the frame; a short platform; a reel to gather the grain to the platform; and a stand or seat for the raker fixed upon the machine so as to enable the raker conveniently to discharge the grain and lay it in gavels upon the ground at the side of the swarth and out of the return path of the horses, substantially as described.

C. H. McCORMICK.

No. 818.—*Improvement in Reaping Machines.*—I claim a seat or stand on the reaping machine for the support of the raker laterally and in front, substantially as described.

C. H. McCORMICK.

No. 819.—*Improvement in Reaping Machines.*—I claim the combination of the reel, the divider, and the raker's seat or stand, cooperating together in such manner that the grain deposited upon the platform by the reel and divider may readily be grasped and discharged from the machine by the raker at his seat, substantially as described.

C. H. McCORMICK.

No. 820.—*Improvement in Reaping Machines.*—I claim the combination, in a reaping machine, of the following elements, namely: the draft and the gearing arranged at the side of the machine; two compressors, one arranged at each end of the cutter; the short reel to sweep over the space between the compressors; and the short platform, substantially as described.

C. H. McCORMICK.

No. 821.—*Improvement in Reaping Machines.*—I claim the combination of the grain guarded platform, to receive and retain the cut grain, with the divider and the reel, the whole arranged substantially in the manner and for the purposes described.

C. H. McCORMICK.

No. 822.—*Improvement in Reaping Machines.*—I claim the combination of the reel support at the rear part of the outer side of the platform with the low flat frame and the divider, arranged substantially as described.

C. H. McCORMICK.

No. 823.—*Improvement in Reaping Machines.*—I claim, first, a dividing board, having a surface inclining towards the cutter and platform, and an outer dividing line and an inner dividing line, arranged and acting substantially as described.

Second. I claim the combination of the inclined dividing board with a guide bar, substantially as described.

Third. I claim the combination of a reel with the inclined dividing board, substantially as described.

Fourth. I also claim the combination of a reel with the dividing board and guide bar, substantially as described.

C. H. McCORMICK.

No. 824.—*Improvement in Reaping Machines.*—I claim a reaping machine frame consisting mainly of two principal beams  $D$   $D^1$  and  $M$ , crossing each other and arranged, relatively to the supporting wheels, so as to give firm support to a platform not extending behind the gearing, and without interfering with the cutter on one side or the gavelling space on the other, substantially as described.

C. H. McCORMICK.

No. 825.—*Improvement in Reaping Machines.*—I claim the arrangement of the frame, the finger beam, the platform, and the driving wheel and gearing, relatively to each other, so as to secure an unobstructed gavelling space  $G$  at the side of the platform behind the finger beam, substantially as herein described.

C. H. McCORMICK.

No. 826.—*Improvement in Machines for Threading Screw Blanks.*—I claim the method herein described of causing the chasing tool to act upon the screw blank in producing both the cylindrical part and the tapering point, that is to say, by so governing the relative positions of each to the other that while threading the cylindrical portion the chasing tool shall be presented at a right angle to the axis of rotation of the blank, and while cutting the tapering



part shall be so inclined acutely to said axis that the line of travel of the face of the chaser shall finally intersect said axis, substantially as set forth.

ELLIOT SAVAGE.

No. 827.—*Improvement in Machines for Threading Screw Blanks.*—I claim as an improved article of manufacture a wood screw, of which the entering end is made to taper in the manner and for the purposes substantially as set forth, that is to say, by giving to the core thereof a form bounded in any plane which passes through the axis of rotation, by lines which converge toward, and, if produced, will intersect said axis, in contradistinction to the known form wherein the bounding lines in such planes are parallel to said axis.

ELLIOT SAVAGE.

No. 828.—*Improved Waste Device for Hydrants.*—What we claim as of John Culver's invention, and of which we have become the owners by assignments, is the described arrangement of the plunger relative to the discharge pipe, and capable of elevation proportional to the capacity of said pipe for forming a chamber in the lower portion of the hydrant, for the reception of the contents of the discharge pipe.

Also, in combination, the arrangement of the valve C, and means for operating it by the spring H, substantially as and for the purposes specified.

JOSHUA REGESTER.  
WM. GEO. WEBB.  
JOHN L. ROCHE.  
JOHN McCART.

No. 829.—*Improvement in Sewing Machines.*—I claim, as the invention of O. L. Reynolds, first, the employment and use in a sewing or tambouring machine of a needle or thread carrier having a movable or flexible beard or hook, and also the combination with said needle or thread carrier of a mechanism for closing the beard thereof.

Second. The combination with a bearded instrument, used as before described, of a thread guide V, having the motions described, such as shall carry the thread across the path of the bearded instrument and present it to the action thereof without carrying the thread around the shank of the said bearded instrument, in the manner set forth and described.

Third. The combination of the cam G, lever O, and guide V, with a spring, whereby the thread is presented to the action of the bearded instrument, as set forth.

J. W. BARTLETT.

No. 830.—*Improvement in Clothes Dryers.*—I claim, first, tilting the reel to the desired position to enable a person to place the clothes on the lines without high reaching, and elevate them in good position to dry, and out of the way of injury, substantially as set forth.

Second. Arranging and combining with a rotary tilting reel the ratchet G and pawl H, or their equivalents, for preventing backward rotary motion of the reel as the clothes are placed on the lines and moved along, substantially as set forth.

Third. Operating the reel by the combined action of the arm C, jointed arm or lever E, and loop or staple F, or its equivalent, substantially as set forth and for the purpose specified.

SAMUEL MORRILL.

No. 831.—*Improvement in Mowing Machines.*—First. I claim the combination of the short curved arm R, with the bar Q, and finger bar P, the whole being constructed and arranged for joint operation, substantially as and for the purposes above set forth.

Second. I claim the combination of the coupling arm with bar Q, wrist *f*, socket *h*, hinge *g*, and short finger beam P, substantially as and for the purposes set forth.

Third. I claim extending the coupling arm R outside of the frame, in combination with the front hinges of bar Q, also outside of the main frame, when the parts are constructed and arranged in the manner substantially as described, whereby greater freedom of the movement of the cutting apparatus is secured.

E. BALL.

No. 832.—*Improvement in Mowing Machines.*—I claim the combination of the independent driving wheel B<sup>1</sup> at the grain side of the machine, with the hinged bar Q, to which the short finger beam is rigidly attached and the hinged coupling arm, whereby the cutting apparatus may rise and fall freely, and the cutters be kept in operation while turning to the left upon uneven ground, substantially as described.

E. BALL.

No. 833.—*Improvement in Flour Bolts.*—I claim the slide valve or valves *d*, so arranged and operating with the apertures *e e*<sup>1</sup> in the sides of the bolting chest, that either of these apertures can be opened or closed, or both closed when required, for the purpose of turning the material as desired in either of three directions, as set forth.



I claim, in combination with the valves, the concave M and scrapers  $a^1$  upon the bolt, all arranged and operating as herein set forth.

JAMES M. CLARK.

No. 834.—*Improvement in Machines for Burnishing Metals.*—I claim, first, the burnishing of silver plated, and other metallic ware, such as spoons, knives and forks, or other similar articles which have a concave, convex, or bevel surface, by an organized machine, requiring no other attention than being kept in proper order, adjusted to suit the article about being burnished, set in motion, and having the articles properly introduced to it, successively, substantially in the manner herein set forth.

J. STEVER.

No. 835.—*Improved Furnace for Smelting Iron.*—I claim, first, the combination with the cone of a furnace of one or more arched recesses or chambers A A, substantially as and for the purposes set forth.

Second. The combination of an opening I with the crown of the arch A, substantially as and for the purposes set forth.

Third. The combination with the arch recess A, opening I in the crown of the same, of a movable tympan B B, to be applied to the outer ends of the arched recesses or chambers A A, instead of the permanent tympan now in use; which movable tympan is kept in place by a cross bar that can be removed at pleasure, substantially as and for the purposes set forth.

S. M. FALES.

No. 836.—*Improvement in Coffee Pots.*—We claim the employment in a condensing boiler, in which the water in the condenser is impregnated with the aroma of the coffee, or other articles under treatment, of a syphon, or equivalent self-acting device, for the discharge of the contents of the condenser into the body of the boiler, substantially as described.

CHARLES B. WAITE.  
JOSEPH W. SENER.

No. 837.—*Improved Calendar Clock.*—I claim, first, the extra movable tooth  $m$  and leap year wheel G, applied to or controlled by the year wheel F, to operate in the manner described for the purpose of regulating the effective length of the tooth which represents the month of February.

Second. The arrangement of the month wheel C, its attached pinion  $t$  and pin 4, the rack bar H and its pawl  $q$ , the spring  $v$  or its equivalent, the lever D E and its stud  $i$  or their equivalents, the catch K or its equivalent, and the stop 7, the whole being applied to operate upon and be controlled by the year wheel of a calendar movement, as and for the purpose herein set forth.

Third. Arranging the month wheel in such a manner that the same at the end of each month returns to its original position by the action of the spring or its equivalent, gathered up or strained by the action of the clock work, substantially in the manner and for the purpose herein described.

HOLLY SKINNER.

No. 838.—*Improved Construction of Cylinders and Pistons for Pumps and Steam Engines.*—I claim the combination of the cylinder, open at both ends, with three pistons and their connections, arranged substantially as herein set forth.

WALLACE WELLS.

No. 839.—*Improvement in Leather Finishing Machines.*—What we claim is, first, in machines for finishing leather, the employment of a soft elastic bed, substantially as described.

Second. The combination of an elastic bed and tool, both constructed and operating together, to produce the desired effect upon the leather, as set forth.

Third. In combination with the soft elastic bed and elastic finishing tool, the cord  $p$ , secured to the tool stock for the purpose of keeping the tool clear of the leather during its retrograde movement over the bed, as herein above set forth.

C. WESTON.  
T. F. WESTON.  
JOHN W. WESTON.

No. 840.—*Improved Clap Board Machine.*—What I claim is resawing and bringing plank to an equal width at the same time.

Second. The flange rollers, with their springs or equivalents, in combination with the adjustable back rest, for the purposes hereinbefore described.

ARETUS A. WILDER.

No. 841.—*Improvement in Journal Boxes for Railroad Cars.*—We claim as the invention of the said McWilliams, first, the upper half A of the box with its socket formed by the flanges



*h*, in combination with the lower half B of the box, when the two halves are arranged substantially as set forth, so that on adjusting the lower half to its place it may assume the position shown in Fig. 1, and so that when adjusted the end *w* of the oil chambers shall be close to the axle, as and for the purpose specified.

Second. The self-adjusting leather packing E and the metal plate F, when both are dependent upon the lower half of the box for their proper position within the other half, and when they are otherwise arranged in respect to both upper and lower half of the box, as and for the purpose set forth.

S. W. HOFFMAN.  
ADAM J. FREDERICK.

No. 842.—*Improvement in Harvesters.*—I claim, in combination with a main frame H, supported upon two carriage wheels A A<sup>1</sup>, which frame bears the shaft M and main cog wheel S, a second frame hinged to and vibrating about said shaft M, so that the crank shaft on said second frame shall always be in a radial line to the main cog wheel S, however much said second frame may vibrate on the main frame, as set forth.

Second. I claim supporting the crank shaft V upon a vibrating frame R, intermediate between the cutter bar, or its shoe X, and the main frame H, when said main frame bears the main cog wheel S, and said intermediate frame vibrates or turns about an axis parallel to the axis of the driving or carriage wheels, as set forth.

W. S. STETSON.

No. 843.—*Improvement in Harvesters.*—I claim, first, the main frame H, which bears the pinion K, and has its vibratory motions up and down independent of the motions of the platform and pole, in combination with the vibrating frame R intermediate between the said main frame and cutter bar, as set forth.

Second. I claim combining the adjusting lever Z with the platform C and main frame H, in the manner and for the purposes set forth.

Third. I claim giving to the main frame H, which bears the driving pinion K, a back and forth motion upon the axletree, as set forth.

W. S. STETSON.

No. 844.—*Improvement in Harvesters.*—I claim the combination of shoe X with the vibrating frame R, by means of axis *y*, at the rear end of said frame, as set forth.

Second. I claim horsing or supporting the knife bar in a position at right angles, or nearly so, to the carriage axle by two movements, substantially as described.

W. S. STETSON.

No. 845.—*Improvement in Machines for Cleaning Grain.*—What we claim as the invention of the said William H. Orr is the arrangement and application of the stirrer K in the described relation to the riddle or shoe of a grain separating machine, operating in the manner and for the purpose set forth.

W. M. GRIFFITH,  
SYLVANUS MOORE,  
*Composing the firm of W. M. Griffith & Co.*

No. 846.—*Improvement in Revolving Fire-Arms.*—I claim combining the driving pin that works in the grooves to rotate and hold the breech in line with a slide below adapted to the reception of and to be operated by the trigger finger, and acting on the lock at the end of the back motion to liberate the cock or hammer and discharge the load, substantially as described.

And I also claim combining the plunger with the many chambered rotating breech pistol or other fire-arm, by means of a lever with a cogged sector engaging the cogs of a straight rack, substantially as and for the purpose specified.

E. K. ROOT.

No. 847.—*Improvement in Straw Cutters.*—I claim, first, operating the adjustable lower feed roller by means of a spur wheel hung in a vibrating frame or yoke, the axis of which is connected with the said roller by means of an universal coupling, when said roller is supported on spring bearings independent of each other, substantially as and for the purpose specified.

Second. The employment of a cylinder provided with a knife or knives which have an upward cylindrical cut, when the same is arranged with two independent feed rollers, the lower one of which being supported on a spring or springs in such a manner that it can adjust to act with greater or less pressure on the material to be cut, substantially as set forth.

DEWITT C. CUMINGS.

No. 848.—*Improvement in Pumps.*—I claim the two ball valve cages with the suction valves



in their interior, attached to the extremities of a central perforated tube, or its equivalent, in combination with the water ways and discharge valve or valves, the water entering between the plunger valves and being alternately discharged from the ends of the pump barrel in direction of the stroke, the whole being constructed and operated, substantially in the manner and for the purposes set forth.

WILLIAM M. HENDERSON.

No. 849.—*Improved Lock and Detector*.—I claim combining with a padlock, or any lock provided with a shackle, a lead or soft metal tube or seal so arranged as to be temporarily secured thereto, and admitting of being released only by the removing or breaking of said tube or seal, which thereby serves as a detector, substantially as set forth.

JOHN H. LYON.

No. 850.—*Rim for Lockets*.—I claim a rim for lockets and similar metallic cases formed of sheet metal in such manner that the face of the fieldpiece within the case and the exterior surface of the rim are both formed from the same side or surface of the original sheet metal, and that the fieldpiece and rim are of one piece of metal.

CHARLES G. BLOOMER.

No. 851.—*Mode of Constructing Lockets*.—I claim the method of imparting the finished shape to case rims of sheet or thin metal, in which the external ring and fieldpiece are one piece of metal, by means of dies, substantially as herein set forth.

CHARLES G. BLOOMER.

No. 852.—*Machine for Wetting and Cutting Paper for Printing Presses*.—I claim, first, the combination with the printing machine of the mechanism herein described, or its equivalent, so arranged as that the paper, as it passes along from the reel to be printed upon, shall be dampened, as set forth.

Second. The combination with the cylinder C D or their equivalents, of the adjustable rollers E F or their equivalents, to supply the moisture for the paper, and also to regulate the quantity of that moisture, as set forth.

Third. The combination with the printing machine of the moisture vessels G H or their equivalents, as set forth.

Fourth. The combination of the cutting knife with the dampening roll, or cylinder, or its equivalent, as set forth.

Fifth. Simultaneously wetting or moistening both sides of the paper, in the manner substantially as described.

Sixth. Leaving the paper dry at the point or line of cutting, substantially as described.

Seventh. The employment of spring pressure to project the knife, in the manner substantially as herein shown or described.

Eighth. Retiring the knife within circumference of the cylinder by means of the cams R, or their equivalents, as set forth.

Ninth. Catching the knife when retired within the circumference of the cylinder C, retaining it while so retired, and releasing it for the operation of cutting, by means of the catches *e f*, the springs *j*, and the tripping pins I, or their equivalents, in the manner substantially as described.

Tenth. The employment of cylinders C D, or their equivalents, to draw the paper from the reel, to be afterwards cut into sheets and fed into the printing machine, as set forth.

Eleventh. Breaking or tearing asunder any fibres of paper left uncut by the knife by the grasp of the cylinder M and roller Q, or their equivalents, as set forth.

Twelfth. Giving the conducting or guide tapes K, or their equivalents, a speed greater than that of the paper, as set forth.

Thirteenth. The combination of the feeding mechanism, cutting apparatus, and the printing machine, or their equivalents in the said combination, for feeding the paper from a roll to a printing machine, and cutting or partially cutting it into sheets as it passes along to be printed, as set forth.

M. S. BEACH.

No. 853.—*Improvement in Bending Wood*.—I claim my improved method of bending wood, substantially as hereinbefore described.

THOMAS BLANCHARD.

No. 854.—*Improvement in Apparatus for Cooling Liquids*.—I claim, as executrix and in trust for the heirs of Valentine Hall, deceased, first, the employment or use of one or more receivers A B, with or without the pump E, placed on a tank F, containing ice water or water at a low temperature, and connected together and to the liquid supply pipe, substantially as and for the purpose set forth.

Second. The employment and use of one or more receivers A B, placed within a tank F,



and connected with the barrel or cask H, by means of a syphon I, and with a pump E within or at the outer side of the tank, for the purpose set forth.

Third. The combining of a pump E, with one or more receivers A B, connected together and made to communicate with each other by syphons C D, when said parts are submerged within a tank F, and made to communicate with the cask or barrel H, by means of a syphon I, extending over the top of the tank, substantially as and for the purpose set forth.

BERRESFORD M. KING.

No. 855.—*Improvement in Machines for Ploughing.*—I claim, first, the employment in combination with the locomotive of a bilge shaped driving wheel, substantially as set forth.

Second. I do not claim broadly the invention of movable spurs, but I claim the combination of the sliding spurs K K, with the bilge shaped driving wheel E, as herein shown and described.

Third. The arrangement of the adjustable frame, ploughs, gauge wheel, driving wheel, engine, boiler, and guiding wheels, as herein shown and described.

J. W. HAWKES.

No. 856.—*Improvement in Running Gear of Locomotive Engines.*—I claim the combination of a free vibrating truck, with six or more driving wheels, when the front pair of drivers is placed in advance of the centre of gravity of the entire engine, substantially as and for the purposes herein set forth.

SEPTIMUS NORRIS.

No. 857.—*Improvement in Steam Boilers.*—I claim, first, the central water space F<sup>1</sup>, in the combustion chamber F, arranged in relation to the annular water space F<sup>2</sup> and to the tubes D, or their respective equivalents, substantially as within set forth.

Second. Placing the annular sheet G and horizontal plate I (which with the jacket form the smoke box M,) outside of the water space W, and sufficiently above the bottom of the water space to allow the sediment to be conveniently removed from the water space, in combination with the described arrangement of the return tubes D, substantially as set forth.

WILLIAM OLDMAN.

No. 858.—*Improvement in Making Brass Kettles.*—What I claim, in forming kettles and other analogous vessels of brass or other ductile metal or alloys, is the employment of two rotating rollers for griping, turning, and rolling the disk of metal substantially as described, in combination with the clamps or holders for holding the disk of metal at any desired angle with the axis of the rollers, substantially as described and for the purpose specified.

And I also claim the concave and convex clamping plates substantially as described, in combination with the rollers or any equivalent mode of rolling the metal, substantially as described.

And I also claim the combination with the rollers for rolling the disk of metal, the supporting rest for supporting the metal beyond the point of action of the griping rollers, substantially as set forth

O. W. MINARD.

No. 859.—*Improvement in Reaping and Mowing Machines.*—I claim so constructing and arranging the platform of a reaper as that it or a portion of it may be made to form a track clearer when it is desired to convert the machine into a mower, substantially as herein specified.

J. W. MULLEY.

No. 860.—*Improvement in Reaping and Mowing Machines.*—I claim the hollow reel shaft, made of sheet metal, or its equivalent, formed with boxes or bearings at or near each end, and made to revolve on an arm supported at one end only, substantially as specified.

J. W. MULLEY.

No. 861.—*Improvement in Reaping and Mowing Machines.*—I claim, first, the manner herein described of securing the detachable cutters or blades to or in their place on the cutter bar, and relatively to each other, by means of central holding screws, in combination with pins or studs on the bar to fit the recesses in the adjoining sides of the blades, substantially as set forth.

Second. Providing the fingers with the laterally projecting lips, in front and rear of the slot in which the cutter bar plays, substantially in the manner and for the purposes specified.

Third. The finger bar, arched as described, in combination with the fingers, made with a swell or convex projection in their rear, substantially as herein set forth.

J. W. MULLEY.

No. 862.—*Improvement in Coating Metallic Surfaces.*—We claim the combined process, substantially as herein described, of coating metals with the composition made of India



rubber or allied gum dissolved in and combined with linseed oil in a heated state, in proportions substantially such as set forth, by first heating the metal to be coated to about 350 degrees, applying the composition to the metal surface while so heated, and then subjecting the metal so coated to about 200 degrees of heat, substantially as described.

WM. BUTCHER.  
WM. A. BUTCHER.

No. 863.—*Improvement in Ploughs.*—I claim moving and adjusting the beam A laterally upon the standard B, by means of the head L and dovetailed connections *m m* and *j j* or their equivalents, in such a manner that the line of draft, or direction of the beam, shall always remain parallel with the landside of the implement, substantially as and for the purposes herein shown and described.

ISAAC RULOFSON.

No. 864.—*Improvement in Boilers and Steamers.*—I claim the construction and arrangement of the two sections A and B, so that the section A may be used separately, as a caldron, or both sections be securely united and employed as an enclosed boiler for generating steam, as herein specified.

I also claim the combination of the cylindrical or cylindroidal support and fire-box C, entirely open at the top, with the uniting and supporting flanges *e f* of the spherical or spheroidal sections A B, constructed as described, so that, by presenting a thin edge only to the flanges, it allows the utmost facility of clamping and unclamping the sections, and of moving or adjusting the same, while it firmly sustains the boiler and shields the packing between the flanges from the heat of the fire, substantially as herein set forth.

I also claim the trough F, formed by the lip projecting above the upper flange *f*, for the purpose of containing water to protect the packing between the flanges from injury by heat, substantially as described.

DANIEL R. PRINDLE.

No. 865.—*Improvement in Pumps.*—I claim the arrangement of two or more cylinders B B, piston heads C C, ball valves *a a*, air chamber F, and valves *a<sup>1</sup> a<sup>1</sup>*, said valves being kept in position by proximity to each other and the sides of the chamber F, substantially in the manner and for the purpose herein specified.

JOHN M. LUNQUEST.

No. 866.—*Improvement in Harvesters.*—I claim giving the rake the two within described regularly succeeding axial movements over and across the platform of said machine—that is to say, an elevated curvilinear movement from rear to front over said platform, and a horizontal movement from front to rear upon or near to said platform, by means substantially as herein described and for the purpose set forth.

McCLINTOCK YOUNG, JR.

No. 867.—*Improvement in Pans for Evaporating Cane Juice.*—I claim, first, the combination, with a fire furnace, of a sugar evaporating pan, when said pan is constructed and arranged so as to allow of a continuous circulation of the syrup in an indirect course over its surface during the process of boiling, substantially as and for the purposes set forth.

Second. So arranging the pan on the furnace that a portion of its bottom surface near each side shall not be exposed to the direct heat of the furnace, and thus, while the intermediate surface of the bottom of the pan is intensely heated, the other portions remain comparatively cool, substantially as and for the purposes set forth.

Third. Retarding the escape of the syrup, or facilitating its escape, either by giving the pan a vibrating motion or a greater or less inclination, substantially as and for the purposes set forth.

Fourth. An evaporating apparatus, which allows of a circulation of the stream of syrup, boils it at the centre of the pan, and cools it at the sides of the same, and affords facilities for regulating the flow of the steam, substantially as and for the purposes set forth.

D. M. COOK.

No. 868.—*Improvement in Stop Cocks.*—I claim the arrangement and combination of the collar I, flexible washer H, metallic washer G, as and for the purpose described.

Second. The chambered, square, nut, or valve, when its seat is formed in the body of the cock, in the manner substantially as and for the purpose described.

ERASTUS STEBBINS.

No. 869.—*Improved Machine for Splitting Fire Wood.*—First. I claim feeding the wood to be split by the endless chain I I, when so arranged that the chain can receive a lateral movement for the purposes and as specified.

Second. In combination with the endless chain to feed the wood as aforesaid, I claim the rollers *j j*, for permitting a lateral movement and taking up any slack, as set forth.



Third. I claim the yielding pawls  $h^2 h^2$ , in combination with the feeding chains I I, for permitting backward movement to the wood as the knife enters the same, thereby preventing the wedging of the wood or injury to the parts, as set forth.

Fourth. I claim the spurs  $f^1$  to give lateral motion to the chains I I, in combination with the arms  $d^1$ , and yielding connection to the rods  $b^1 b^1$ , as described and shown.

Fifth. I claim the yielding end pieces  $e e$ , to regulate the delivery and sustain the wood while being split and prevent the same falling over before being separated by the second cut as specified.

W. L. WILLIAMS.

No. 870.—*Improvement in Skeleton Skirts*.—I claim the new manufacture of skeleton skirt herein described, in which the hoops B are fastened between separately woven parts of the tapes, substantially as herein described, when the parts are woven together as single tapes between the hoops, and separately as distinct tapes at the points where the hoops are received.

J. DRAPER.

No. 871.—*Improved Table Caster*.—We claim, first, the combination of the caster and egg stand.

Second. The combination of the caster and bell.

Third. The combination of the caster, egg stand, and table bell, substantially as described.

ROSNELL GLEASON.

R. GLEASON, JR.

EDWARD GLEASON.

No. 872.—*Improved Evaporating Apparatus*.—I claim a pan for containing solutions to be heated in combination with a vessel contained therein, the top and bottom of which are connected by a series of vertical or nearly vertical tubes, the interior of such vessel being connected with proper pipes for the supply of steam and the escape of steam or condensed vapor, and the whole being constructed substantially in the manner and for the purpose specified.

JAMES McCracken.

No. 873.—*Improvement in Cooking Stoves*.—I claim, first, the flaring enlargement of the side flues C C and D D, from the space above the oven to the flue space E, which extends under the entire front end of the oven; and also the flaring enlargement of the central flues F and G, from the flue space E to the upper end G, for the purpose of increasing the draft of the stove, substantially as herein set forth.

I also claim separately the front of the oven from the front plate of the stove, and also from the hearth plate and from the back plate of the fire chamber, by means of the flue space H, which communicates freely with the flue space E, and is closed at all other points; the said arrangement enabling the flue space H to arrest the great amount of heat that will be radiated from the back plate of the fire chamber, and conduct the same (by means of the circulation which it will create in said flue space) into the flue space E, for the purpose of producing the beneficial results herein particularly set forth.

GILES F. FILLEY.



## CLAIMS OF PATENTS FOR DESIGNS GRANTED DURING THE YEAR 1859.

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No. 1,075.—*Design for Dining Room Stoves.*—We claim the scrolls, figures, and fluting, as set forth in the annexed drawings, thereby forming an ornamental design for dining room stoves, to be called the trio.

CONRAD HARRIS.  
PAUL W. ZOINER.

No. 1,076.—*Design for Cooking Stoves.*—We claim the scrolls, foliage, and mouldings, as set forth in the annexed drawings, and thereby forming an ornamental design for coal cooking stoves, to be known and called the Pluto.

CONRAD HARRIS.  
PAUL W. ZOINER.

No. 1,077.—*Design for Parlor Stoves.*—I claim the combination of ornaments and ornamental configuration of the different plates of parlor Franklin stoves, as described and set forth in the accompanying drawings.

S. W. GIBBS.

No. 1,078.—*Design for Ink Bottles.*—I claim the general configuration of the parts herein shown and described, to form a new and original design for an ink bottle.

THADDEUS DAVIDS.

No. 1,079.—*Design for Cooking Stoves.*—I claim ornamenting the doors, front plate, side plates, and feet of cooking stoves, as herein specified and represented in the annexed photographic drawings.

JAMES R. HYDE.

No. 1,080.—*Design for Stoves.*—I claim, first, the form and pattern of the plates A, B, and E. Second. The beadings and escutcheons of the design shown.

Third. The design of the moulding H, the whole forming an ornamental stove, as herein described.

APPOLLOS RICHMOND.

No. 1,081.—*Design for Hot Air Furnaces.*—I claim the shape and configuration of the said furnace, as herein described and shown in the drawings.

HIRAM BISSELL.

No. 1,082.—*Design for Gas Burners.*—I claim a design for portable gauze gas burners, represented in the accompanying drawings.

H. B. MUSGRAVE.

No. 1,083.—*Design for Carpets.*—I claim the design or pattern for carpets, herein set forth.

ELEMIR J. NEY.

No. 1,084.—*Design for Carpets.*—I claim the within described design or pattern for carpet and other fabrics.

ELEMIR J. NEY.

No. 1,085.—*Design for Stereoscope Cases.*—What I claim as a new and ornamental design is making a stereoscope case in the form of a book, as described and shown.

WILLIAM LOYD.

No. 1,086.—*Design for Stereoscope Cases.*—I claim forming a case A, with the column B, the entablature C, and the lid D, arranged so as to form a new and ornamental design, in the manner herein described.

ALEX. BECKERS.

No. 1,087.—*Design for Table Bells.*—I claim a design for a tea bell composed of an ornamented base mounted by a female figure, as herein represented.

HENRY C. FOOTE.



No. 1,088.—*Design for Parlor Cook's Stoves.*—I claim the ornamental design for a parlor cook stove herein described and represented in the annexed photographic drawing.

DAVID HATHAWAY.

No. 1,089.—*Design for a Cooking Stove.*—I claim the new design for the side plate of a cooking stove consisting of the ornamental configurations hereinabove described and represented in the drawings.

A. C. BARSTOW.

No. 1,090.—*Design for Hat Racks.*—I claim the new ornamental design of hat racks as represented and described.

EDWARD REYNOLDS.

No. 1,091.—*Design for Floor Cloth.*—I claim the above described arrangement of ornamental figures forming a design as shown by the accompanying drawings.

JAMES PATERSON.

No. 1,092.—*Design for the Plates of a Stove.*—I claim the combination and arrangement of ornamental figures and forms represented in the accompanying drawings, forming together the ornamental design for the plates of a stove.

S. H. RANSOM.

No. 1,093.—*Design for the Plates of a Cooking Stove.*—I claim the combination and arrangement of ornamental figures and forms represented in the accompanying drawings, forming together the ornamental design for the plates of a cooking stove.

S. H. RANSOM.

No. 1,093½.—*Design for Air Tight Stoves.*—We claim the design, configuration, and arrangement of the several ornaments in bas relief, as above set forth and shown in the annexed drawing, as a new stove design.

GARRETTSON SMITH.  
HENRY BROWN.

No. 1,094.—*Design for Stoves.*—We claim the design and configuration of the mouldings and ornaments as herein described, forming an ornamental design for stoves.

GARRETTSON SMITH.  
HENRY BROWN.

No. 1,095.—*Design for Cooking Stoves.*—We claim the ornamental configuration and design for the plates of a stove, as herein described and shown in the accompanying drawings.

SHERMAN S. JEWETT,  
FRANCIS H. ROOT.

No. 1,096.—*Design for Tea Pot, &c.*—I claim giving tea and coffee pots and other articles of tea and coffee sets, the configurations, flutings, and ridges, embossings, and other adornments before described, so as to produce a simple, chaste, and highly ornamental design.

GEORGE W. SMITH.

No. 1,097.—*Design for a Burial Case.*—I claim the design for a burial case of the form and style represented in the accompanying drawings.

JOHN McMURTRY.

No. 1,098.—*Design for Spoon and Fork Handles.*—I claim the configuration of a grape vine foliage upon both sides of a spoon, fork, or other handle, as shown in Figs. 1 and 2 of the accompanying drawings.

WILLIAM H. LEWIS.

No. 1,099.—*Design for Stoves.*—We claim the ornamental configuration and design for the plates of a stove, as described and shown in the accompanying drawings.

SHERMAN S. JEWETT.  
FRANCIS H. ROOT.

No. 1,100.—*Design for Watch Guards.*—I claim making a watch guard to represent a fire engine, hose, and pipe, as represented in the accompanying drawings.

GEORGE BLANCHARD.

No. 1,101.—*Design for a Stove Plate.*—I claim the star and crescent in alto relievo, forming a border for circular plates for stoves, when arranged as above described and represented.

J. W. LANE.



No. 1,102.—*Design for Stove Plates.*—I claim the ornamental design for a door or plate of a stove, as herein described and shown in the annexed photographic drawing.

DAVID HATHAWAY.

No. 1,103.—Suspended.

No. 1,104.—*Design for Sepulchral Monuments.*—I claim the ornamental design for the shaft or faces of the obelisk, as represented and described.

RICHARD BARRY.

No. 1,105.—*Design for Sewing Machines.*—I claim the design for a sewing machine, illustrated and shown in the accompanying drawing.

S. B. ELLITHORP.

No. 1,106.—*Design for Cooking Stove.*—We claim the arrangement and combination of the ornaments that form the design herein above specified and represented in the accompanying drawings.

ANTHONY JOHN GALLAGHER.  
JACOB BEESLEY.

No. 1,107.—*Design for Stove Plates.*—I claim the ornamental configuration of the plates of a premium cooking stove, as fully set forth and described.

S. W. GIBBS.

No. 1,108.—*Design for Stove Plates.*—I claim the ornamental configuration and combination of ornaments for a six plate wood stove.

S. W. GIBBS.

No. 1,109.—*Design for the Tops and Bases of Sheet Iron Stoves.*—I claim the combination of the different ornamental figures and forms, and configuration of the mouldings of the top, and base, and door, of a sheet iron parlor or wood stove, as herein set forth and described.

S. W. GIBBS.

No. 1,110.—*Design for the Arms of Sewing Machines.*—I claim the ornamental design of the arms for sewing machines, as shown in the drawing.

JAMES S. McCURDY.

No. 1,111.—*Design for Match Boxes.*—I claim the configuration of the bases or lower terminals C, the same being in the form of a scollop shell, and constituting a new and ornamental device for a match safe.

P. J. CLARK.

No. 1,112.—*Design for a Cooking Stove.*—We claim the design for a cooking stove, exhibited in the accompanying drawing.

JAMES GREER.  
RUFUS I. KING.

No. 1,113.—*Design for the Sides and Doors of Cooking Stoves.*—We claim the design exhibited in the accompanying drawings for the side and doors of a cooking stove.

JAMES GREER.  
RUFUS I. KING.

No. 1,114.—*Design for Spoon and Fork Handles.*—I claim the combination and arrangement of the several devices hereinbefore described, with the handle of a spoon, fork, or other article of table cutlery, whether made of silver or other metal, for the purpose of ornamenting the handles thereof.

HENRY HEBBARD.

No. 1,115.—*Design for Sun Dials.*—I claim the new and improved configuration of sun dials, as set forth in the specification and accompanying drawing.

WM. W. WILSON.

No. 1,116.—*Design for Floor Oil Cloth.*—I claim this design, of whatever size, in whatever colors, in kind or number, or in whatever contrasts or blending of colors, or of light and shade.

JAMES BOGLE.

No. 1,117.—*Design for Floor Oil Cloth.*—I claim the design, of whatever size, in whatever colors, in kind or number, or in whatever contrasts or blending of colors, or of light and shade.

JAMES BOGLE.



No. 1,118.—*Design for Stoves.*—We claim the design and configuration of the ornamental castings as above described and set forth in the annexed drawing.

GARRETTSON SMITH.  
HENRY BROWN.

No. 1,119.—*Design for Fire Frames.*—I claim the configurations, ornaments, and mouldings above described, as shown in the drawings, as a design for fire frames.

WM. W. STEVENS.

No. 1,120.—*Design for a Carpet Pattern.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,121.—*Design for a Carpet Pattern.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,122.—*Design for a Carpet Pattern.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,123.—*Design for a Carpet Pattern.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,124.—*Design for Clock Cases.*—I claim the general design and configuration herein described.

JOSEPH A. MUNN.

No. 1,125.—*Design for a Cook's Stove.*—I claim the ornamental design for the front and sides of a cook stove, herein described.

DAVID HATHAWAY.

No. 1,126.—*Design for a Cook's Stove.*—We claim the ornamental design for a cook stove herein described and represented in the annexed photographic drawings.

GEORGE W. PITTOCK.  
JOHN PITTOCK.

No. 1,127.—*Design for Parlor Cooking Stoves.*—I claim the configurations, ornaments, and mouldings as a design for an urn, top, door and frame, base, bottom, and legs, to be used with a sheet iron body in making a coal parlor or coal parlor cooking stove, as above described and represented in the accompanying drawings.

WM. W. STEVENS

No. 1,128.—*Design for Parlor Stoves.*—I claim the above described ornamental design for a parlor stove.

ROBERT HAM.

No. 1,129.—*Design for Carpet Patterns.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,130.—*Design for Carpet Patterns.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,131.—*Design for Parlor Coal Stoves.*—I claim the ornamental shape and configuration of the stove plates and doors, represented in the accompanying drawings.

ISAAC DE ZOUCHE.

No. 1,132.—*Design for Table Forks.*—I claim the configuration of the neck and stem, as shown and described, to form a new and original design for a table fork.

NATHANIEL E. RUSSELL.

No. 1,134.—*Design for Stoves.*—We claim the design, configuration, and arrangements of the ornaments on the plates as described, forming a new stove design.

GARRETTSON SMITH.  
HENRY BROWN.



No. 1,134.—*Design for Floor Oil Cloth.*—I claim the ornamental design for floor oil cloths represented in the accompanying pattern.

JAMES BOGLE.

No. 1,135.—*Design for Floor Oil Cloth.*—I claim the ornamental design for floor oil cloths represented in the accompanying pattern.

JAMES BOGLE.

No. 1,136.—*Design for Spoon or Fork Handles.*—What I claim is the use of the ornamental devices on the obverse and reverse sides of the spoon, as hereinbefore described, for the purpose of ornamenting the handles of spoons, forks, and other articles of table cutlery, whether made from silver or other metals.

HENRY HEBBARD.

No. 1,137.—*Design for Scales.*—We claim the configuration of the parts herein shown and described, to form a new and original design for the cases of what are known as the Union scales.

FRANCIS M. STRONG.  
THOMAS ROSS.

No. 1,138.—*Design for a Floor Oil Cloth.*—I claim the combination and arrangement of figures and devices herein specified and represented in the accompanying photographic impression, to form an ornamental pattern or design for a floor oil cloth.

J. B. VIROLET.

No. 1,139.—*Design for a Carpet Pattern.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into three-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,140.—*Design for a Carpet Pattern.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into three-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,141.—*Design for a Carpet Pattern.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into three-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,142.—*Design for a Three-Ply Carpet Pattern.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into three-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,143.—*Design for the Handles of Spoons and Forks.*—I claim the ornamental configuration herein represented, as applied to the handles of spoons and forks, as set forth.

P. B. GILBERT.

No. 1,144.—*Design for a Carpet Pattern.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,145.—*Design for the Handles of Spoons, Forks, &c.*—I claim the use of the ornamental devices hereinbefore described, for the purpose of ornamenting the handles of spoons, forks, and other articles of table cutlery, whether made of silver or other metal.

HENRY HEBBARD.

No. 1,146.—*Design for a Skating or Riding Cap for Ladies.*—I claim the design above described, and as shown more particularly in the drawings, of a cap for ladies, misses, and children, the same to be made of Berlin or Shetland worsted, or any other suitable material capable of being knit into the form as above described.

ELIZA A. MURDOCK.

No. 1,147.—*Design for a Cooking Stove.*—I claim the combination and arrangement of ornamental figures and forms represented in and by the accompanying drawing, as forming together an ornamental design for the front, side, and top plates of a cooking stove.

JOHN MARTINO.



No. 1,148.—*Design for Cylinder Stoves.*—We claim the combination and arrangement of the ornamental figures and forms represented in and by the accompanying drawing as forming together the plates of a cylinder stove.

JOHN MARTINO.  
JAMES HORTON.

No. 1,149.—*Design for the Frame of a Sewing Machine.*—I claim the design for a sewing machine illustrated and shown in the accompanying drawing.

S. B. ELLITHORP.

No. 1,150.—*Design for Gas Cocks, &c.*—I claim the use of the devices hereinbefore described as adapted and used for ornamenting cocks, couplings, brackets, and other parts of gas fixtures and chandeliers, as set forth.

B. M. JOHNSON.

No. 1,151.—*Design for a Box Stove.*—I claim the ornamental design and configuration of stove plates, such as herein described and shown in the annexed drawings.

E. J. CRIDGE.

No. 1,152.—*Design for the Arms of Sewing Machines.*—I claim the ornamental design of the shape or configuration of the sewing machine arm, as represented.

JAMES S. McCURDY.

No. 1,153.—*Design for Stoves.*—We claim the design, configuration, and arrangement of the several ornaments in bas relief, as herein described and set forth in the drawing, as the design for stove "Patapsco cook."

GARRETTSON SMITH.  
HENRY BROWN.

No. 1,154.—*Design for a Clock Case Front.*—What I claim as a new design is the semi-octagonal top in combination with the corner blocks and tips, when the whole is constructed, arranged, and made to present the symmetry of the new design, as herein described and represented.

ROSWELL KIMBERLY.

No. 1,155.—*Design for a Trade Mark.*—I claim the design shown by the annexed drawing and described herein, to be used as a trade mark upon an article of manufacture, with the name thereon described.

J. H. McLEAN.

No. 1,156.—*Design for Ornamenting Sewing Machines.*—I claim the combination and application of the devices hereinbefore described, for ornamenting the frame and working parts of sewing machinery, as set forth.

WM. NEWTON BROWN.

No. 1,157.—*Design for Cooking Stoves.*—I claim the arrangement and combination of the ornaments that form the design herein above specified and represented in the accompanying drawings.

ANTHONY JOHN GALLAGHER.

No. 1,158.—*Design for Parlor Stoves.*—We claim the scrolls, flutings, and mouldings, as set forth in the accompanying drawings, as forming an ornamental design for wood parlor stoves.

S. HARRIS.  
PAUL W. ZOINER.

No. 1,159.—*Design for Floor Cloths.*—I claim the ornamental design represented in the accompanying pattern.

JEREMIAH MEYER.

No. 1,160.—*Design for Cooking Stoves.*—The general design and configuration represented in the accompanying photograph.

THOMAS H. WOOD.  
JOHN E. ROBERTS.  
HENRY S. HUBBELL.

No. 1,161.—*Design for Ornamenting Bottles.*—I claim the ornamental design described and represented in the drawing for pine tree tar cordial bottles.

L. Q. C. WISHART



No. 1,162.—*Design for Clock Cases.*—I claim the design for a clock case, as herein above illustrated and set forth.

CHARLES T. FOOTE.

No. 1,163.—*Design for a Trade Mark.*—We claim the within described design of picture to be affixed to our wares and manufactures, and to be designated as the peach brand.

THOMAS HARGROVE.  
SAMUEL HARGROVE.

No. 1,164.—*Design for a Base for Casters.*—I claim the shape and configuration, as described for a centre base.

ALLEN LEONARD.

No. 1,165.—*Design for Caster Handles.*—I claim the configuration of a tasteful and artistical wrought figure for an ornamental design for a handle or lift, substantially as described, for a caster, &c.

ALLEN LEONARD.

No. 1,166.—*Design for Fork or Spoon Handles.*—I claim the configuration and ornamentation, the shield, the urn, or vase, the strawberry fruit, vine, and foliage combined, as described, to produce an ornamental design for a handle.

WILLIAM H. LEWIS.

No. 1,167.—*Design for Stoves.*—We claim the design and configuration, in bas relief, on the ornamental castings, for a stone design, as above set forth and represented by the annexed drawing.

GARRETTSON SMITH.  
HENRY BROWN.

No. 1,168.—*Design for Carriage Bodies.*—I claim the design consisting of the grooved seat B, with the round corners to ornament the seat of a carriage or buggy body.

HARRISON GROSH.

No. 1,169.—*Design for Carpet Patterns.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,170.—*Design for Carpet Patterns.*—I claim the design or pattern for carpets herein set forth.

ELEMIR J. NEY.

No. 1,171.—*Design for Floor Cloths.*—I claim the combination of figures and devices herein described and represented in the accompanying photographic impression, to form an ornamental pattern or design for a floor oil cloth.

I. B. VIROLET.

No. 1,172.—*Design for a Trade Mark.*—We claim a picture to be used as a trade mark, and designed as described, with the Bragg's Arctic liniment printed or engraved thereon.

OLIVER T. BRAGG.  
MICHAEL BURROWS.

No. 1,173.—*Design for a Trade Mark for Soap Boxes.*—We claim the new design for a label for boxes of soap consisting of the words and ornamental devices as above described and represented in the drawings.

THOMAS LINCOLN.  
SAMUEL LINCOLN.

No. 1,174.—*Design for Floor Oil Cloths, Carpets, &c.*—I claim the ornamental design represented in the accompanying pattern.

JEREMIAH MEYER.

No. 1,175.—*Design for Carpets, &c.*—I claim the design or pattern for carpets or other fabrics, herein set forth.

ELEMIR J. NEY.

No. 1,176.—*Design for Carpets, &c.*—I claim the design or pattern for carpets or other fabrics, herein set forth.

ELEMIR J. NEY.



No. 1,177.—*Design for Parlor Stoves.*—We claim the design and configuration of the ornamental castings as above described and set forth in the annexed drawing, and as forming the plates of a parlor stove.

GARRETTSON SMITH.  
HENRY BROWN.

No. 1,178.—*Design for Carpet Patterns.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into two-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,179.—*Design for Carpet Patterns.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into three-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,180.—*Design for Carpet Patterns.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into two-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,181.—*Design for Carpet Patterns.*—I claim the configuration of the design hereunto annexed, irrespective of colors and width, when made by being wrought into a twilled Venitian or other carpet, in form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

No. 1,182.—*Design for Carpet Patterns.*—I claim the configuration of the design hereunto annexed, when made by being inwrought into two-ply, ingrain, or other carpeting, in the form similar to the drawings accompanying this specification.

HENRY G. THOMPSON.

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## CLAIMS OF ADDITIONAL IMPROVEMENTS GRANTED DURING THE YEAR 1859.

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No. 215, to original Letters Patent No. 21,256.—*Improved Cross Cut Sawing Machine.*—We claim attaching the bar or beam C to the vertical bar B, by a pivot *a*, and securing the bar or beam C and beam B in a proper relative position with each other, by means of the rod D, loop *b*, and nut *d*, or their equivalents, so that the bar or beam C may be more or less inclined according to the thickness of the log, and the bar B always retained in a vertical position.

We further claim, in combination with the oscillating platform E, lever H, and saw bar J, the bar L, provided with an adjustable weight M, and arranged substantially as shown, to operate as and for the purpose set forth.

ALBERT HETH.  
GAYLON HALL.

No. 216, to original Letters Patent No. 19,507.—*Improvement in Hominy Mortars.*—I claim the application and combination of the slide S, with its spring D, and roughening of the lower end of the pestle at G, for the uses and purposes specified and substantially as set forth.

JOHN KEEZER.

No. 217, to original Letters Patent No. 18,681.—*Improved Shingle Machine.*—I claim, first, the use of the bridles or guides *d*<sup>1</sup> *d*<sup>2</sup>, in combination with the wrists *a*<sup>1</sup> of the shaving knives and the converging grooves and vertical slots, for the purpose of communicating to the shaving knives a combined drawing knife and approximating motion during the process of shaving the shingles, substantially as described.

Second. The use of the spring check plate E, in combination with the movable gate D, to



permit one only at a time of the shingle bolts to pass to the shaving knives, and prevent the bolt being drawn back on the retrocession of the feed board.

Third. The use of a feed-board composed of elastic bars or fingers, each capable of a slight depression at its extremity, so as to accommodate the surface of the feed board to any unevenness or twist in the shingle bolt.

JAMES CRARY.

No. 218, to original Letters Patent No. 16,416.—*Improved Method of Hanging and Operating Reciprocating Saws.*—I claim the adjustable ways D and E and the friction wheels H and I, arranged and operating in the manner and for the purposes specified.

I also claim the vibrating beams B and C, in combination with the ways D and E, and their dependent parts, constructed and operating in the manner and for the purpose set forth.

CARLYLE WHIPPLE.

No. 219, to original Letters Patent No. 21,710.—*Improvement in Machines for Trimming the Edges of Paper Hangings.*—I claim the framed ways W X, moving in a curvilinear path on a centre at one angle of frame, the hand lever  $x$ , that operates on frame way, and the springs  $b b$ , which keep the frame in position, in combination for the purposes as substantially set forth.

JOHN WAUGH.

No. 220, to original Letters Patent No. 18,357.—*Improvement in Spring Bed Bottoms.*—I claim supporting the fixed end of the longitudinal slots in spring bottoms for bedsteads by means of longitudinal spring bars substantially as described, so that the elasticity or yielding of both ends of the slots may be equalized for the purpose set forth.

HENRY S. SMITH.

No. 221, to original Letters Patent No. 16,532.—*Improved Tool for Tenoning Spokes.*—I claim, first, the adjustable gauge D, attached to the tube A, substantially as and for the purpose set forth.

Second. The employment or use of the temper or set screws B C, applied to the tube A, as and for the purpose set forth.

Third. The gauges H, fitted in the bars F F<sup>1</sup> of the clamp cutter head, all the above parts being arranged and operating as herein specified.

JOHN J. CROY.

No. 222, to original Letters Patent No. 18,228.—*Improvement in Locks.*—I claim the combination of the disk D and centre V, toothed or corrugated, substantially as represented, for the purpose of fastening them securely together, but I do not confine myself to any particular size or shape or number of teeth, nor to any particular position on the disk or centre.

HENRY W. COVERT.

No. 223, to original Letters Patent No. 20,091.—*Improved Fly Trap.*—I claim the cover or shade  $a$ , the rim or front marked  $e$ , and the pan marked  $b$ , as described above.

WILLIAM RILEY.

No. 224, to original Letters Patent No. 22,456.—*Improved Bedstead Fastening.*—I claim constructing the locking bolt A of a flat or rectangular form, so as to work against the surface of the side board C, to obviate the reducing of the bearing surface of the recess of the wrench B, and hold the parts to the required position without the usual guide pin, substantially as described.

I also claim elevating the hook  $j$  above a right line through the centre of the bolt A, substantially as and for the purpose set forth.

I also claim uniting the point  $i$  of the circular wedge with the stock of the wrench, whereby greater strength and a better adaptation to the recess or seat of the same is secured, substantially as described.

I further claim adapting the cam  $l$ , or raised part of the wrench lever to pushing and holding forward the bolt for ready connection with the pin  $f$ , substantially in the manner herein described.

OLIVER ROBINSON.

No. 225, to original Letters Patent No. 20,450.—*Improvement in Cooking Stoves.*—I claim the combination of the openings A in the side plate F, with the back fireplate B, and connecting tube C, with the centre plates D and E, constructed and combined in the manner and for the purpose set forth.

Second. I claim the openings  $ff^1$ , in side plate F, with the centre plate E<sup>1</sup>, constructed in the manner and for the purpose set forth.



Third. I claim the flue or opening L L, from the front plate H, to the top plate I, constructed in the manner and for the purpose set forth.

JAMES SPEAR.

No. 226, to original Letters Patent No. 17,756.—*Improved Railroad Car Stove.*—First, I claim the combination of the cone damper J, with the smoke pipe H and the top plate D, constructed in the manner and for the purpose set forth.

Second. I claim the combination of the head or deck collar L, with the cold air pipe G, and the smoke pipe H, constructed in the manner and for the purpose set forth.

JAMES SPEAR.

No. 227, to original Letters Patent No. 9,601.—*Improved Machine for Making Axes.*—I claim the groove G, the arm X, with the tongs T or T<sup>2</sup>, in combination with each other, substantially in the manner and form and for the purposes set forth in the within specification.

JONAS SIMMONS.

No. 228, to original Letters Patent No. 18,852.—*Improvement in Seeding Machines.*—I claim the arrangement of the stationary roof like screen N, lateral sloping projections e<sup>1</sup>, septum O, slides G<sup>1</sup> and G<sup>2</sup>, slotted bars f, and shoes I I, with slides E and trough F, the above part being constructed substantially as described and used in combination with the features covered by my patent December 15, 1857.

CHARLES COX JAMES.

No. 229, to original Letters Patent No. 21,941.—*Improved Arithmometer, for Addition.*—I claim the combination of the rocker, keys, and shifting pawl, in any equivalent manner and for the purposes set forth.

O. L. CASTLE.

No. 230, to original Letters Patent No. 14,859.—*Improvements in Machines for Dressing Mill Stones.*—We claim the bed piece A, with the cam B, bar or lever C, and rods p p, attached, provided with springs r, in combination with the frame or carriage D, with pick shaft i attached, provided with the forked arm o, the whole being arranged to operate as and for the purpose set forth.

SIMON W. DRAPER.

REUBEN M. DRAPER.

No. 231, to original Letters Patent No. 18,322.—*Improvement in Machines for Packing Wool.*—I claim forming either or both of the leaves B B of my improved wool packing machine of two or more connected longitudinal sections, when the said jointed leaves are so arranged as to operate with the other parts of said machine, substantially in the manner and for the purpose herein set forth.

CHARLES CARLISLE.

No. 232, to original Letters Patent No. 22,523.—*Improvement in Corn Shellers.*—I claim the guide B, in combination with the weighted or spring presser C, made movable and adjustable with reference to the centre of a disk A, in the manner and for the purpose set forth.

WILLIAM WELLS.

No. 233, to original Letters Patent No. 17,957.—*Improvement in Automatic Lubricators for Railroad Car Axles.*—I claim, first, placing a cylindrical coiled spring around the piston immediately above the socket, to be used instead of the volute spring below the piston and within the socket, as described.

Second. I do not claim generally a ball valve, as this is in common use in various connections, but I claim the use of the ball valve T, in combination with the enlarged chamber P, and the arrangement described for communicating and sustaining the oil in contact with the journal.

Third. I claim the use of the flat spring e, (Figs. 2 and 3,) constructed and arranged as described, to be used for vibrating the piston, together with the arrangement I have described for seating the piston on the spring, as herein set forth.

WILLIAM BAKER.

No. 234, to original Letters Patent No. 21,044.—*Improvement in Mangles.*—I claim the employment or use of the cylinder C, having an elliptical surface upon a portion of its periphery, and having a fixed axis of rotation, the cylinder D having a movable axis of rotation, and the eccentric cams h arranged upon a movable rod, and their pressure being regulated by suitable springs, the whole being arranged to operate substantially as and for the purposes set forth.

D. CUMMING, JR.



No. 235, to original Letters Patent No. 12,818.—*Improvement in Railroad Car Ventilators.*—We claim the construction of the fan chambers  $D D^1$ , with outlets at each extremity, and their combination with the other portions of the ventilating apparatus, as described.

D. H. FOX.  
JOHN FINK.

No. 236, to original Letters Patent, No. 17,374.—*Improvement in Ore Crushing Machines.*—I claim the alternate lifting and dropping of a stamper or hammer by means of the combination of the vertical rod with two or more clamping rollers, the peripheries of which are not complete circles.

SAMUEL F. HODGE

No. 237, to original Letters Patent No. 20,668.—*Improvement in Cooking Stoves.*—I claim the extension of the flues under the hearth, substantially as described, for the purposes set forth.

SAMUEL B. SPAULDING

No. 238, to original Letters Patent No. 21,267.—*Improvement in Harnesses.*—I claim the bearing bar, the chain and braces attached thereto, and the padded swivel joint, to be used in combination with my improvement in harness, disclaiming the original invention heretofore patented.

FREEDOM MONROE.

No. 239, to original Letters Patent No. 22,648.—*Improvement in Apparatus for Evaporating Saccharine Juices.*—I claim, first, the application of one or more dampers  $H$  to the movable furnace  $A$ , also the cooling surface on the evaporator connected therewith, for the purposes set forth.

Second. I claim the movable flue  $I$ , as described.

Third. I claim the broad hook or supporter  $K$ , or its equivalent, as set forth.

L. P. HARRIS.

No. 240, to original Letters Patent No. 19,582.—*Improvement in the Spring Seats of Chairs, Sofas, &c.*—I claim the spring plate  $D$ , arranged and operating in combination with the supporting blocks  $B B$ , substantially as herein specified.

CHARLES ROBINSON.

No. 241, to original Letters Patent No. 22,941.—*Improvement in Railroad Car Springs.*—I claim the box  $A$  and cover plate  $C$ , secured together by a bolt  $D$ , or other suitable fastening, in combination with one or more loose plates  $H$ , placed within the box so as to divide the latter into two or more compartments, as and for the purpose herein set forth.

A. B. DAVIS.

No. 242, to original Letters Patent No. 23,343.—*Improved Mode of Preparing and Mounting Slate.*—I claim the combination of leather, or cloth, or felt, (or felting,) instead of or in addition to India rubber and gutta percha so far as beauty and economy, and desirableness in use may require, with the metallic band or rim around the edge of the slate, as patented March 29, 1859.

I also claim as my improvement the combination of leather and cloth with my metallic rim, or with a water proof cement of such strength and stiffness as will warrant to some extent the disuse of said metallic rim, especially in mounting slates in port folio form, or forms, as set forth in the above specification and accompanying drawings.

HUBBARD BEEBE.

No. 243, to original Letters Patent No. 22,365.—*Improvement in Hanging Window Sash.*—I claim the improved arrangement of cords, pulleys, and weights, hereinbefore described, for hanging the sashes of windows, so that either or both sash can be retained in any desired position in the frame, the sash and weights being suspended and moving in cords attached to the frame.

T. F. HALL.

No. 244, to original Letters Patent No. 17,626.—*Improvement in Picker Sawing Machines.*—I claim attaching the saw guides to the overhanging bearing, so as to adjust them to the sawing of small logs, substantially as set forth.

JOHN HAW.

No. 245, to original Letters Patent No. 19,321.—*Improvement in Ploughs.*—I claim the combination of the eccentric roller  $r$ , beam  $B$ , notches  $i$ , and cuff  $f$ , substantially as set forth.

GEORGE WATT.



No. 246, to original Letters Patent No. 22,980.—*Improvement in Locks.*—I claim the arrangement of the spring *f*, collar *a*, ring *X*, screw *u*, brake wheel *W*, and arbor *S*, in the manner above described, so as to produce friction between the ring *X* and wheel *W* and arbor *S*; and also the arrangement of the brake *k*, indented flange *W*, and stem *O*, as above described, so as to prevent the revolution of the wheel *W* and arbor *S*, and ring *X*, and the external dial hand substantially as above described.

AMOS A. RICHARDS.

No. 247, to original Letters Patent No. 22,913.—*Improved Instrument for taking Altitudes of the Sun.*—I claim, in combination with the rotary bar *E*, the arrangement of the adjustable bar *F* and dial plate *R*, and rotary cylinder *H*, and adjustable disk *D*, in connection with the bar *K* and plates *a a* holding the lens, and *e e* having on its face a small square 3 to receive the sun's image through the lens, in such relation to each other, and to the rotary bar *E* that it operates substantially as and for the purposes specified.

FREDERICK YEISER.

No. 248, to original Letters Patent No. 22,928.—*Improvement in Mole Ploughs.*—I claim the employment of the cap *d* in combination with the mole *B*, constructed and arranged substantially as and for the purposes set forth.

MOSES BALES.

No. 249, to original Letters Patent No. 22,648.—*Improvement in Apparatus for Evaporating Saccharine Juices.*—I claim the application of partial transverse or oblique partitions to evaporating pans, for the purpose of preventing a continuous transverse channel when the said partitions shall be arranged, substantially in the manner as herein fully set forth and described.

L. P. HARRIS.

No. 250, to original Letters Patent No. 23,251.—*Improvement in the Mode of Oiling Journals.* I claim, first, the hinging the dish or bucket *G* to the rod *J*, as shown, for the purpose set forth.

Second. The dish or bucket *G* in combination with the several parts marked *C D E F* and *I*, for the purposes set forth and described.

DOUGLAS B. JORDAN.

No. 251, to original Letters Patent No. 24,537.—*Improvement in Corn Planters.*—We claim, first, the described arrangement of the weighted valve *V*, rod *v*, tappet *X*, wheel *K k*, slides *H*, and tube *D*, for the purpose set forth.

Second. In the described combination with a cam wheel *K k*, crank shaft *M*, rod *O*, and rocking lever *J j*, we claim the inverted arch yoke *Y y*, constructed and operating as set forth.

A. CAMPBELL.

W. CAMPBELL.

JAMES CAMPBELL.

No. 252, to original Letters Patent No. 19,256.—*Improvement in Tobacco Presses.*—We claim, first, the top plate of the press, marked in two drawings *A* and No. 5 *A*, in connection with the bottom plate of said press, marked in drawing as *c*, used for retaining pressure and forming the bed of the main truck, constructed as described.

Second. The groove nuts for raising and lowering the top plate of the press without taking it from the bars, as described.

WILLIAM R. MUSSER.

JOHN COLEMAN.

No. 253, to original Letters Patent No. 23,549.—*Improvement in Attaching Thills to Vehicles.* I claim combining with the hook *A a* collar *G*, having a reverse hook or lip *k*, corresponding with the point of *A*, to form an eye therewith, together with the screw shank and binding nut *H*, substantially as and for the purpose herein specified.

DOUGLAS BLY.

No. 254, to original Letters Patent No. 19,560.—*Improved Curtain Fixture.*—I claim the application of the lever as before explained, and as it is represented in Fig. 2, in combination with the cord and tassel, with the pulley or eye in the end of the tassel, and for the purposes described.

JOSEPH F. HALL.

No. 255, to original Letters Patent No. 25,667.—*Improved Gold Washer.*—I claim, first, imparting to the shaft *b*, and the series of pans thereon, an intermitted or oscillating movement for the purposes and as specified; and in combination with the shaft *b* and pans having



the intermitted or oscillating movement set forth, I claim the cam *h* and ball *i* to give the vertical or jiggling movement as specified.

Second. The conical hoods or funnels *o*<sup>1</sup> *o*<sup>2</sup>, in combination with the pans *n n*, for the purposes and as specified.

M. NELSON.

No. 256, to original Letters Patent No. 25,359.—*Improved Apparatus for Watering and Sweeping Railways.*—I claim combining a fireplace and flues or other equivalent heating apparatus with the water tank *L*, for the purpose specified.

W. C. ALLISON.

No. 257, to original Letters Patent No. 25,857.—*Improvement in Naval Architecture.*—I claim making the lines of every section of a vessel, from the keel to the water line, arcs of circles, when said arcs have separate and independent centres determined, substantially in the manner described.

B. F. WELLS.

No. 258, to original Letters Patent No. 19,779.—*Improvement in Straw Cutters.*—I claim the combination and arrangement of the devices for operating the knife and feeding box, substantially as above described.

W. W. HOLLMAN.

No. 259, to original Letters Patent No. 14,110.—*Improved Machine for Making Clothes Pins.*—What I claim, is adding bits to the machine so as to bore the stuff at the time it is being shaped and turned at the same operation.

I also claim as above the boring the stuff first and then putting it up on a small mandrel which revolves, so that the work shall be turned and shaped to the right pattern, and finished at each end upon its own centre hole, all at one operation.

I claim the above improvements as before set forth, or any equivalent which substantially effect either of the above objects by any other arrangements of mechanism or mechanical devices.

EPHRAIM PARKER.

No. 260, to original Letters Patent No. 22,897.—*Improved Refrigerator.*—I claim the arrangement severally of the escape pipe *G* in combination with the induction pipe *E*, so as to operate conjointly therewith, and in connection with a flue *K*, substantially as and for the purposes set forth.

WILLIAM SIMS.

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## CLAIMS OF EXTENSIONS GRANTED DURING THE YEAR 1859.

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Letters Patent No. 3,885, dated January 16, 1845.—Reissue No. 92, dated May 1, 1847.—*Improvement in Cotton Presses.*—I claim combining the piston of a steam engine with the follower or platen of a press, by the interposition of the two progressive levers, substantially as herein described, whereby the direct and constant force of the steam piston shall operate the follower or platen by a force increasing in the ratio of the increased resistance, or nearly so, as described.

PHILOS B. TYLER.

Letters Patent No. 3,915, dated February 20, 1845.—*Improvement in Buttons.*—What I claim as the invention of John Hatch, deceased, is my improvement in the modes usually adopted for forming or making the eyelet holes or thread passages of buttons, composed of two circular plates of metal, the one of said pieces being confined to the other, as above described; the said improvement consisting in punching holes through the plates (so as to leave a bur projecting on one side of the plate from each hole) before they are applied and connected to each other, and (in combination with) applying the said holes of one plate to those of the other, in such manner that their burred projecting edges may be in direct contact, and the countersunk portion of each of the holes of the plate (there being the same number of holes in each plate) be opposite to that of the corresponding hole of the other plate, thereby forming eyelets or passages, countersunk on *both sides* of the *button*, by which mode of construction the above wear of the threads, which secure the button when sewed to



cloth or other material, is to a very great degree obviated; the whole being substantially as above described.

JOSEPH B. THAXTER,  
*Administrator of John Hatch, deceased.*

Letters Patent No. 3,974, dated March 26, 1845.—*Improvement in Making Boats and other Vessels of Sheet Iron or other Metal.*—I claim constructing boats of sheet metal pressed into form in moulds, with beads, flanches, and mouldings, as herein described, for the purpose of taking up the surplus metal, in forming the boat, to prevent wrinkles in the sides thereof, and for stiffening it, as above set forth.

I further claim the recess moulding and flanch to receive the gunwale, which takes up the surplus metal along the upper edge of the boat, and gives sufficient strength and stiffness, without frames or timber inside; constructed substantially in the manner and for the purposes above specified.

JOSEPH FRANCIS.

Letters Patent No. 3,987, dated April 10, 1845.—Reissue No. 146, dated October 9, 1849.—*Improvements in Power Looms for Weaving Plaids, &c.*—1. I claim regulating the delivery of the unwoven warps, as required for the weaving of the cloth, by the tension of the said warps, substantially as described, in combination with a brake or stop motion, substantially as described, to prevent the tension given to the warps by the beat of the lay from effecting the delivery motion, as set forth.

2. I also claim, in combination with the method of regulating the delivery of the warps by their tension, and controlled by a brake, the taking up of the woven cloth by a regular and positive motion, substantially as described, that the figures produced thereon may be regular and well matched, the irregularities of the weft threads being by this means taken up in the thickness instead of the length of the cloth.

3. I also claim, in combination with the roller of a positive and regular take up motion of a weaving loom, the measuring wheel and hand or pointer, operated substantially as described, whereby the quantity of cloth woven is at all times indicated, as described.

4. I also claim communicating the shifting motion for shifting the shuttle boxes up and down when a change of color is required in the weft, by the gravitating force of a weight, or the equivalent thereof, substantially as described, whereby all injury to the mechanism is avoided, should anything be interposed to arrest the motion of the moving parts, as described.

5. I also claim arresting the motion of the shuttle, and relieving the picker from the end thereof, preparatory to the shifting of the shuttle boxes, by combining with the lay and picker a spring lever, one arm of which moves in a slot, or the equivalent thereof, to give it the required motion, substantially as described.

6. And, lastly, I claim stopping the loom and arresting the momentum of the moving parts at a given and determined point by means of a lever, which, when the weft thread is not carried through, is brought into contact with a spur on the crank shaft, or the equivalent thereof, which forces it back to shift the belt, when this is combined with the fingers which enter recesses in the lay, and which, when the weft thread is carried through, are pushed forward to prevent the lever from stopping the loom, as described.

E. B. BIGELOW.

Letters Patent No. 3,761, dated September 24, 1844.—*Improvement in Chairs for Invalids.*—I claim the manner in which I have combined the seat, the back, and the apron, with each other, and with the lower segment or legs of the chair, as herein set forth, by which combination and arrangement the person occupying the chair is enabled, by the action of his own gravity, to govern the position of the movable parts; the whole being connected and combined substantially as herein set forth.

JAMES G. HOLMES.

Letters Patent No. 4,004, dated April 22, 1845.—*Improvements in Wooden Bridges.*—I claim the combination of one or more series of iron screw rods *b b*, &c. with the suspension posts and chords or string pieces of a truss, in the manner and so to operate substantially as herein above specified.

I do not claim the combining with the posts, braces, and strings of a truss a series of supplementary braces *k k*, &c., but what I do claim is the arrangement of such a series of braces upon the *outer sides of the truss*, and so that they shall extend above and below the chords thereof, and be confined to the truss, substantially as above described.

GEORGE W. THAYER.

Letters Patent No. 4,013, dated April 26, 1845.—*Improvement in Machines for Making Match Splints and Arranging them in the Dipping Frames.*—We claim the combination with the series of cutters *o* of the passages *e e*, &c., leading from the cutters, whether there be one or more series of said cutters and passages, the whole being for the purpose of making match splints from a block or blocks, as described. Also, the combination with the aforesaid cutters and



passages of one or more dipping frames, arranged and operating with respect to them, substantially as hereinbefore described. Also, our improved manner of making the dipping frames, viz: in sections of separate pieces or plates *h h h*, as described.

Also, the combination of mechanism by which each of the blocks of wood is held down upon the carriage B and progressively forced forward against the board F, the said mechanism being applied to the carriage B and board F, and constructed and operating together substantially as hereinbefore set forth.

Also, the combination of machinery by which the dipping frames are progressively moved forward, the said machinery being connected with, and intervening between, the carriage B and the said dipping frames, and operating substantially in the manner as hereinbefore explained.

ASA FESSENDEN.  
LUKE L. KNIGHT.

Letters Patent No. 4,023, dated May 1, 1845.—*Improvement in the Machine for Ginning Cotton and Wool.*—I claim arranging the metallic rings composing the burring cylinder so near together that no burrs or seeds, &c., can fall in between them, the rings *e*<sup>1</sup> having hooked teeth cut in the periphery, as described, and so placed around the cylinder as not to have the teeth on any two adjoining rings to come opposite each other, by which the wool or cotton is drawn in below the surface of the rings, and the seeds or burrs are cleaned off.

Second. I claim the combination of the burring cylinder *e*<sup>1</sup>, constructed as above described, with the feeding cylinders *d* and trash cylinder *g*, to separate the fibres of cotton or wool from foreign or useless substances.

STEPHEN R. PARKHURST.

Letters Patent No. 4,025, dated May 1, 1845.—*Improvement in Printing Presses.*—I claim, first, the manner in which I have combined the flying sheet frisket with the cylinder printing press, as set forth. I do not claim this frisket as being new in itself, it having been applied to the bed and platen press, but never, as I verily believe, so modified as to adapt it to the cylinder press. I claim, therefore, the manner described of passing the ends of the slats between the adjustable tape rollers F F, by which they are enabled to conduct the sheet on to the frisket in the position which it must assume in the cylinder press, said frisket being governed in its motion by the cam G, arranged and operating substantially as herein made known.

I claim the lifting of the cylinder when it is desired that it should not bear on the form as it revolves, such lifting being effected by means of the apparatus connected with the lever J, arranged and operating substantially as described.

I claim the manner herein made known of constructing the spring box or apparatus used by me for checking the momentum of the bed in a cylinder press, but which may be advantageously applied in other machines for a like purpose, said spring box or apparatus being furnished with a centre shaft carrying a toothed wheel, that gears into wheels or pinions on several surrounding shafts, the whole of which shafts carry spiral springs, arranged and combined as herein made known, so as to cooperate with each other in the manner described.

RICHARD M. HOE.

Letters Patent No. 4,032, dated May 7, 1845.—*Improvement in Stoves.*—I claim the particular manner as above set forth, in which I arrange and combine the flue and air heating spaces and the pedestal of my stove, the hot air space being between the ascending and descending draft, the descending draft spreading around the base of the stove.

FRANCIS L. HEDENBERG.

Letters Patent No. 4,047, dated May 13, 1845.—*Improvement in the Manufacture of India Rubber Fabrics.*—I claim, as the invention of Nelson Goodyear, deceased, the intermingling and combining fibrous substances with the gum in forming India rubber fabrics, solid and firm in the body, with a smooth surface resembling leather.

HENRY B. GOODYEAR,  
*Administrator of Nelson Goodyear, deceased.*

Letters Patent No. 4,072, dated June 7, 1845.—*Improvement in Machines for Casting Types.* I claim the combination of the slide I and rod H with the horizontal moving crane A, substantially in the manner described, the crane receiving its reciprocating motion from the combination of the crank shaft M Y, cam R, roller U, connecting link V, rocking shaft T, lever W, and weight X, or by other means substantially the same.

I also claim the arrangement of the adjustable socket *e e* for the upper centre B of the crane A, as described, for adjusting the mouth of the mould to the orifice of the nipple plate, in combination with the crane.

DAVID BRUCE, JR.

Letters Patent No. 4,097, dated July 5, 1845.—*Improvement in Machines for Raising and*



*Lowering Weights.*—I claim the manner of combining the barrel disks  $f f^1$  with the wheel  $c$ , for the purpose of hoisting, lowering, or suspending weights by means of the ribs and grooves, or any analogous device, and I claim the further combination therewith of the means employed to govern and regulate the action of said parts, namely, the friction band  $g$  or  $g^1$  and lever  $h$  or  $h^1$ , the attaching and detaching lever  $l$  or  $l^1$ , rolling shaft and bit 4 or  $4^1$ , pin 3 or  $3^1$ , and slide key 2 or  $2^1$ , substantially as such manner and combination are shown and set forth, irrespective of the power employed to work the machinery, and also irrespective of the mode by which the power is connected to the working parts.

EPHRAIM MORRIS.

Letters Patent 4,105, dated July 10, 1845.—*Improvement in Fan Mills.*—I claim the manner in which I have arranged the screen  $F$  and the chess board  $H$ , and combined them with the screens ordinarily used, so as to obtain two distinct currents of wind, and to subject the falling grain to the stronger current below the screen and chess board, thereby blowing off the heavier portions of foreign matter, whilst the chaff is blown off by the ordinary currents in the upper compartments of the shoe.

ISAAC T. GRANT.

Letters Patent No. 4,120, dated July 22, 1845.—*Improvement in Shaping Irregular Surfaces in Wood.*—We claim the method herein above described of copying or forming the longitudinal irregularities of piano legs and other similar articles, on rough blocks of wood, by means of a carriage moving *horizontally* against the *revolving* cutter, and holding both the pattern and the rough block, the cutting tool being raised and depressed for depths of cut by rollers resting on the patterns, the whole method or *modus operandi* being substantially as herein above set forth.

WARREN HALE.  
ALLEN GOODMAN.

Letters Patent No. 4,141, dated August 9, 1845.—*Improvement in Gas Burners.*—I claim the combining with the space  $d d$  directly beneath the orifices of discharge of the gas, and with the supply or branch tubes  $ff$  an expansive chamber  $e e$ , so as to operate in the manner and for the purpose hereinbefore set forth.

I also claim making the lower part of the inner case of the burner with a bell shaped opening or mouth, in the manner and for the purpose as above specified.

WILLIAM BLAKE.

Letters Patent No. 4,149, dated August 16, 1845.—*Improvement in Grinding Mills.*—I claim making the grinding teeth of mills in concentric rows projecting from the surface of the plates so that the teeth of one plate shall run in the spaces between the teeth on the other, and *vice versa*, in combination with the grooves or furrows running towards the periphery of the plates, through which the substances acted upon are carried outwards, whether these furrows be arranged radially, according to what is technically termed the eight quarter dress, or in any other manner leading from the inner to the outer range of teeth.

And I also claim, in combination with the teeth, arranged as expressed in the above claim, the breaking teeth on a cylinder or cone, arranged substantially as herein described and for the purpose specified.

BERIAH SWIFT.

Letters Patent No. 4,184, dated September 9, 1845.—*Improvement in Cooking Stoves.*—I claim the forming of the bottom plate of the oven with a number of tubes or boxes, usually of sheet-iron or other substance thinner than the bottom plate, that descend from it through the lower flue space, the same being effected under an arrangement of their respective parts, substantially the same with that herein described, and for the purpose set forth.

C J. WOOLSON.

Letters Patent No. 4,201, dated September 19, 1845.—*Improvement in the Mode of Tripping Cut Off Valves.*—I claim tripping the drop valve of the cut off by a motion independent of the lifters, substantially in the manner and for the purpose herein described.

I also claim combining the wiper that drops the valve of the cut off, whether working horizontally or vertically, with any of the moving parts of the engine, other than the lifters, or their rocking shaft, by means of the sector and arm or arms, by means of which the extent of the cut off can be regulated at pleasure, during the action of the engine, from the full to the least portion of the stroke, as herein described.

FREDERICK ELSWORTH SICKELS.

Letters Patent No. 4,218, dated October 1, 1845.—Reissue No. 132, dated March 10, 1845.—*Improvements in Barrel Machinery.*—I claim, first, the combination of the slide rest  $k$ , guided in the manner set forth, with the tool  $L$  for turning of the cask, constructed and arranged in the manner set forth.



Second. I also claim the apparatus for chamfering and howelling and crozing—that is to say, the combination of cylinder E open at both ends, so that both ends of the cask can be worked off without changing, with the ring chucks O for fastening the cask into the cylinder, and with the tools as herein described for chamfering and howelling.

Third. I also claim the crozing tool V with the changeable face plate *w*, as herein set forth.

Fourth. I likewise claim the combination of the stock *l*, cutter *l*<sup>1</sup>, adjustable and guage plate *l*<sup>2</sup>, constituting the tool for turning and smoothing the outside of the cask, as above described and represented in Fig. 4.

Fifth. I likewise claim the peculiar construction of the tool for howelling the cask, as above described and represented at Fig. 9.

Sixth. I likewise claim the peculiar construction of the tool for chamfering the ends of the cask, as above described and represented in Fig. 8.

Seventh. I likewise claim the mode of edging and jointing *bilge* staves for making barrels and other *bilge work*, by the employment of a swing frame, having a *concave* or *convex bed*, in or against which the stave is sprung and secured to the required bilge, in combination with the revolving edging saw and straight jointer, be constructed, arranged, and operated in the manner herein set forth, or in any other mode or manner that may be substantially the same, and by which analogous results shall be produced.

WM. TRAPP, JR.

Letters Patent No. 4,223, dated October 9, 1845.—*Improvement in Ruling Machines*.—I claim causing the pens to be raised by the edge of the paper in its passage through the machine, thus causing each sheet to determine the length of its own lines.

LEWIS EDWARDS.

Letters Patent No. 4,245, dated November 1, 1845.—Reissue No. 815, dated September 20, 1859.—*Improvement in Cultivator Teeth*.—I claim making the shank or upper part of cultivator teeth of thin plate steel, U shaped or curved round in front, substantially as hereinbefore described, for the purpose of securing the necessary strength to permit the tooth to be made entire, shank and blade, of a single piece of metal; and, also, of enabling the tooth to be secured in its place in the beam by means of a wedge driven into the cavity of the shank, substantially as hereinbefore described.

DAVID B. ROGERS.

Letters Patent No. 4,266, dated November 12, 1845.—Reissue No. 303, dated April 3, 1855.—*Improvement in Vault Covers*.—What I claim, in covers for openings to vaults in floors, decks, &c., is making them of a metallic grating or perforated metallic plate, with the apertures so small, that persons or bodies passing over or falling on them may be entirely sustained by the metal, substantially as described; but this I only claim when the apertures are protected by glass, substantially as and for the purpose specified.

And I also claim, in combination with the grating or perforated cover and glass fitted thereto, the knobs or protuberances on the upper surface of the grating or perforated plate for preventing the abrasion or scratching of the glass, substantially as specified.

THADDEUS HYATT.

Letters patent No. 4,273, dated November 18, 1845.—*Improvement in Forges*.—I claim the combination of the curved sliding shutters for inclosing the space over the fire, and the device for admitting a draft of air to keep up the combustion during the intervals in which the bellows are not employed, the same being effected for the purpose, and substantially in the manner made known.

CHRISTIAN V. QUEEN.

Letters Patent No. 4,283, dated November 21, 1845.—*Improvement in Planing Machines*.—I claim the manner of forming, arranging, and combining with the revolving cutter wheel the revolving platform, and the endless aprons between which the board to be planed is to be passed; by means of which arrangement and combination it is firmly held along the whole length of such apron, and carried regularly forward without deviation.

JOHN M. FARRAR,

*Administrator of Joseph E. Andrews, deceased*

Letters Patent No. 4,288, dated November 26, 1845.—*Magnetic Water Gauge for Boilers*.—I claim the method, herein described, or any other substantially the same, of indicating the rise and fall of water in the steam boiler or generator, by means of an indicator outside thereof, actuated by a magnet connected with a float, or any other body within the boiler, that rises and falls with the water, and connected with the magnet, substantially as herein described.

JOHN S. RAPPE,

*Administrator of George Faber, deceased.*



Letters Patent No. 4,300, dated December 6, 1845.—*Improvement in Corn Shellers*.—I claim making the *concave plate or disk*, with a concave face and circular opening, provided with a lower and upper lip for the discharge of the cobs in combination with the sheller, and with the shell or bottom; and, also, with the door or valve in the side for broken cobs, &c.; and, also, the cylindrical *hopper and spring in combination with the feeder*, all as herein described.

THOMAS D. BURRALL.

Letters Patent No. 8,840, dated March 30, 1852; antedated December 16, 1845.—*Improvement in Dredging Machines*.—I claim the shovels or scoops *h*, forming the bottoms of compartments in a proper frame, and moving at one end on a hinge or similar contrivance, the other end being lowered to cause the scoop, as the frame is moved along, to collect the sand or mud, or other material operated on, and retain the same by suitable mechanical means, operating to lift the scoop and close the bottom, as described and shown.

JAMES HAMILTON.

Letters Patent No. 4,299, dated December 6, 1845.—Reissue No. 91, dated April 24, 1847.—Again Reissued, No. 99, dated July 31, 1847.—*Improvement in Cooking Stoves*.—I claim making the top of the metal ovens of cooking stoves of fire brick or other earthy substance when this is combined with a stove in which the products of combustion from the fire chamber pass first over the top of the oven, substantially as described, whereby the heat in the oven is equalized and the vapors or gases evolved in the oven are absorbed and carried off as described.

I also claim the arrangement of parts by which I supply the fire with heated air, said arrangement consisting mainly of the apertures in the front plate or doors and the plate *s*, in front of which the air must descend on its passage to the grate bars; the heating of the admitted air has been attempted under other arrangements, and I limit myself under this particular therefore to the special combination of parts by which I attain this end.

And, finally, I claim making the plate of that part of the oven which extends under the grate in the manner substantially as described, and connected with a receptacle for ashes at the bottom for the purpose of discharging the ashes that fall from the grate as described, whereby I am enabled to heat this part of the oven more effectually and equally and to avoid the burning out of the grates, as described.

SAMUEL PIERCE.

Letters Patent No. 4,321, dated December 20, 1845.—*Improvement in Machinery for Dressing Combs*.—I claim the manner in which I have arranged the apparatus for carrying the plates between the cylinders, consisting of the box *B*, the slide *N*, with its piece and the wheel *C*, connected by the rod *S* to the slide *N*, and to the shaft *D* by the small wheel *c i* and the gripe *A A*, heretofore described and seen in Fig. 1, and operating substantially as before stated. I claim the manner in which I have arranged the top bed *G*, whereby plates varying in thickness are equally scraped, not reducing the thickness of one more than another, said arrangement consisting of the spring *S* and piece *S i*, as seen in Fig. 5, and the position of said bed with its space *A B*, as seen in Fig. 7. I claim the manner in which I have arranged the chisels for scraping, smoothing, and shaping the plate, said arrangements consisting of the levers *J* and *Ja*, the cross pieces *L L*, and the apparatus for securing the chisels to the cross pieces seen at *P i*, Fig. 8, and for securing the cross pieces to the levers as seen at *n n n n*, Fig. 1, or at *H H*, Fig. 8, and for the movement up or down for the same by the screws as seen at *L i L i*, Fig. 8. I claim the manner in which I arranged the box *F* to receive the plates from the top bed *G*, consisting of the spring *Z* on the under side of the lid seen in Fig. 6, and the bed with its tapering rod *X i* clasped by the springs *r r* under the said box, operating as before stated. And I hereby declare that I do not intend by these claims to limit myself to the exact form or arrangement of the respective parts and combinations as herein described and represented, but to vary these as I may deem expedient, while such arrangements and combinations are substantially the same with those herein fully made known.

CALVIN B. ROGERS.

Letters Patent No. 4,331, dated December 26, 1845.—Reissue No. 122, dated August 15, 1848.—*Improvement in Steam Boilers*.—I claim the employment of vertical or nearly vertical water tubes for steam boilers or generators that open into water chambers at top and bottom, which water chambers are connected together by a surrounding jacket or water space made singly or in sections to admit of the free circulation of the water, which rising in the tubes by the effect of the heat will descend in the surrounding jacket or external water space or spaces, and thus by this circulation carry off the heat from the tubes and prevent them from overheating as described when this is combined with the fire chamber placed at the side of the boiler and outside of the series of tubes substantially as described whereby the tubes are prevented from being overheated and unequally expanded to an injurious extent and the water kept cooler in the jacket than in the series of tubes, as described.

I also claim as my invention, in combination with vertical or nearly vertical tubes and surrounding water space or spaces, the employment of a fire chamber outside of the series of tubes and so arranged and located substantially as described as to apply the most intense



heat at their upper ends and the reduced heat towards their lower ends, substantially as herein described, whereby a greater circulation and evaporation is obtained with a given amount of fuel than by any other plan known to me, thereby not only economizing fuel but effectually preventing the incrustation of the tubes by the deposit of mineral and other solid matter, as described.

I also claim as my invention the employment of a diaphragm or partition in the flue space between the series of tubes surrounded by the water space or spaces, and in combination therewith to divide the same into two parts that the products of combustion after passing around the upper end of the tubes may pass around their lower ends substantially as described, and thus more effectually expose the upper end of the tubes to a more intense heat than their lower, as described.

And I also claim the making of the bottom of the boiler of a conical or dished form, with a mud or blow off valve in the lowest part of the concavity, in combination with the vertical tubes communicating with the bottom in the manner herein described to permit the deposit of the sediment, there being a water space surrounding them to induce circulation of the water up the tubes towards the mud or blow off valve, as herein described.

JAMES MONTGOMERY.

## DISCLAIMERS ENTERED DURING THE YEAR 1859.

Letters Patent No. 15,957, dated October 21, 1856.—Reissue No. 654, dated February 1, 1859.—*Improvement in Devices for Putting up Caustic Alkalies.*—Your petitioners therefore hereby enter their disclaimer to so much of the claim in the aforesaid specification, forming part of said reissued patent as might be construed as claiming as the invention of the said George Thompson, the putting up of small sticks or pieces of hydrate of soda or hydrate of potassa in closely sealed or stoppered glass bottles for surgical, medical, and scientific purposes.

GEORGE THOMPSON.

T. G. HOLLINGSWORTH,

*President Pennsylvania Salt Manufacturing Company.*

GEORGE THOMPSON,

*Secretary Pennsylvania Salt Manufacturing Company.*

Letters Patent No. 4,141, dated August 9, 1845.—*Improvement in Gas Burners.*—I disclaim the “bell shape or mouth of the lower part of the inner case of said burner.”

WILLIAM BLAKE.

Letters Patent No. 18,259, dated September 22, 1857.—*Improved Nut Machine.*—I disclaim as follows, to wit: the use of the preparatory punch marked *b*, on the drafts annexed to said patent for the purpose of forcing the core of the blank into the body of the nut or washer, and thereby saving the scrap produced by punching.

The use of the punch marked *J* on said drafts in finishing the puncher of the nut and washer.

The combination of the two punches *b* and *J*, operating on opposite sides of the nut or washer, that combination as set forth in the specification and shown by the drafts attached to said patent being a mere colorable change from the combination in which the punches operating on opposite sides are used in a line.

The use of said preparatory punch *b*, and the punch or mandrel *J*, for the purpose aforesaid and in the position aforesaid in the combination mentioned in said specifications.

The use of the spring in combination with the punch *b*, in order to retract said punch after the operation of punching is performed.

The use of the punch *b*, and the punch or mandrel *J*, in combination with each other and the dies *N* and *L* and counter die *K*, whereby a nut of definite thickness is formed by first partially punching the blank while joined to the bar, then separating the blank and completing the punching.

An improvement in the art of making metallic nuts by making them of definite thickness, not materially varying from that of the bar and so as to save the scrap produced by punching by forcing the core into the substance of the nut.

SAMUEL C. TATUM.

Letters Patent No. 17,534, dated June 9, 1857 —*Improved Nut Machine.*—I disclaim as



follows, to wit: The taper punch marked *b*, on the draft annexed to said patent or taper pointed mandrel marked *J* and a hollow plunger, combined and operating as described in said specification on opposite sides of the bar of iron so as to avoid waste from cores or burrs, and I acknowledge that punch is the proper name for the tool, and that the word mandrel is a mere colorable change therefrom, and that the taper pointed punch is a mere colorable change from the parallel sided punch; the spring *f* alone, or in combination with the hollow sleeve *K*, by which the sleeve *K* is forced up and made to accommodate itself to the thickness of the nut or washer.

In claiming the arrangement of the cams *C* and *G G* in their yoke or yokes, by which the plunger *L* and sleeve *K* are enabled to accommodate themselves to the increased thickness of the nut or washer produced by squaring or finishing its exterior.

The use of the taper punch *b*, to punch a taper hole through or nearly through the blank without forcing out any core.

The use of the mandrel *J* in entering the smallest portion of the hole formed by the punch *b*, and gradually enlarging it and passing entirely through it making it parallel and of the required size.

The employment of two punches entering the nut or washer from opposite sides, the taper form and side by side arrangement of the punch *b* and mandrel *J* being mere colorable changes from the parallel sided punches and the arrangement in line.

The employment of a taper punch *b* and a hollow plunger *L*, or its equivalent, and a taper pointed mandrel *J*, combined and arranged substantially as in said specification set forth.

An improvement in the art of making hot pressed nuts and washers by avoiding all waste from cores or burrs by forcing the same into the substance of the nut or washer.

SAMUEL C. TATUM.

Letters Patent No. 21,860, dated October 19, 1858.—*Improvement in Nut Machines*.—I disclaim as follows, to wit: The use of the punches marked *D* and *G*, on the drafts annexed to said patent in combination with each other operating in a line and on opposite sides of the nut or washer in order to incorporate most of the core with the bar or nut.

The use of the stationary punch marked *I* on said drafts, in combination with the other punches in order to give the nut or washer its final pressure and finish.

The use of the punch *D*, in combination with the die box *N e f g*, operating as set forth in said specifications as to embody the greatest portion of the wad or core in the nut or bar.

The arrangement of the punches *D G* and *I*, in combination with the dies *E* and *H*, and perforated bridge *N*, or equivalent devices, operating together substantially in the manner described in said specifications for the automatic and economical manufacture of hot pressed nuts.

An improvement in the art of making metallic nuts by causing most of the core or punching to be incorporated in the substance of the bar or nut.

SAMUEL C. TATUM.





















































