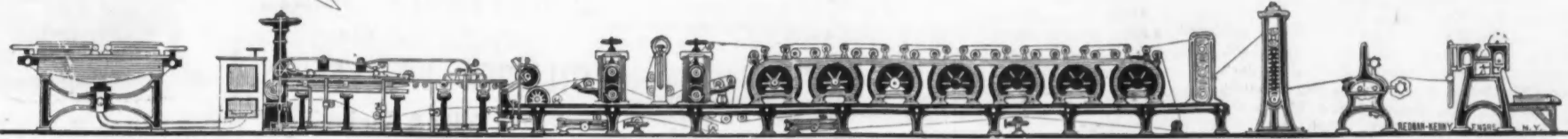


# THE PAPER TRADE JOURNAL.



"The Consumption of Paper is the Measure of a People's Culture."

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## Trade Topics.

### Special Report on Group XIII in the International Exhibition of 1876.

By EDWARD CONLEY.

(Continued.)

#### THE FIBRE EXHIBITS.

Among the fibres exhibited from Brazil were several specimens prepared by Mr. S. L. da C. Leite, of the Province of Minas Geraes, two of which were especially remarkable. One, the fibre of a plant belonging to the order Asclepiadaceae, or milk-weed family, is noticeable for its admirable whiteness and unusual tenacity. The plant grows spontaneously in the country, and has also been successfully cultivated. It has been already woven into textile fabrics, but its value as a paper material remains to be tried. It is said to resemble jute. The other was a specimen of natural paper produced from a species of fig tree, *Ficus speciosa*. The trunk leaves are soaked in water, and then passed between iron rollers, and, coming out very thin, are used for writing paper without other preparation. He also exhibited fibres from a reed belonging to the order Malpighiaceae, which is peculiar to southern tropical America, and one variety of palm fibre. There were also sent from the various Brazilian Provinces several other specimens of fibre. Among these may be mentioned as belonging especially to southern tropical America, *Bertholletia excelsa*, a variety of the order Myrtaceae; two species of *Hilopia*, known locally as white and red ambira, and a third, *Hilopia sericea*, noted for its wide, long fibres, which are highly esteemed for various fabrics; *Cecropia pellata*, used for woven fabrics and belonging to the Urticaceae; *Copaifera*, well known for its medicinal gum, but also valuable for fibre, and *Bilbergia tinctoria*, a species of Bromeliaceae, so called from the yellow dye extracted from it. There were very few specimens of palm fibre, of which there are so many varieties in Brazil. Of these the most valuable were the *Attalea funifera*, already mentioned, and *Bactris*, also called tecun, said to be finer and more tenacious than hemp.

In many parts of tropical America, fibrous plants of the Eastern Hemisphere have been naturalized, and seem to flourish as well as in their native habitats. It would seem that the great demand for textile substances might be met near home, if only advantage were taken of the materials so bountifully supplied. It might be said to American manufacturers, as was several years ago said to those of England, "that there is no want of material in every way adapted to the manufacture of paper, and paper-makers would soon find it to their interest to turn their attention to some of it instead of spending their time in futile attempts to induce foreign countries to supply them with rags."

In closing the list of fibres in the exhibit from the Western Hemisphere, mention must be made of a sample of asbestos fibre, prepared by J. S. Rosenthal, of Philadelphia. This mineral is well known for its long, silky fibres, which have the power of completely resisting the action of heat. In consequence of this latter property many attempts have been made to use asbestos as a material for the manufacture of fire-proof paper, but never very successfully on account of the difficulty of separating the foreign matters. Mr. Rosenthal has invented a method of disintegrating asbestos fibre which seems more successful than any preceding one. The asbestos is put into wooden tanks lined with lead; it is then covered with water and the chemicals are added. After the introduction of steam it is boiled from four to six hours. When disintegrated it is passed through a pair of rolls, the top one covered with rubber and a rubber apron running on the lower one, by means of which the water is driven from the fibre. It is then dried and manufactured into board on a machine especially constructed for the purpose. He exhibited specimens of board made from this fibre from one-eighth to three-fourths of an inch in thickness. This board is used in packing steam joints, covering steam boilers, and in the manufacture of asbestos packing for steam engines. He also exhibited some samples of paper made from the asbestos fibre, which, while not possessing sufficient strength or smoothness for writing paper, showed great progress toward the production of a fire-proof paper.

Passing from the Western to the Eastern world, we come to countries where it would seem that centuries of occupation had scarcely left anything to be discovered, and yet here, too, there is much to be learned in regard to utilizing the material so abundantly furnished.

In the Eastern Hemisphere, the plants belonging to the orders Urticaceae, Malvaceae, Silicaceae and Tiliaceae are more valuable for their fibre than in the Western Hemisphere; and some varieties of the orders Pandanaceae, Leguminosae

and others of which there are so few specimens in the New World are valuable additions to fibrous plants. Here we find valuable specimens of the Musa and Palm tree families. In the Egyptian exhibit especially were several specimens of fibre from the different varieties of palm. The date palm is indigenous to Egypt, and flourishes both on the borders of the desert and in the cultivated ground. Textile fibres are obtained from the leaflets, spathe, flower-stalk, trunk and root. There were several samples of fibre prepared from different varieties of bananas, and also from different water reeds growing in the numerous canals of the Nile in lower Egypt. From one of these latter, *Cyperus dives*, called diss by the Arabs, it is said an abundance of good paper material can be obtained. The well-known cat-tail, *Lypha latifolia*, also grows in great profusion, and some good specimens of its fibre were exhibited.

India has long been celebrated as a country where almost every variety of fibrous substance is produced, and an enumeration of these would be like the rehearsal of an "oft-told tale." But with all that has been said and written of them, their real value as textile materials is scarcely realized even now, though of late years some have come into more general use. The exhibit of fibres from the British East India possessions contained over forty different specimens, belonging to nearly all the fibre-producing families, most of them native to the country, some naturalized. Of the order Urticaceae or the nettle family, there were several specimens, beginning with the well-known China grass or Rhea fibre, and including several specimens native to the country. Among these may be named the Neigherry nettle, *Urtica heterophylla*; *puyba* fibre, *Boehmeria puoya*, sometimes called *puya* flax; and *Kangra* hemp, *Cannabis Sativa*. Of this family of plants there is an almost unlimited supply in India, many varieties growing in great profusion along the base of the Himalaya Mountains from Assam to Sutledge. A proper mode of treatment seems to be all that is necessary to render them of great value as textile and paper-making materials. Of the order Malvaceae we find *barria* from Bengal, *Sida rhomboida*, which very much resembles jute in appearance, and for some purposes is said to be superior; the "brown hemp" of Bombay, *Hibiscus cannabinus*, which is used for cordage, sack-cloth and paper; Indian mallow, *Abutilon Indicum*; and *Roselle*, *Hibiscus sabdariffa*. The varieties of this family differ very much in appearance, but nearly all of them are valuable for their fibre-producing qualities, and, as they grow in great abundance, are worthy of attention. From the order Silicaceae were specimens of *Sansevieria Zeylanica*, familiarly known as Bow-string Hemp, which grows wild under the bushes in the jungles, is very abundant and very strong; and the *Yucca gloriosa*, Adam's needle, which has already been mentioned among American fibres. One specimen of the order Asclepiadaceae, *Calotropis gigantea*, *Yercumar*, also a jungle plant, said to be one of the most tenacious fibres known, and much used in Bengal and Madras for the manufacture of strong cloths, cambries and lawns. This fibre grows very abundantly without any special care. It is known sometimes as *mudar* silk cotton. Of the fibres of leguminous plants exhibited, two are especially worthy of mention—one the *Sunn* Hemp, *Crotalaria juncea*, said to be a valuable substitute for Russian Hemp; and *Jub* bulpore Hemp, *Crotalaria tenuifolia*. The former is a well known article of commerce, the latter only lately coming into use, and employed for the manufacture of rope.

In addition to these fibres were several varieties of palm fibres, *musa* fibres, *Agaves*, *Bromelias*, *ScrewPines*, different species of *mat* grass and *flax*; but only one of special interest to paper-makers remains to be mentioned, namely, *Jute*, *Corchorus olitorius*, which belongs to the order Tiliaceae, or lime tree family. This fibre has for many years been an article of commerce, and attention is called to it from the fact that it is capable of being used by paper-makers for a much greater variety and finer grade of paper than at present. Under proper treatment a fine white fibre can be obtained from it at less cost than from the materials generally used for the manufacture of the finer grades of paper. *Jute* culture has been introduced into America in the last few years. It is cultivated with great advantage in the neighborhood of cotton fields, as it requires the same soil and climate. It is said that when the cotton fields are belted with jute, it serves as a protection against the ravages of the caterpillar.

Many of the fibres in the Indian exhibit have never been tried as paper materials, and at present could be made use of only indirectly; but the great trouble has been want of proper treatment. In order to utilize them to their full extent, it is necessary to disintegrate them thoroughly, and at the same time keep unim-

paired the strength of the fibre and its capability of being properly bleached. This once accomplished, the want of material need never trouble the manufacturer.

(To be Continued.)

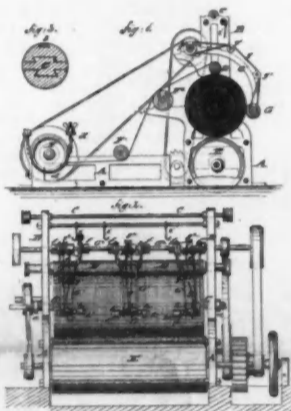
#### Machines for Rolling Paper.

Charles T. Bischof, of Gloggnitz, Austria, has invented a new and improved machine for rolling paper, which is herewith illustrated:

Fig. 1 represents a vertical longitudinal section of the machine; Fig. 2, an end view of the same, and Fig. 3 a detail cross-section of the sectional winding-up roller.

Similar letters of reference indicate corresponding parts.

The object of the invention is to provide for meeting the increased demand for rolls of continuous paper, to be used in the printing of newspapers by the latest styles of printing-presses, an improved machine or apparatus for rolling paper in rolls of any required widths, and cutting the



BISCHOF'S PAPER-ROLLING MACHINE.

paper simultaneously with the rolling, so as to furnish the rolls wound up in tight and uniform state, ready for packing, shipment, and use.

The invention consists of a sectional roller of longitudinal wedge-shaped centre and side sections, on which the paper is wound from the drum by means of suitable rollers that produce the stretching, smoothing, and rolling of the paper. The core-roller is movable in slotted side standards, to adjust itself to the varying diameter of the paper-rolls. Curved and laterally adjustable arms or frames carry revolving cutting-knives and eccentric guide-rollers, which are set in motion by pulley and cord connection with a top shaft, to which the frames are hung.

In the drawing, A represents the supporting-frame, which guides in vertically-slotted side standards B, the sectional winding-up roller C, and the weighted top-roller D. A hollow cast-iron cylinder, E, is arranged at the lower part of standards below the slots, and revolved by suitable power, the cylinder E being designed to serve as support to the vertically-sliding roller C. The roller C is made of three detachable longitudinal sections, and of round cross-section, as shown in Fig. 3, the sections being tapered or wedge-shaped, and connected longitudinally by dove-tail tongues and grooves. The ends of the roller-sections are provided with screw-threads for the screw-fastening bands, a, that lock the sections in the nature of screw-nuts. One of the roller-sections is arranged with a longitudinal groove and spring, b, that serves to retain firmly the end of the paper to be wound. The roller, C, is readily detached from the centre of the paper-rolls by unscrewing the end bands, and withdrawing the central section by suitable mechanism, so that the side sections become loose and may be readily taken out. The weighted roller, D, bears on the top of the sectional roller, C, and rises in connection with the latter in the slotted standards, according as the thickness of the paper-roll increases thereon. The paper is passed over the weighted roller, and then on the sectional roller, the weighted roller serving to produce the smooth and tight winding up-throughout the entire length of the paper.

The paper coming from the paper machine is wound up on a drum, F, that turns in bearings at the end of frame, A, the tension of the paper unwinding therefrom by the action of the winding-up roller being regulated by an adjustable spring-brake mechanism, d. The paper is then conducted past a stretching-roller, F1, and a second roller, F2, to the roller D, and sectional roller, C. The roller F2 revolves in a direction opposite to the motion of the paper, and may be slightly adjusted in its bearings to impart direction and uniform tension to the paper.

The roller F2 is intended to smooth out any creases or folds that may be formed in the paper, and to secure by moving against the paper the

tight rolling of the same on the winding-up roller.

Another advantage of the roller F2 consists in the fact that any weak and injured portions of the paper are instantly indicated, as they are not strong enough to resist the tension exerted by the smoothing-roller. The damaged portions are then cut out, and the ends connected by gluing.

In this manner the apparatus exercises a perfect control over the quality of the paper, and secures the homogeneous character of the entire roll.

In connection with the winding-up roller are arranged adjustable cutting devices, G, that trim the edges or cut up the paper into rolls of any desired width, simultaneously with the rolling of the same.

The cutting devices, G, are hung by curved arms or frames, G1, to a revolving top shaft, G2, of standards, B, and adjusted laterally thereon by collars and set-screws f. Circular cutting-knives at the ends of the swinging frames, G1, are rotated by means of cords or belts, g, and intermediate pulleys, g1, in connection with pulleys, g2, that are fastened by set-screws to the shaft. The shafts of the cutting-knives are eccentrically extended beyond the frames, and provided with press or guide rollers, h, that are adjusted on the eccentric shaft ends by means of set-screws, h1, bearing on the arms or frames G1. The rollers are lined with cloth, made of smaller diameter than the cutting-knives, and set by means of the eccentric shafts and screws to greater or less proximity to the paper, to admit the knives to enter more or less into the paper. The knives adjust themselves by their swinging frames to the increasing size of the rolls, and bear, by means of the curved shape of the frames, throughout the rolling process on the paper, whatever be the size of the rolls.

If any one of the knives is not required, the frame of the same is hung to pendent top hooks, i, of the supporting-frame, in which position, as the knives continue to rotate, the same may be readily sharpened, and the press or guide rollers set to the same. The replacing of the knives has to be attended to before the machine is started, and also the exact setting of the knives and their frames to the width of the rolls.

The weighted top roller, C, is raised by means of a differential hoisting mechanism, in connection with a shaft, C1, having double end pulleys, the roller being retained in hoisted position, for detaching the rolls from the winding-up roller, when the required thickness has been obtained. The sectional roller is then withdrawn, and the rolls removed for being packed. They may also be wound on suitable cores, if desired, the cores being then mounted in suitable manner.

The claims of the inventor are:

1. In a paper-rolling machine, the winding-up roller C, made in three longitudinal sections, the two outer dovetailed to the middle one, and the latter arranged to slide in and out of the other two.

2. In a paper-rolling machine, the combination, with the stretching and winding-up rollers, of a smoothing-roller, that turns in opposite directions to the motion of the paper.

3. The combination, with a revolving driving-top shaft of a paper-rolling machine, of curved and swinging arms or frames, being adjustable on the shaft, and having revolving cutting-knives and guide-rollers at the ends.

4. The shafts of the cutting-knives, having eccentric extensions, with guide-rollers and set-screws, for adjusting the rollers to the required depth of the cutting-knives.

#### Density of Alum Solutions.

The following table will be found useful for ascertaining the percentage of alum present in solution by simply taking the specific gravity with a hydrometer:

POTASH ALUM.	Spec. gravity.
1 per cent.....	1.0065
2 ".....	1.0110
3 ".....	1.0166
4 ".....	1.0218
5 ".....	1.0269
6 ".....	1.0320
AMMONIA ALUM.	Spec. gravity.
1 per cent.....	1.0060
2 ".....	1.0109
3 ".....	1.0156
4 ".....	1.0200
5 ".....	1.0255
6 ".....	1.0305

It will be noticed that a solution of ammonia alum has a slightly lower specific gravity than one of potash alum containing an equal quantity of the salt.—O. Schluttig, in *Deutsche Industrie Zeitung*.

When we attempt to deceive the world, those most likely to detect us are the ones who are sailing on the same tack.

## Correspondence.

### British Notes.

[FROM OUR REGULAR CORRESPONDENT.]

15A PATERNOSTER ROW, LONDON, E. C.,  
March 5, 1877.

Trade is still exceedingly depressed. It becomes melancholy to say this, week after week, but such is the fact. I can't understand why business should keep at such a low ebb. "Nothing doing" is all I hear on every side. Why should this state of affairs continue? People all blame Turkey and that "abomination of desolation," the "Eastern Question." I am heartily sick of this "Eastern Question." And then the beauty of it is, nobody knows what the E. Q. really is. It is so unsatisfactory to have to blame something for the dull state of trade, and not know exactly what. I am perfectly safe in saying, "as soon as the 'Eastern Question' is arranged," everything and everybody will be in first-rate order again. One reflection must strike forcibly, and that is this: that trade must be really very bad to be affected by a spectre. This points to the character of our business world very plainly, when the least disturbing agency will paralyze all kinds of commerce. We keep on hoping for, and telling of, improvement, day by day; but such intelligence is only a momentary stimulant, and when the actual position of affairs dawns upon us we find that it is but a little temporary excitement, followed by a more oppressive relapse. I don't know what to think of matters. The only portion of our trade which seems to flourish is the better class of writings. Rag papers are in good demand. Hand-made papers sell freely, and raw materials are rapidly rising in consequence of the free demand. Rags have moved upward. Several other fibres, gunny, and such like *materiel*, are very scarce, and accordingly dear. Coals and chemicals are, however, extremely dull. We have had our old style of weather again—dull, wet, muddy, and generally miserable. This has effected a change for the worse in coals. At the beginning of the week it was dreadfully cold, and the thermometer in London on February 27 reached 23 degrees Fahrenheit, or 10 degrees below freezing point. On Wednesday, 28, the glass told off 53 degrees Fahrenheit, only 30 degrees variance! "Such is life"—here at any rate. I hear nothing but grumbling and complaints. Paper-makers are not the only growlers. Everybody seems anxious for a change, and, like Micawber, we are all "waiting for something to turn up."

The brown trade is fair, and orders are about, though prices are rather low. Buyers, however, have the best of the position at present.

A few weeks ago I mentioned an advertisement in the *Daily Telegraph* about the sale of a mill, and that the said mill was paying fifteen per cent. I doubted the dividend, and do still; but a correspondent from Wakefield sends me the following particulars, which, I believe, are correct, and which will be interesting:

The Anstey Paper Company capital is made up of 25 shares, of which £2 15s. has been called up. The market value of the share is £3 2s. 6d., and the dividend twenty per cent. The Scatsaw Brook Company, Darwen, capital £5 shares, £3 called up, market value £3 12s., and paying a dividend of 17½ per cent. The East Lancashire Paper Company, Radcliffe, is made up of 110 shares fully paid up, and being worth £19 per share; dividend is 20 per cent., and has been for a long time. Preference shares have been issued by this company. The Ramsbottom Paper Company also has 110 shares, 25 of which are called up, and are now worth £8 2s. 6d., paying a dividend of 15 per cent. "But," my correspondent adds, "you must not conclude that all the Lancashire mills are so successful—far from it."

Now I don't know whether the above is strictly accurate, but I dare say it is. I never disbelieve a man when he makes statements of this kind, but I never knew the Lancashire mills were doing so well. No wonder they can undersell the southern paper-makers. I wish I had some shares in some of the 20 per cent. mills; but, on second consideration, I think I am better as I am.

The Rishton Paper-making and Staining Company held its half-yearly meeting on February 17 last, Mr. Eccles, the chairman of the company, presiding. The three retiring directors, of whom the chairman was one, were re-elected. They resolved to increase the capital of the company from £20,000 to £60,000, and that the present issue of the new capital be limited to £15,000 six per cent. preference shares until 1880. The present shareholders are to have the privilege of the first offer of allotment, and it is generally believed the whole of this capital will be forthcoming from the original shareholders. If not, the general public will be invited to subscribe. The £30,000 capital is in £10 shares, of which £8

have been called up. No dividend is spoken of. I hear that J. H. Bracken & Co., the proprietors of the Hunslett Paper Mills, near Leeds, have resolved to erect a new drying shed, boiler, steam engine, and other general alterations at a cost of £6,000. They will accordingly stop work for a time until these changes are complete. There are three machines, making browns, glazed casings, small hands, and caps.

Bolton-le-Moors is a town of about 95,000 inhabitants, but they are powerful at politics and newspapers undoubtedly. There are published there the following: *The Morning News*, 1/2d.; *Evening News*, 1/2d.; and *Evening Guardian*, 1/2d., dailies, all Liberal. *The Evening Chronicle*, 1/2d., is a Tory paper. *The Bolton Weekly Journal*, 1/2d., *Weekly Guardian*, 1/2d. (both Liberal), and *Weekly Chronicle*, 1/2d., is a Tory. *The Weekly Journal* has been enlarged, and is printed from the web, and now and then its readers are presented with a picture of the town worthies. The proprietors are about to issue a new weekly serial, 1d., the *Journal Budget*, "a serial of fact, fiction, fun and frolic."

The London Fine Art Associations are doing good business. They are advertising guinea engravings in many of the provincial papers for 15d. Large numbers are being sold—numbers, whether people or engravings, I decline to say.

The report that W. H. Smith, M. P., had bought the *Daily Telegraph* has been denied, as has also the announcement that the *Standard* had been sold.

Our home markets are very easy and quiet. The following are correct reports up to date: Coals.—Wallsend: Hetton, 18s. 6d.; Hetton Lyons, 16s. 6d.; Lambton, 18s.; Newbottle, 15s. 6d.; South Hetton, 18s. 6d.; Tunstall, 16s. 9d.; Vane, 16s. 6d.; East Hartlepool, 18s. 6d.; Tees, 18s. Ships at market, 26; sold, 16; contracts, gas, &c., 6—22; unsold, 4; at sea, 5.

The fibre market is steady, and all kinds of fibres incline upwards. Higher prices are certainly asked, but buyers decline to yield.

Mr. Knoblauch reports: No alteration has taken place in trade here during this week. Paper manufacturers continue to buy freely for immediate and for forward delivery, and from America also orders are being received here for all grades of stock.

Rags.—Strong linens continue in good demand, and some large contracts were closed as well as for fine white linens. Of cotton rags, blues and checks are fairly sought after. Prices for all goods tend upwards. Gummi is very scarce, and although there are plenty of orders in our market, they cannot be executed for want of stock. Waste papers have also moved freely, and holders decline selling large quantities unless at much advanced prices; the general belief is that prices are long will be much higher.

The chemical market is lower. Large stocks are existing, and makers will be glad to clear out at a reduction rather than have their room occupied by lying stock. Alkali is now very low.

Cooper Bros., Newcastle-on-Tyne, quote, and say: "We have no change to report in our trade, and if it were possible we would say that the demand is still diminishing. Prices, in consequence, continue easy, and in many cases, owing to large stocks, lower prices have been accepted. We would call attention to the low prices of soda crystals and bicarbonate of soda. Refined alkali, 50 to 52 per cent., 2d. per cent.; soda ash, 48 per cent., 1 1/2d. per cent.; soda crystals, £3 10s. net per ton; bicarbonate of soda in 10 cwt. casks, £9 per ton; bleaching powder, 35 to 36 per cent., £6; sulphate soda in bulk, £3 5s.; antichlor, English, £4 net; Jarrow caustic soda, 70 to 74 per cent., £17 net—all f. o. b. Tyne, less 2 1/2 dis. In Liverpool—caustic soda, white, 70 to 72 per cent., £15 per ton; caustic soda, white, 60 to 62 per cent., £12 12s. 6d., and cream caustic soda, 60 to 62 per cent., £12 5s. per ton; caustic soda bottoms, £9 5s. to £9 10s.; bleaching powder—hard wood casks, 35 to 36 per cent., £6 7s. 6d., soft wood do., £6 2s. 6d.; soda ash, 48 to 52 per cent., 1 13-16d. to 1 1/4d. per cent.—all delivered f. o. b. Liverpool, less usual discount."

In Liverpool, under date March 3, the following were the prices: Prussiate potash dull at 1 1/4d. per lb. and red at 1s. 11d. per lb.; bi-chrome quiet at 4 1/2d. per lb.; alum in fair demand—lump, £7 5s., ground, £7 12s. 6d.; aluminous cake for sizing brown, grey, and medium white papers, £4 5s. per ton; sulphate copper, 24s. per cwt.; acetate, or sugar of lead, 37s. 6d.; brown, 26s. 6d. per cwt.; rosin—about 250 bbls. sold at 5s. 6d. to 5s. 7 1/2d. per cent. for common, chiefly the former price; oil's quiet. W. F. C.

**New Patents.**

For the week ended February 27. No. 187,751. Apparatus for Recovering Waste Alkalies.—J. W. Dixon, Philadelphia, Pa.

The evaporating-pan and coil containing the liquor in circulation are both heated from one furnace, and when a charge is ignited upon the incinerating-hearth the products of combustion therefrom unite with those from the furnace to heat the said pan and coil.

No. 187,790. Machines for Dampening Paper.—S. W. Wilder, Lawrence, Mass.

1. The combination of perforated dampening-rollers provided with jackets, inlets, and steam receiving and distributing reservoirs.  
2. Dampening rolls provided with steam inlets located in their opposite ends, for the purpose of causing the steam in said rolls to flow in opposite directions, so as to equalize the heating and moistening of the sheet of paper.

No. 187,883. Turbine Water Wheels.—M. V. Drake, Attica, Ind., assignor of one-fourth of his right to N. P. Foster, same place.

The casing is composed of a bottom part and top part, receiving between them the wheel, which is attached to a vertical shaft, and is provided on its circumference with a series of nearly L-shaped buckets, and between these buckets are shorter buckets, making a circle of alternate long and short buckets. By this means greater power is obtained, while the exit of water remains large enough for all purposes.

**Manufacturing News.**

**EASTERN STATES.**

The Crocker Paper Manufacturing Company, Holyoke, Mass., contemplates putting up a stock house in the rear of its mill this spring. The company is now running on full time, on a miscellaneous line of papers.

A correspondent at Fitchburg, Mass., writes: "All the mills here are running full. Have had a full run of water for the last two weeks, and no steam-power is needed at present. Have run part steam-power here since last June, and this is the only time since then when we could say we have had plenty of water. Hope it will continue."

**MIDDLE STATES.**

F. G. Weeks, Skaneateles, N. Y., intends rebuilding the mill recently destroyed by fire.

The Malone Paper Mills, Malone, N. Y., will make a rag and wood paper instead of straw print, as stated in THE JOURNAL of last week.

W. W. Harding, Philadelphia, Pa., has reset two boilers with the Jarvis Patent Furnace. Previous to resetting he had an evaporation test, showing a result of 7.67 of water evaporation to one pound of pea coal. The boilers were tested again, after applying the Jarvis setting, showing a result of 11.08 pounds of water to one pound of coal, a gain of 40 per cent. in economy and 12 per cent. in capacity.

**WESTERN STATES.**

The Harding Paper Company, Middletown, O., will rebuild its Franklin mill, which was burned recently.

**FOREIGN.**

Kohn & Co.'s mill at Schlaw, Bohemia, was totally destroyed by fire on February 23.

Reports from the Hague bring news that the Dutch Government has abolished all export duties on rags.

Two new paper mills have recently been started in New Zealand, under subsidies from the local government.

The extensive mills at Oldesloe, in Holstein, have been closed on account of the suspension of the Anglo Bank in Hamburg. A large number of employees are thrown out of work.

The Fernside Mill, Whitebrook, Monmouthshire, England, is to let, with option of purchase. This mill has a 68-inch machine with a weekly capacity of fourteen tons, using both steam and water.

**Alkali and Bleaching-powder Manufacture of Glasgow.**

By JAMES MACTEAR.

Read before the Chemical Section, Sept. 12, 1876. (Continued.)

The soap leys, after having become spent, were boiled down to salts, and barilla again made from them, much on the system already described as in use at Dalmuir.

**Cost of One Ton Barilla from Soapers' Salts.**

14 cwt. of soapers' salts, at 5s. ....	£3 10 0
3 " lime, at 1s. ....	0 3 0
20 " coal, at 7s. 6d. ....	0 7 6
Labor, ....	0 4 0
Tear and wear, ....	0 1 4
	£4 5 10
By 10 cwt. of muriate of potash, at 5s. ....	2 10 0

One ton of barilla of 7 per cent. alkali, costing, £1 15 10

At first the muriate of potash was employed in the stills instead of common salt, but this was soon given up, and the muriate of potash was sold, chiefly to the alum-makers of the district.

The manufacture of vitriol gives as a by-product a considerable quantity of "sulphur ash" residues, consisting of sulphate of potash, mixed with a little unburnt sulphur. This was used along with soapers' salts, and gave a larger yield of muriate of potash.

The mixture employed seems to have been at this time—280 lbs. soapers' salts; 112 lbs. sulphur ashes; 84 lbs. lime; 112 lbs. coal—588 lbs. in all, yielding 364 lbs. black ash, containing 10.5 per cent. alkali, and 25 per cent. insoluble.

In 1806 a trial was made of the mother liquors from the alum works as a source of potash; the black ash made from a mixture of this liquor and soapers' salts gave only about 6 per cent. alkali, and from this and other causes its use was soon abandoned.

A statement of the products obtained at this time from 100 parts of salts is subjoined: 100 parts salt, 83 parts oil of vitriol, 56 parts manganese—produce bleaching powder. The residue from the above, with 150 parts American potash of 81 per cent. produces 265 parts soda crystals, 160 parts sulphate of potash, 50 parts of manganese recovered. It will therefore produce as much soap as 16 cwt. of kelp, even reckoning kelp as containing above 3 per cent. of real soda, worth 10 per cent. per cwt. Methods more or less of this nature continued to be used until about 1816, when a good deal of correspondence with the French manufacturers, Chaptal and D'Arcet, took place, relative to the Leblanc system which was finally adopted in 1818.

The following extract from the correspondence is of considerable interest under date July, 1816. Messrs. C. & D'A. say, in reference to their manufacture of soda: "They produced 44,000 lbs. per day of crude soda (black ash), containing 20 to 21 per cent. alkali, which they sell at 30 francs per quintal (equal to 16s. 8d.). It is produced from common salt obtained from the spontaneous evaporation of the sea water at Marseilles, and costs about 9d. to 10d. per quintal. It is decomposed by sulphuric acid in the proportion of 83 acid to 100 salt. In purifying their crude soda, and crystallizing, they always experience a loss of nearly 25 per cent. of the alkali indicated by the acid test in the crude soda."

These gentlemen utilized to some extent the muriatic acid evolved, by producing gelatine from bones, for the manufacture of soap, in

which M. D'Arcet says he had made 1,300,000 portions of a quart each.

In 1818 these gentlemen had the intention to establish works in Liege and in London, for making soda, nitric acid, marine acid, gelatine, &c.

In this year a process was at work at Port Dundas for preparing a black ash for soap-making purposes, and this is the first record of the use of carbonate of lime (previously caustic lime seems to have been always used). The mixture used was: 10 parts soapers' salts, 2 1/2 parts poor kelp, 2 1/2 parts chalk, 5 parts sawdust. This was fluxed for six hours, and gave a black ash testing 6 to 7 per cent. alkali.

In the end of this year, French soda was imported into London. It was in the form of black ash, and of three qualities. No. 1, containing 13 per cent. alkali, sold at £30 per ton; No. 2, containing 12 per cent. alkali, sold at £26 per ton; No. 3, containing 11 per cent. alkali, sold at £25 per ton.

It was manufactured at Marseilles by the Leblanc process, which had been fully established there for some years. Three qualities of soda were made for sale: 1. Crude soda (now called black ash). 2. Crystals obtained by the lixiviation of the crude soda. 3. Calcined residues from the "bitter water" (now called soda ash). All these qualities had certainly been produced since the year 1807, works being in operation at Marseilles, Chauny, Rouen, Lille, Amiens and elsewhere.

The first sale of soda made at St. Rollox on the Leblanc system took place in the end of 1818. It was sold at £42 per ton. Carbonate of soda, or soda ash, had been made for some months previously, but was apparently all consumed in the manufacture of soap.

The use of soapers' salts was still continued, and black ash was made for sale from the following mixture: 1 cwt. Irish kelp, 1 1/2 cwt. soap salts, 1 cwt. sulphur ashes, 1 1/2 cwt. chalk, 1 1/2 cwt. coals, in all 6 1/2 cwt., yielding 3 cwt. 2 qrs. 14 lbs. black ash, containing 14 per cent. alkali.

In the following years soda crystals were sold in constantly increasing quantities.

Year.	Price per ton.	Year.	Price per ton.
1818.....	£42 0 0	1844.....	£6 0 0
1819.....	41 0 0	1849.....	5 10 0
1820.....	40 0 0	1854.....	4 10 0
1824.....	37 0 0	1859.....	6 0 0
1829.....	15 0 0	1864.....	4 15 0
1834.....	12 0 0	1869.....	4 5 0
1839.....	11 0 0	1874.....	5 10 0

The quantity made has rapidly increased from about 100 tons in 1818 to 1,400 tons in 1830, and is now nearly 14,000 tons per annum.

(To be Continued.)

**A New California Industry.**

The San Francisco Bulletin says: A manufactory of a new kind of belting has been recently established at the Willows, North Oakland, in which the entrails of sheep are used in the production of an exceedingly strong and durable belt. Hitherto none has ever been manufactured for the purpose of putting it on the market, either here or in Europe, but in a few manufactories on the continent it has for years been made by the workmen themselves in quantities sufficient only for immediate use. Now a building has been erected close by the abattoir for the purpose of manufacturing this belting for the market.

The entrails of sheep, which will average about fifty-five feet in length, are first thoroughly cleaned and then placed in vats of brine, where they remain some days. When thus prepared they are not much thicker than a piece of common cotton twine, and will sustain a weight of about ten pounds. The next stage in the process of manufacture is to wind the prepared material upon bobbins, after which the process is the same as in making common rope. This method is used to produce a round belt, but where a wide, flat belt is to be made, a loom is employed, and the five strands are woven together as in ribbon manufacture. The flat belts are made of any size, and the round are of sizes varying from one-sixteenth of an inch up to one inch and a half in diameter. The round belts are made either in the form of a smooth cord, or as ropes with from three to five large strands.

The three-quarter inch rope is said to stand a strain of seven tons, and is guaranteed to last ten years. Hemp rope will last on an average not over three years. The three-eighths round cord, containing one hundred and fifty strands, will endure a strain of about four tons. A one and one-eighth inch belt was recently put in position in the Safe Deposit building. The manufactory at "The Willows" was started about three months ago, and now employs nine hands. New looms for weaving the flat belt have been bought, and in a short time the production will be increased. The North Oakland abattoir does not furnish material enough to supply the demand, and a large proportion has to be procured from Butchertown. A large quantity is shipped from Butchertown to the East, where it is manufactured into violin strings, but now all this promises to be used nearer home for a more useful purpose. With the exception of the entrails of cats and dogs, those of the sheep are only fit to be used in this manner, as in the other animals they are both too large and too short.

Seek not so much to know thy enemies as friends; for where one man has fallen by foes, a hundred have been ruined by acquaintances.

**SENT FREE.**  
**LEFFEL WHEEL BOOK.**  
PRICE REDUCED.  
Send at once for new Wheel Book for 1877, containing  
**LARGE REDUCTION**  
of prices.  
Address  
**JAMES LEFFEL & CO.,**  
Springfield, Ohio, or, 109 Liberty Street, N. Y.

**PIQUA FELTS.**

Paper-Makers'  
**FOURDRINIER FELTS.**  
Coarse and Fine  
**CYLINDER WET FELTS.**

Press Felts & Jacketing.  
**F. GRAY, O'FERRALL & CO.,**  
Piqua, Ohio.

We warrant every Felt to work well, and if it does not, it can be returned.

**SATISFACTION GUARANTEED.**  
In ordering Felts, give kind of Stock used, and quality of Paper made.

[From The Paper Trade Journal of March 4, 1876.]  
MIDDLETOWN, O., February 23, 1876.

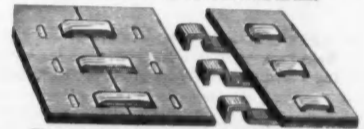
To the Editor of The Journal:

Much has been said in former numbers of THE JOURNAL about the running and durability of cylinder long felts. GRAY, O'FERRALL & CO. are supplying the best cylinder long felt I have ever had any experience with for wide machines. I think they decidedly excel. They keep their width under a reasonable strain, and when kept clean never roable with wind marks, never get slack in the middle or edges; in fact, they make paper, with or dinary care, until they are entirely worn out, and I would be well for any one who is troubled with at unsatisfactory working felt of any other make, to try one, and by all means to do so if there is a necessity for last running.  
J. W. B.

**IRA L. BEEBE,**  
NEW YORK AGENT.

**CHAMPION (DOUBLE HITCH) BELT HOOK**

LEADING MANUFACTURERS and others who have tested it emphatically pronounce it, in all respects, the BEST BELT FASTENING in use.



This cut conveys a correct idea of the manner of adjusting these Hooks. It will be observed that the substantial DOUBLE BEARING of each Hook precludes the possibility of its "tearing out."

For sale by the TRADE. Specimen Hooks and United Belt Ends mailed when requested, on receipt of 10 cts. postage stamps. Address, CHAMPION BELT HOOK CO., 87 Liberty Street, New York.

[From THE CLARK THREAD CO., Newark, N. J.]  
"We have thoroughly tested your Belt Hooks, and we think it the best belt fastening we have ever used."

**Wm. Zinsser & Co.,**  
197 William St., N. Y.,  
MANUFACTURERS OF SUPERIOR

**SEALING-WAX**  
OF ALL GRADES.

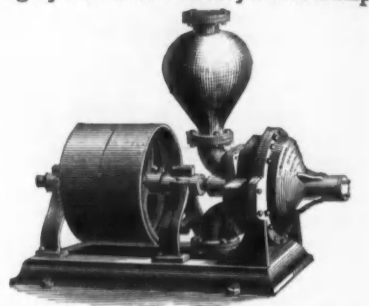
Wrapping Sealing-Wax at Low Prices of all grades and colors a specialty.

**Wood Pulp,**  
**WET or DRY,**

Delivered in any part of the country, in quantities to suit.

**IRA L. BEEBE,**  
60 Duane Cor. Elm St., N. Y.

**Bagley & Sewall's Rotary Force Pump**



Most Perfect Rotary Pump Ever Offered to the Public.  
**SPECIALLY ADAPTED FOR WORK IN PAPER MILLS.**

The following are among the leading advantages of this pump: Its few Parts, Simplicity of Construction and small space occupied. Its small cost compared with other pumps. The comparatively small Power required (using from 20 to 75 per cent. less power than any Rotary Pump now in use.) Its Action is Positive, given an Even and Continuous Stream, being perfectly balanced in the water. Its Self-Packing Match Joints, requiring no Packing or Stuffing Boxes. Its Ready Accessibility of Parts, without breaking joints on pipes in taking apart. All Parts are made to an Exact Gauge, corresponding parts being interchangeable. The Speed can be adapted to Quantity of Water desired, the amount of water delivered being in proportion to speed and water applied.

**TESTIMONIALS.**

OFFICE OF THE WATERTOWN PAPER CO., WATERTOWN, March 22, 1875. Its action is positive, discharging all the water taken in, and consequently no power is wasted. In short, WE GIVE IT OUR UNQUALIFIED ENDORSEMENT. Yours, &c., HIRAM REMINGTON, President.

WEST CUMMINGTON, MASS., October 4, 1876. It does its work well, and I recommend it as the simplest and cheapest, as well as the best suction pump I ever saw. Truly yours, F. A. BATES.

OFFICE OF THE REMINGTON PAPER CO., WATERTOWN, March 20, 1875.

We have used two 2-inch Pumps for the past ten months as Suction or Vacuum Pumps, on our two 84-inch Fourdrinier Machines with entire satisfaction. For this purpose, or for raising and forcing water for general purposes, we regard the Green Pump as vastly superior to anything we have ever seen, and we have made the subject of Pumps one of especial study and investigation. A. D. REMINGTON, President.

OFFICE OF THE CANADA PAPER CO., MONTREAL, December 11, 1876.

DEAR SIR—The Bagley & Sewall Pump we are now using for pumping strong Caustic Alkali Liquors. We find it the best pump for that purpose that we have ever used, the metal packing being particularly valuable. The No. 3 Pump of your make, which we are using as a Fire Pump, we find to be very effective and easily managed. CANADA PAPER CO., Wm. Angus, President.

PATERSON, N. J., October 11, 1875.

SIR—The little Rotary Fire Pump (No. 3) is entirely satisfactory. I have it connected with a system of sprinklers on each floor, and a set of hose front and rear, 1 1/2 inch nozzles, from which I am able to throw two streams at once, each 125 feet. J. SWINBURNE.

WATERTOWN, MASS., March 23, 1875. In an experience of fifteen years we find this to be decidedly superior to any Pump we have found, and we have tried a large number, both Rotary and Piston. IN FACT IT IS THE ONLY ONE WHICH HAS ENTIRELY PLEASED US. Yours truly, KNOWLTON BROS.

BALTIMORE, October 12, 1876.

DEAR SIR—It works smoothly and rapidly without a jar, and does all its makers claim it will do. We know of no pump that is its equal for the purpose it is used for. JOHN A. DUSHANE & CO., Manufacturers.

WINCHESTER PAPER COMPANY, WINCHESTER, September 14, 1875.

We have it in use on our Straw Board Machine (62-inch Fourdrinier) as a Vacuum Pump, connected to an 18-inch box, which is a severe test. We consider it the best pump for that use that we have ever seen used. Yours truly, CHAS. L. CRUM, Sec'y.

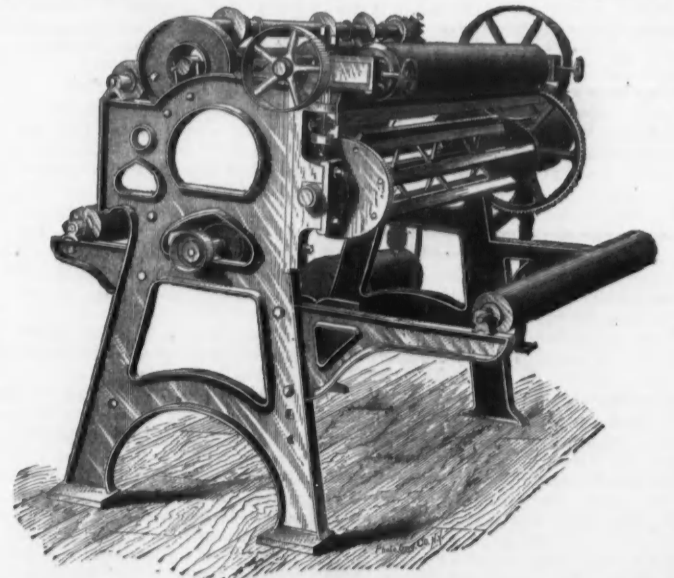
These Pumps are now in use as Force and Vacuum Pumps in many of the Leading Paper Mills.

Liberal Terms made to First-class Parties.

SEND FOR PRICE LIST OF THE CHEAPEST PUMP IN THE MARKET.

Address **EDWARD CONLEY,**

Sole Agent for Paper Mills, No. 74 DUANE ST., N. Y., where the Pump can be seen by parties wishing to examine it.



ABOVE REPRESENTS THE

**Gavit Patent Cone Pulley Cutter.**  
Which received the very highest award at the Centennial Exhibition for strength, finish, economy in cost, and for running at a high rate of speed. The only Cutter extant that will cut A PERFECTLY SQUARE SHEET while running rapidly.

MANUFACTURED BY THE

**GAVIT PAPER MACHINE WORKS,**  
224 to 230 North Broad Street, Philadelphia.

**DIRECTORY.**

**NEW YORK HOUSES.**

**Paper and Paper-Makers' Supplies.**

ANDERSON, J. F., Jr., & Co.,	34 Beekman st.
BEEBE, IRA L.	60 Duane st., cor. Elm.
BEEBE & O'CONNELL,	78 Duane st.
BUCHANAN & CO.,	38 Rose st.
COBB, A. H.,	16 Reade st.
GOODWIN, JAS., & CO.,	42 Duane st.
HAND & ELLSWORTH,	51 Beekman and 81 Ann sts.
HARD, MELVIN & SON,	25 Beekman st.
HEWITT, C. B., & BRO.,	48 Beekman st.
HULBERT, H. C., & CO.,	13 Beekman st.
LINDENMEYER, HENRY,	15 and 17 Beekman st.
McNAMEE, R.,	4 Warren st.
MYERS, B. & O.,	16 Beekman st.
MURPHY, JOHN J.,	47 John and 5 Dutch sts.
PARSONS, W. H., & CO.,	74 Duane st.
PERKINS & GOODWIN,	84 Duane st.
WATSON, GEORGE, JR.,	63 Beekman st.

**Rags and Paper Stock.**

ATTERBURY BROS.,	460 Pearl st.
BRIGGS & TAYLOR,	60 Duane st.
BUTTERWORTH & SMALLEY,	32 Beekman st.
KEENAN, OWEN & CO.,	365 Pearl st.
KILDEA, PATRICK,	171 and 173 Christopher st.
LYON, J. W., & CO.,	35 Park st.
MASON, JOHN W., & CO.,	43 Broadway.
O'MEARA, M.,	27 Centre st.
SMITH, THOMAS,	30 Hester st.
WARD, OWEN,	448 & 450 West 39th st.

**Paper-Makers' Chemicals and Colors.**

PENNSYLVANIA SALT MFG. CO.,	140 S. Delaware av., Phila., Pa., 59 Maiden lane, N. Y.
WM. PICKHART & KUTTROFF,	98 Liberty st.
RIKER, J. L. & D. S.,	45 Cedar st.

**Paper-Makers.**

ORRIS & CO.,	Printing and Hanging Mills at Troy, Office, 39 Park Row, New York.
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**Jute Butt Brokers.**

CABOT, BOWLES & CO.,	85 Beaver st.
LACEY, POPE & CO.,	138 Pearl st.

**Straw Boards.**

HAYES, JAMES E. & CO.,	75 Duane st.
LINDENMEYER, HENRY,	15 and 17 Beekman st.

**Paper-Making Machinery.**

CURRIER, CYRUS,	Newark, N. J.
DANIELS MACHINE CO.,	Rag Cutters, Woodstock, Vt.
GAVIT, NELSON,	224 North Broad st., Philadelphia.
HOLYOKE MACHINE CO.,	Holyoke, Mass.
MOHAWK & HUDSON MFG. CO.,	Paper Machinery and Eddy Straightway Valves, Waterford, N. Y.
POOLE, J. MORTON & CO.,	Wilmington, Del.
PUSEY, JONES & CO.,	Wilmington, Del.
RICE, BARTON & FALES MACHINE AND IRON CO.,	Worcester, Mass.
SHERIDAN, E. R. & T. W.,	25 Centre st., N. Y.
SMITH, WINCHESTER & CO.,	South Windham, Ct.

**Water Wheels.**

POOLE & HUNT,	Baltimore, Md.
STOUT, MILLS & TEMPLE,	Dayton, O.

**Wire Cloth.**

CABLE MANUFACTURING CO.,	43 Fulton st., N. Y.
MACREADY, H. A.,	1411 & 1413 Vine st., Phila., Pa.
THE SELLERS MFG. CO.,	707 Market st., Phila., Pa.

**Steam Pumps.**

LEWIS, W. H.,	74 Duane st., N. Y.
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**Felts and Felting.**

BULKLEY, DUNTON & CO.,	74 John st., N. Y.
GRAY, F. O'FERRAL & CO.,	Piqua, O.
HEATHCOTE, L. K. & CO.,	Gleff Rock, Pa.
WATERBURY, H., & CO.,	Rensselaerville, N. Y.

**Belt Hooks.**

WILSON, GREENLEAF,	Lowell, Mass.
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**Paper Mill Insurance.**

ANDERSON & STANTON,	130 Broadway, N. Y.
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**BOSTON HOUSES.**

BLANCHARD, J. HENRY,	Chemicals and Wood Pulp, 42 Battery March st.
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**CHICAGO HOUSES.**

CLARKE, FRIEND, FOX & CO.,	Paper Manufacturers and Dealers, 150 and 152 Clark st.
GILBERT, WM., & CO.,	Wholesale Dealers in Paper and Woollen Manufacturers' Materials, 11 & 13 Market st.

**CINCINNATI HOUSES.**

BENJAMIN, B. & CO.,	Paper Stock, 206 to 220 West Third st., and 39 to 57 McFarland st.
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**PHILADELPHIA HOUSES.**

BARBER, J. & J. S.,	Paper Stock and Binders' Boards, 621 and 623 Commerce st.
DITMAN, J. G. & CO.,	Wholesale Paper and Rag Warehouse, 30, 32 & 34 South 6th st.
ELLIOT, A. G.,	Paper & Paper Stock, 26 S. Seventh st.
JESSUP & MOORE,	Domestic and Foreign Rags, 27 North 9th st.

**ST. LOUIS HOUSES.**

GRAHAM & BRO.,	H. B., Paper Warehouse and Stock Dealers.
MAYER, A. B.,	Rags and Paper Stock Dealer, 1014, 1020 & 1022 N. Twelfth st.

**MANUFACTURERS.**

CLAREMONT MANUFACTURING CO.,	Claremont, N. H.
WALSH, J. DEWITT, & CO.,	Blue Writing Paper, Newburg, N. Y.

**IMPORTATIONS OF PAPER STOCK, PAPER, BOOKS, CHEMICALS, &c.**

IMPORTS of Paper and Paper Materials, Books, &c., at the Port of New York, for the week ended March 16, 1877. Quantity given in packages when not otherwise specified.

Aniline Colors	28	\$4,069
Alum	—	—
Aluminous Cake	172	1,385
Bleaching Powders	515	8,048
Soda Ash	43	14,620
Soda Bicarb.	100	959
Soda Caustic	311	6,365
Soda Sal.	—	—
Ultramarine	85	4,458
Books	154	20,154
Newspapers	99	3,927
Engravings	19	6,210
Ink	18	1,196
Lead Pencils	2	696
Paper	104	14,906
Steel Pens	2	269
Stationery	4	390
Clay	—	4,846
Jute Butts	1,850	11,232
Jute Rejects	102	674
Paper Hangings	32	5,204
Paper Stock	2,883	52,889
Waste	—	—
Total	—	\$162,527

**TOTAL IMPORTS.**

General Merchandise, for the week ending March 16	\$5,458,961
Paper, Paper Stock, &c., for the year ending May 23, 1873	15,074,825
Paper, Paper Stock, &c., for the year ending May 22, 1874	12,150,855
Paper, Paper Stock, &c., for the year ending May 21, 1875	13,292,891
Paper, Paper Stock, &c., for the year ending May 20, 1876	11,233,408
Paper, Paper Stock, &c., for the quarter ending Aug. 25, 1876	2,554,554
Paper, Paper Stock, &c., for the quarter ending Nov. 24, 1876	2,589,247
Paper, Paper Stock, &c., for the quarter ending Feb. 23, 1877	1,613,867
Paper, Paper Stock, &c., for the week ending March 2, 1877	206,436
Paper, Paper Stock, &c., for the week ending March 9, 1877	181,551

IMPORTS of Rags and Paper Stock at the Port of New York, since Jan. 1, 1877, from the following Ports, showing quantities from each Port.

Rags, Paper Stock, Bales.	Manilla Stock, Bales.
Alexandria	650
Antwerp	1,611
Bremen	645
Glasgow	487
Genoa	534
Hamburg	112
Havre	665
Havana	24
Hong Kong	1,525
Hull	727
Leghona	2,197
Liverpool	591
London	1,596
Naples	300
Newcastle	—
St. John's	86
Trieste	855

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports, for the week ended March 20, 1877.

Paper, reams	40,426	\$10,523
Paper, pkgs.	102	3,119
Paper, cases	234	3,530
Books, cases	49	6,966
Rosin, bbls.	7,302	25,416
Stationery, cases	74	3,360
Total	48,187	\$52,914

**TOTAL EXPORTS.**

General Merchandise, for the week ending March 20	\$4,794,472
Paper, &c., for the year ending May 27, 1873	2,880,082
Paper, &c., for the year ending May 26, 1874	11,783,876
Paper, &c., for the year ending May 25, 1875	2,327,682
Paper, &c., for the year ending May 23, 1876	1,654,284
Paper, &c., for the quarter ending Aug. 22, 1876	465,564
Paper, &c., for the quarter ending Nov. 24, 1876	500,164
Paper, &c., for the quarter ending Feb. 27, 1877	434,712
Paper, &c., for the week ending Mar. 6, 1877	19,425
Paper, &c., for the week ending Mar. 13, 1877	26,463

**NEW YORK IMPORTS.**

FROM MARCH 16 TO MARCH 21, INCLUSIVE.

**Hide Cuttings.**

Cumming & Lockwood, Egypt, Liverpool, 354 bs.
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**Jute Butts.**

A. Z. Vonros, Lord Canning, Calcutta, 850 bs.
J. G. Whitney & Co., by same, 2,000 bs.
A. Z. Vonros, Pembroke Castle, Calcutta, 5,548 bs.
A. Z. Vonros, Friedlander, Calcutta, 408 bs.
G. Tuckerman, by same, 1,000 bs.
A. A. Low & Bro., by same, 3,200 bs.
A. A. Low & Bro., Furniss Abbey, Calcutta, 1,171 bs.

**Paper.**

Leissner & Louis, Victoria, Glasgow, 1 cs. hangings.
Fischer & Keller, Parthia, Liverpool, 2 cs. hangings.
C. Lichtenberg, by same, 1 cs.
Belcher & Houghton, Elyria, London, 2 cs.
C. C. Haskell, Germania, Liverpool, 2 cs.
E. & H. T. Anthony, by same, 1 cs.
Brown Bros. & Co., by same, 1 cs.
R. J. Cortis, Britannic, Liverpool, 1 cs.
Porter & Bainbridge, Egypt, Liverpool, 4 cs.
B. & P. Lawrence, by same, 5 bs.
E. & H. T. Anthony, Mosel, Bremen, 5 cs.
Chas. Lichtenberg, by same, 1 cs.
Alex. Murphy & Co., by same, 1 cs.
Dreyfuss & Sachs, by same, 2 cs.
C. Joerg, by same, 1 cs.
Geo. Meier, by same, 3 cs.
Henry Maillard & Co., by same, 3 cs.
Rudolph & Dunston, by same, 3 cs.

S. Thanhausen, by same, 3 cs.  
 Fischer & Keller, by same, 4 cs. hangings.  
 F. J. Emmerich, by same, 1 cs. hangings.  
 F. W. Smith, City of Berlin, Liverpool, 15 bs.  
 Eduardo & Ester, T. C. Jones, Marseilles, 18 cs.  
 Victor E. Mauger & Co., Labrador, Havre, 9 cs.  
 A. & C. Kaufman, Frisia, Hamburg, 1 cs.

**Rags, &c.**

John W. Mason & Co., C. Grimell, London, 31 bs. rags.  
 Lee & Sturges, by same, 102 bs. rags; 27 bs. paper waste.  
 Geo. Watson, Jr., by same, 111 bs. paper waste.  
 W. O. Davey & Son, by same, 212 bs. old junk.  
 E. Storey Smith, by same, 183 bs. paper stock.  
 John W. Mason & Co., State of Pennsylvania, Glasgow, 97 coils old rope.  
 O. Keenan & Son, by same, 85 bs. rags.  
 W. I. Clark, by same, 253 bs. paper stock.  
 W. I. Clark, Holland, London, 129 bs. paper stock.  
 Campbell, Hall & Co., by same, 19 bs. rags.  
 H. C. Hulbert & Co., by same, 50 bs. rags.  
 Jas. Elmslie, by same, 22 bs. paper stock.  
 A. F. Heard, Denbighshire, Hongkong, 250 bs. rags.  
 Hagemeyer & Brunn, Friedland, Bremen, 110 bs. rags.  
 John W. Mason & Co., Egypt, Liverpool, 468 bs. manilla stock.  
 W. H. Parsons & Co., by same, 232 bs. coils rope.  
 Briggs & Taylor, by same, 167 bs. manilla stock.  
 Geo. Waston, Jr., Mosel, Bremen, 40 bs. paper stock.  
 Lee & Sturges, by same, 22 bs. paper waste; 18 bs. rags.  
 F. S. Robinson & Co., St. Anna, Naples, 300 bs. rags.  
 W. I. Clark, Othello, Hull, 76 bs. paper stock.  
 O'Keenan & Son, by same, 77 bs. paper stock.  
 Isaac & Vought, by same, 29 bs. paper stock; 46 bs. rags.  
 John W. Mason & Co., Holland, London, 72 bs. paper stock.  
 W. H. Parsons & Co., by same, 212 bs. old papers.  
 Briggs & Taylor, by same, 166 bs. paper stock; 65 bs. old bagging.  
 Briggs & Taylor, State of Pennsylvania, 26 bs. rags; 62 manilla stock; 86 bs. old papers.

**BOSTON IMPORTS.**

**IMPORTATIONS of Paper Stock, Chemicals, &c., at Port of Boston, from March 16, 1877, to March 22, 1877, inclusive.**

**Books, &c.**

Merrimack Public Library, Hecla, Liverpool, 2 cs.
Jones, McDuffee & Stratton, Massachusetts, Liverpool, 1 cs.
E. P. Dutton & Co., by same, 1 cs.
Lockwood, Brooks Co., by same, 1 cs.

**Paper.**

J. L. Fairbanks & C. Massachusetts, Liverpool, 1 cs.
Hooper, Lewis & C., by same, 7 cs.

**Paper Stock.**

Warren & Co., Minnesota, Liverpool, 2 bs. papers.
Warren & Co., Massachusetts, Liverpool, 172 bs. paper stock.
M. A. Ring & Sons, by same, 66 bs. waste papers.
C. C. Herald, by same, 227 bs. rags.
Twombly & Co., Victoria, Liverpool, 56 bs. rags.

**Aluminous Cake.**

Jas. Lee & Co., Hecla, Liverpool, 26 cks.
W. H. Winslow & Co., Iberian, Liverpool, 40 cks.

**Bleaching Powders.**

W. F. & F. C. Sayles, Iberian, Liverpool, 45 cks.
Warren & Co., Massachusetts, Liverpool, 328 cks.

**Caustic Soda.**

W. F. & F. C. Sayles, Iberian, Liverpool, 50 drums.
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**China Clay.**

J. Henry Blanchard, from South Carolina, 12 cks.
--

**Hide Cuttings.**

Twombly & Co., Victoria, Liverpool, 642 bs.
T. Groom & Co., Massachusetts, Liverpool, 76 bs.

**Soda Ash.**

E. & F. King & Co., Massachusetts, Liverpool, 25 cks.
Wing & Evans, by same, 20 cks.
New England Glass Co., by same, 15 cks.
Warren & Co., by same, 328 cks.

**Venetian Red.**

Morey & Co., Massachusetts, Liverpool, 100 bbls.
--

**OLD WHITE MANILA & HEMP ROPE, Gunny Bagging, AND JUTE STOCK**

Of Superior Quality, received weekly on consignment from our friends the

**Liverpool Marine Store Co.,**

FOR SALE BY  
**JOHN W. MASON & Co., Agents**  
 43 BROADWAY, N. Y.

**A. B. ANSBACHER,**  
 IMPORTER OF

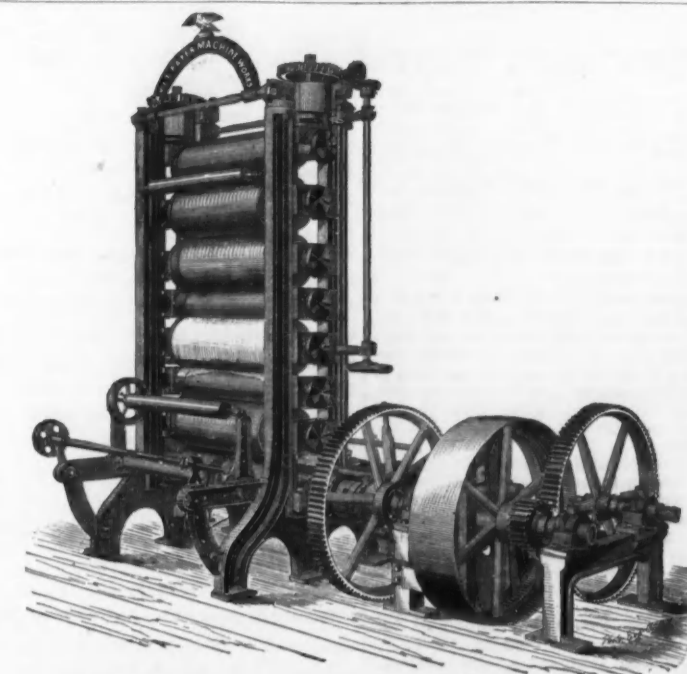
**Ultramarine Blues,**  
 ESPECIALLY ADAPTED FOR PAPER MILLS.

Manufacturer of all shades of  
**PULP COLORS,**  
 43 John Street, New York.

**J. HENRY BLANCHARD,**  
 Chemical Broker,  
 NO. 42 BATTERY MARCH ST.,  
 BOSTON, MASS.

**SODA ASH.** ALUM.  
**BLEACHING POWDERS.** CLAY.  
**SAL SODA.** ROSIN.  
**HYPOSULPHITE OF SODA.** CAUSTIC SODA, &c.

AGENT  
 McNamee's "Excelsior" South Carolina Clay,  
 "Elephant" Aluminous Cake,  
 and "Crescent Felts,"  
 and for the  
**Androscoggin Pulp Company,**  
 MANUFACTURERS OF  
**WOOD PULP.**



THE ABOVE CUT REPRESENTS A STACK OF  
**WEB SUPER CALENDERS,**  
 Which received the highest award at the Centennial Exhibition for combined strength, finish and  
**ECONOMY OF COST,**  
 AS MADE BY THE  
**Gavit Paper Machine Works.**  
 224 TO 230 NORTH BROAD STREET, PHILADELPHIA.

**JESSUP & MOORE,**  
 27 North 6th Street, Philadelphia.

DEALERS IN  
**DOMESTIC & FOREIGN RAGS.**  
 OFFER TO PAPER MANUFACTURERS  
**Country White or Mixed Rags at a Small Advance on Cost.**

**BRIGGS & TAYLOR,**  
**RAGS and WASTE PAPERS.**  
 60 DUANE STREET, N. Y.

**BUCHANAN & CO.,**  
 COMMISSION  
**Paper Warehouse**  
 PACKERS OF AND DEALERS IN  
**Paper Stock,**  
 38 ROSE STREET,  
 NEW YORK.

**GEORGE HARLEY,**  
 Importer of California Rags  
 AND DEALER IN  
 WOOLEN AND COTTON RAGS, &  
 All Kinds of Paper Stock.  
 362, 365 & 367 Third Street,  
 Between Avenue D and Lewis St. NEW YORK.

**THOMAS SMITH,**  
 WHOLESALE DEALER IN  
 Cotton and Woolen Rags  
 OF EVERY DESCRIPTION,  
 AND  
**PAPER MAKER'S SUPPLIES**  
 No. 30 HESTER ST. and 75 PIKE ST.,  
 NEW YORK.  
 ESTABLISHED 1840.

**O. KEENAN & SON,**  
 WHOLESALE DEALERS IN  
 Foreign and Domestic Cotton and Woolen  
**RAGS AND PAPERS,**  
 ROPE, BAGGING, CANVAS, &c.  
 395 Pearl street, and 44 & 46 Duane street, New York.  
 OWEN KEENAN. JAMES T. KEENAN.

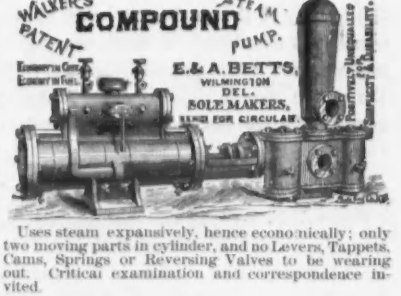
**LACEY, POPE & CO.**  
 133 Pearl St., N. Y.  
 BROKERS IN  
**JUTE BUTTS**  
 AND  
**Rejections.**  
 P. O. Box 5433.

**GLENS FALLS**  
**Marble Lime**  
 The best bleaching Lime known for  
**PAPER-MAKERS' USE.**  
**Osborn & Robinson,**  
 AGENTS,  
 87 Dey Street, N. Y.

**NATRONA**  
**POROUS**  
**ALUM,**  
 FOR  
**PAPER MAKERS' USE.**  
 FREE FROM IRON AND FROM  
 EXCESS OF ACID.

Two pounds of it will size as much paper as  
 three pounds of Potash or Ammonia Alum.  
**Pennsylvania Salt Mfg. Co.**  
 140 South Delaware Ave., Philadelphia.  
 59 Maiden Lane, New York.  
 212 Washington Ave., St. Louis, Mo.

AGENTS,  
**W. M. ELLICOTT & SON,** Baltimore.  
**MOREY & CO.** Boston.



Uses steam expansively, hence economically; only  
 two moving parts in cylinder, and no Levers, Tappets,  
 Cams, Springs or Reversing Valves to be wearing  
 out. Critical examination and correspondence in-  
 vited.

# The Paper Trade Journal.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF

## The American Paper Trade.

Weekly, \$4.00 per annum.

Single Copies, 10 Cents.

NEW YORK: SATURDAY, MARCH 24, 1877.

Advertisements cannot be received for insertion in the current week later than 9 A. M. on Friday. The charge for advertising is 25 cents a line, each insertion. Special terms for standing and displayed advertisements to be had on application. Card in Directory Column and one copy of paper, \$10 a year.

THE PAPER TRADE JOURNAL is the recognized organ of the various Paper-Makers' Associations of the United States.

THE JOURNAL contains the latest and fullest information relative to the paper trade in all parts of the world, including descriptions of new appliances and processes for making paper, experiments with new fibres and other materials, a record of the water supply, with the latest manufacturing news in all parts of the country. It gives the cream of all the foreign technical journals which relate to the paper interest, besides communications from competent persons in the trade, both at home and abroad. The market review and quotations show the state of trade in all the principal cities, and no pains have been spared to make these accurate and complete.

Subscription and postage for Great Britain, per annum, \$4 1/2  
Subscription and postage for France, per annum, \$4 1/2  
Subscription and postage for Germany, per annum, \$4 1/2  
Foreign subscribers may address our New York office.

Communications on matters of interest to the trade are earnestly solicited from all quarters, and if used will be liberally paid for. Items of news, and facts of all kinds in relation to the state of the mills, &c., will be gladly received.

All communications must be addressed to

**HOWARD LOCKWOOD,**

Publisher and Proprietor,

No. 74 Duane street, N. Y.

### TO CORRESPONDENTS.

As THE PAPER TRADE JOURNAL is the recognized vehicle of communication in matters of trade interest, we will be glad to receive correspondence from all parts of the country. Information and suggestion upon paper-making topics are especially valuable, and manufacturing news and personal items are equally acceptable.

LOCKWOOD'S Directory of the paper manufacturers in the United States and Canada is now ready.

In addition to a complete list of mills, the Directory gives the names of the dealers in paper and paper materials, and of the wholesale stationers in the principal cities.

THE orders received for this work are very numerous, and will be filled according to priority. Subscribers will, therefore, be able to account for any delay in receiving copies. They may rest assured that they will be supplied as early as possible.

WE glean some interesting facts from Lockwood's new Paper Mills Directory. Since June, 1875, thirty-seven new mills have been constructed, and besides these, twenty-two have been rebuilt after destruction by fire, or from other causes. Eleven mills have been totally abandoned and dismantled. Forty-one mills have been burned, with an aggregate loss of over one million of dollars. There are twenty-one more firms engaged in paper manufacture than in 1875, and the mills are 934 in number, as against 897 as previously reported, an increase of thirty-seven.

In our summary for the year 1876 we recapitulated the principal features of the trade for the year under review. One of the points then mentioned is again brought before us, and can be quite properly referred to now. There is a steadily growing demand for new and improved machinery.

In addition to the requirements of the new mills during the past year or more, the manufacturers of paper-making machinery have done much repairing and altering. These changes have been almost constant in the direction of improvements for bettering the quality of the product, if even at the sacrifice of quantity. In short, our paper-makers seem to be generally imbued with the notion that it pays to make first-rate goods. We are glad to note such tendencies.

An incident reported under the head of "General Notes" is another suggestion quite in point with our remarks last week upon the subject of neglect in paper-mills. It affords another instance of how much

risk can be run and how much paper manufacturers can lose from causes to which they have been indifferent or which have never been brought so directly to their attention. One of our correspondents indorses, as will be seen, our views upon these matters of neglect, and we are reasonably sure that many others will unite in his opinions. The truth is, paper-makers, like many others, do not always stop to consider all the elements which go to make up the profit-and-loss account on the ledger, and no doubt are astonished to find in how many things before unknown, and apparently removed from the strict line of business, the chances for saving lie. We rejoice to note the decided steps taken by the Seymour Paper Company, and hope that others may be induced to follow its example.

### PAPER WINDING MACHINE.

We illustrate on the first page to-day a machine for rolling or spooling paper, as it comes from the machine, for use on web-finishing presses. This is an Austrian invention recently patented here, and has points which are worth considering.

The hollow, cast-iron cylinder, E, to which the power is applied, is the same as has been used by the Bullock printing press for years, and is not new.

The sectional roller, C, is an advantage, as it enables the manufacturer to take out the cove, or spool, thereby saving the cost of freight on the spools to and from the printing office, as well as the first cost on a large number of spools suitable for each consumer. To preserve the opening a round block or plug should be put into the ends of each roll.

The weighted roller, D, running on top of the sectional roller, C, is well calculated to wind a hard, solid roll. The paper must, however, be made and calendered perfectly level, in order to get both ends of the roll of the same size. A variation in the ends of the roll of paper would change the position of the weighted roller, D, which in time would guide the paper from right to left, and make the ends uneven. It is sought to overcome this difficulty by the cutting devices, G, or trimmers, which are a bad feature of the machine, as being too complicated.

The roller F<sup>2</sup> running against the paper is well adapted to smooth out all wrinkles and creases in the sheet. The second advantage claimed for it, viz., indicating the weak and injured places in the paper by breaking it, is more likely to prove a positive disadvantage, as it would make too much "broken."

We have pointed out some of the good and some of the weak features in this machine, hoping that manufacturers of machinery and paper-makers, using winding machines, may investigate and learn something to their advantage.

## Correspondence.

[Communications are solicited from everyone who has anything of value or interest to impart. Item of news, trade gossip, and personal information will be gladly received. Correspondents are requested to write on only one side of the paper. No responsibility for the opinions of correspondents attaches to this paper. Communications must be sent to reach this office by Wednesday night or Thursday morning, of each week, to insure insertion.]

### Uneven Carrying.

To the Editor of The Journal:  
The query by "Jack" regarding the paper carrying more water on one side of the machine than on the other is caused, I think, by the way in which the slices are set, notwithstanding both sheets may be of the same weight. D.

### Hay Presses.

To the Editor of The Journal:  
Can you inform me who is selling the portable hay-press, and oblige Yours, N.  
Answer.—The Ingersoll press was formerly advertised in our columns, and was controlled, we think, by a house in Chicago.—Ed.

### Lime.

To the Editor of The Journal:  
As subscribers to your paper, we take the liberty of inquiring who the manufacturers of the "Empire" brand of lime are. C. S.  
Answer.—We do not know; but suppose some of our correspondents can enlighten us.—Ed.

### The Saving Question.

To the Editor of The Journal:  
Your correspondent "T" thinks my machine for saving fine stock and clay is an infringement

on a patented pulp-saver which is extensively used. He also claims that the fine stock, &c., will pass through the wire cloth, thereby not fulfilling the requirements for which the machine is intended. I was not aware that I was encroaching upon anyone's invention. While "T" admits my near approach to an extensively-used patent, he condemns my method and claims it to be impracticable. He evidently thinks I am going to use the same number wire as employed in covering the mold that this fine stock passes through. The wire cloth to cover this mold for saving waste is the finest made. My plan may not work, but a trial will test its merits. YORKER.

### Trimmer Knives.

To the Editor of The Journal:  
In reply to the question of "Cutter" in No. 149 of THE JOURNAL, as to who invented trimmer knives, I will venture to say that if Francis McFarlane, of Glasgow, did not make the discovery, he came pretty near hand to it. In or about the year 1835 Francis invented a stop-cutter, to which was attached a circular-knife, for cutting the sheet crosswise of the paper, which, as it passed through the cutter, went between two sets of rolls which were about twelve inches apart. Between the rolls, and on the upper side of the paper, was the stationary cross-cut knife; the circular knife, which was about five inches in diameter, resting against the stationary one, ran from one side of the cutter to the other, back and forth, cutting a sheet each way. The circular knife received its propelling power from a fixing which was put up underneath the cutter expressly for that purpose. There was a two-inch shaft, and probably not more than eighteen inches in length, with a bearing at each end. On this shaft, and close to the bearings, were two large level gear, keyed with the cogs or teeth facing each other. Between the two was the small driving pinion, which was keyed on a different shaft. The two large gear were connected by means of two cross-pieces, each of the two having three cogs. When the cross-piece came in contact with the small pinion, a catch or latch was raised, thus sending the driving pinion into the other gear, reversing its course. It was by one of these cross-pieces the length of the sheet was gauged. The further apart the larger the sheet, and the closer the smaller.

DUNTOCHER.

### Insurance.

To the Editor of The Journal:  
"Smoking, drinking, and neglect have been the cause of two-thirds of the fires in paper mills." So says a correspondent of THE JOURNAL, and I fully believe him. This is a sad commentary upon the management of paper mills. Will mill owners ever learn to have more regard to the personal character and executive ability, as well as the practical knowledge, of the men they place in charge of their mills? A little more money expended in salaries would raise the standard of men placed in responsible situations, and it would be returned in lower rates of insurance, if in no other way. You could not have done a more commendable thing than to call attention, as you did, in your remarks upon the subject in your last issue of THE JOURNAL, in the plain-spoken article headed "A Lesson." While paper-mill proprietors are constantly complaining about high rates of insurance, would it not be well to inquire a little into the cause? I am told by insurance agents that even at the present rates it does not pay to insure paper-mill property, and I also believe there is some truth in this assertion. If I was an insurance agent, which I am not, but, unfortunately, only a paper-maker, I should hesitate about taking risks upon some mills I have in my mind. How would it look, do you think, to step into a mill and see a man lighting his pipe and then throwing his partly burned match down without any regard, perhaps, where it might fall; another man, with equal indifference, knocking the burned refuse out of one he has just finished smoking while about his work, and this with the usual amount of combustible material lying scattered about? Perhaps you will say such a thing is never tolerated in a well-conducted mill. I have often seen it, and on more than one occasion the foreman (!) smoking with his men. What need to look for causes of high rates of insurance when such things are permitted? Is a man who will allow smoking and drinking in a mill a suitable person to be placed in a responsible position? I would suggest to insurance companies to have printed blanks prepared, to furnish to all paper mills applying for insurance, and, with other conditions, I would prohibit smoking on any part of the premises, and I would require the following notices to be posted in every part of the mill:  
"Smoking is positively prohibited on these premises by order of the insurance companies. Insurance forfeited if this rule is not enforced."  
I believe if paper-mill owners will give these matters a little attention, they will find the power to reduce the cost of insurance to a great extent in their own hands. COLOR.

### Changes, Removals, and New Firms.

Chas. J. Cave, paper dealer, has removed to Nos. 164 and 166 Fulton street.  
N. L. Ackert, books and stationery, Yonkers, N. Y., has sold out to J. P. Norton.  
Eberhard Faber will remove in a few days to the buildings 718 and 730 Broadway.  
Robb & McCall, books and stationery, San Francisco, Cal., have dissolved partnership.  
Cohn & Hester, paper box manufacturers, New York, have dissolved partnership; each continues alone.  
Todd & Stevens, books and stationery, Winona, Minn., have dissolved partnership. H. Stevens & Son continue.  
Baker, Schmidlapp & Co., printers, Indianapolis, Ind., have dissolved partnership; Baker & Schmidlapp continue.  
Claffin, Campbell & Co., paper manufacturers,

Maumee City, O., have dissolved partnership; Claffin & Campbell succeed.

Samuel Swan has been admitted to partnership with George Smith, bookbinder, Bridgeport, Conn. The firm style is Swan & Smith.

C. F. Holtermann, paper collar manufacturer, Toronto, Ontario, has admitted Carl Kauffman to partnership; the firm style is Holtermann & Kauffman.

Joseph R. Sergeant and William R. Sergeant have formed a copartnership under the title of Sergeant Bros., for the purpose of carrying on a brokerage business in paper stocks and chemicals. Both of these gentlemen have been known in the trade for many years.

### Failures.

Marcus Teweles, paper and paper stock dealer, Milwaukee, Wis., is reported failed.  
Webster & Hurd, manufacturers of paper bags, Huntington, Conn., have failed.

Application to force into bankruptcy has been filed against Arthur Bott, Albany, N. Y.

A. C. Sanford, newspaper publisher, Racine, Wis., has applied for relief in bankruptcy.

E. Wickstead & Co., stationers, New York, have compromised with their creditors at 30 per cent.

L. Holz & Co., stationers, &c., San Francisco, Cal., have been adjudicated bankrupts on the petition of their creditors.

J. M. Gatehouse, stationer, Dover, N. H., has filed a petition in voluntary bankruptcy. A meeting of the creditors in this city was held on March 21, and a committee was appointed to examine into his affairs. His liabilities are set down at \$10,562.92, and his nominal assets a \$6,955.65.

Allen & Co., stationers, &c., No. 20 Vesey st., have been adjudicated involuntary bankrupts on the petitions of their creditors, and the matter has been referred to Register Allen to take further proceedings. Their liabilities amount to \$17,368.49; nominal assets, \$24,081.10; real assets, \$8,769.38. The firm recently made an assignment under the State law to Richard Esterbrook, Jr.

### Chattel Mortgages.

NEW YORK CITY.  
Mortgagee. Amount.  
W. M. Logan, 586 Hudson st., Dundas Dick \$1,74  
B. M. Lees, 210 Fulton st., R. Hoe & Co., 2,833  
W. A. Matson, 783 Broadway, H. M. Thompson, 4,829  
J. C. Moehring, 31 Avenue A., F. M. Weller & Co., 81  
McWilliam, White & Co., 170, Campbell Printing  
Centre st., Press Co., 3,400  
J. J. O'Brien, 15 E. 37th st., R. Hoe & Co., 1,904  
O. L. Smith & Co., 15 Frankfort st., H. Foster, 500  
O. L. Smith & Co., 15 Frankfort st., J. Meister, 500  
E. Scott, 400 Hudson st., C. Doscher, 326  
G. J. Seabury, 460 Hicks st., R. Hoe & Co., 1,849  
Brooklyn, Pinckney Bros., 3,000

BROOKLYN.  
Caroline Jackson, 410 Kent av. Weller & Degener, 400  
G. J. Seabury & R. W. Johnson, R. Hoe & Co., 1,849  
460 Hicks st.

WESTERN STATES.  
George W. Blair, Chicago, Ill., 2,340  
Aug. C. Schooley, Chicago, Ill., 1,000  
J. W. Frank, Peoria, Ill., 1,000

### In To wn.

Russell Jarvis, Claremont, N. H.; C. E. Weeks, Skaneateles, N. Y.; John C. Newton, Holyoke, Mass.; Z. M. Crane, Dalton, Mass.; H. H. White, North Manchester, Conn.; O. Woodworth, New London, Conn.; Mr. Buckland, North Manchester, Conn.; F. W. Cheney, North Manchester, Conn.

### Obituary.

DANIEL COGHLAN.  
Daniel Coghlan, paper manufacturer, Whippany, N. J., died suddenly in this city on March 22. He had been engaged throughout the day in the transaction of his business, and had started for his home at Whippany when he was fatally attacked with heart disease, and expired almost immediately. Mr. Coghlan was one of the oldest manufacturers in the trade, succeeding the old firm of Gaunt & Derrickson. He was a member of the New Jersey Legislature in 1868, and was highly esteemed throughout that State. He was one of the wealthiest and most influential citizens of the neighborhood in which he lived.

### General Notes.

We often ask advice, but are we always willing to receive it? Is it not more frequently approbation that we mean?

The steamer Rusland of the Antwerp line, which ran ashore on the Jersey coast, near Long Branch, a few days ago, had as part of her cargo, 313 bales of rags, 656 bales of old papers and 104 bales of Manila stocks, all consigned to Lee & Sturges.

A. B. Ansbacher, 43 John street, is an importer of superior ultramarine, and manufacturer of pulp colors for paper-makers' and paper-stainers' use. A large stock is kept stored in this city, the factory being located in Brooklyn, E. D. Mr. Ansbacher has lately published a new list of prices, which will be furnished the trade on application.

John Toppin, a licensed liquor-dealer, was recently tried at Windsor Locks, Conn., on the charge of selling liquor on Sunday. The suit was brought by Superintendent J. H. Carpenter, of the Seymour Paper Co.'s Mills, who had been obliged to discharge a valued workman named Bartholomew Reardon, for drunkenness. Toppin factorized the wages due Reardon, who owed him for Sunday drinks; and Superintendent Carpenter, ascertaining that Reardon had liquor at Toppin's saloon on Sunday, brought the suit. At the examination, Mr. Carpenter stated that the Seymour Paper Company employed about

\$5,000 worth of labor per month, which is deteriorated by the license liquor traffic exceeding its legal limits. As keeper of this labor he is bound to carry this case and others to the extent that the courts of the State will permit, in order to modify in a reasonable way the traffic. He stated that the company had recently had two other good workmen, beside Reardon, destroyed to them by liquor.

### Newspaper Intelligence.

The following is a list of new newspapers, furnished from the advance sheets of the American Newspaper Reporter and Printers' Gazette of March 26:

NEW NEWSPAPERS.		Size.
DAILY.		
Logansport (Ind.) Evening News	15 x 21	
SEMI-WEEKLY.		
Pueblo (Col.) Democrat	22 x 32	
WEEKLY.		
Wilmington (Del.) Sunday Dispatch	24 x 36	
Hillsboro (Ill.) Journal	26 x 40	
Minonk (Ill.) Local Times	22 x 31	
Tamaroa (Ill.) Star	22 x 31	
Decatur (Ind.) Free Press	22 x 32	
Monticello (Ind.) Democrat	26 x 40	
New Orleans (La.) New Delta	26 x 38	
Grand Rapids (Mich.) Greenback	24 x 36	
Little Traverse (Mich.) Republican	22 x 31	
Dundas (Minn.) News	22 x 31	
Oxford (Miss.) Eagle	24 x 34	
Pontotoc (Miss.) Folio	22 x 32	
Pineville (Mo.) News	16 x 23	
Montclair (N. J.) Times	22 x 31	
New York (N. Y.) American	33 x 46	
Bloomburg (Pa.) Journal	22 x 31	
Philadelphia (Pa.) Times	38 x 52	
Wilkesburg (Pa.) Saturday Times	20 x 26	
Newport (Tenn.) Reporter	22 x 31	
Fredericksburg (Tex.) Fredericksburger Wochenblatt	22 x 30	
Sistersville (W. Va.) Tyler Co. Star	22 x 32	
Boscobel (Wis.) Temperance Watchman	16 x 22	
MONTHLY.		
Philadelphia (Pa.) Words of Faith	octavo	
Milwaukee (Wis.) Real Estate Journal	24 x 36	
St. John (N. B.) Printers' Miscellany	octavo	
RESUMPTION.		
Mossy Creek (Tenn.) Independent		

### Hanging and Care of Shafting.

No proprietor of a manufacturing establishment where power is used—steam or water power—but should see that he gets a *quid pro quo* from the power furnished; that is, that he gets a proper proportion of the power developed in comparison with that generated. This is important, not alone in knowing that his machines, driven by power, are running as nearly constantly as possible, but that there be as little waste of power, between the prime mover and the ultimate result, as possible. One item of preventing waste is attention to the proper hanging of shafting, and its after-care. A line of shafting, running true, smoothly, almost noiselessly, is a delight to the mechanical eye. The first look of a practical, visiting mechanic, as he enters a manufactory, is an upward look—to the shafting. If the line runs true, and the pulleys do not "wabble," and there is no grinding nor squeaking, nor exudation of oil at the ends of the boxes, he mentally, if not vocally, declares that the mechanic who hung that shafting knew his business.

The hanging of shafting is as important a department of the millwright's art as the construction of the building to contain machinery is of the architect's; in fact, in the erection of buildings of this character, the millwright and the architect should act in concert. But when a proper building is provided, the hanging of the shafting should be entrusted only to a competent man, one who can previously plan the location of every machine on the floor, and the position of every pulley on the main line, if not also on the counters. Then he can know just where his hangers or brackets should be, to best sustain the weight of the heavy pulleys, and the proper intervals between them, to prevent sagging of the shaft when at rest, and its springing when in motion. If the shaft is supported by brackets on posts, an approximation to a level may be made by stretching a chalk line along the posts and designating the top or bottom of the brackets, or the centre line of the shaft on the posts. Although the line, if stretched a considerable distance, will sag some, it will be a sufficient guide for the boring of the bolt-holes. The rectification of this line can be effected, after the boxes are placed, by means of a water level—a sighting level, or some similar device—the eye being entirely reliable in testing a right line, although not trustworthy as to level. To ascertain the level, a straight edge, of good seasoned pine, planed accurately on both edges, strictly parallel, and wide enough to prevent sagging, and long enough to reach from one box to the next, should be provided. In use, one edge should be rested in the boxes, and on the other should be placed a spirit level. This is a simple, but effective device. Of course it is equally applicable to hangers and brackets.

Shims for leveling down hangers should be of wood, not leather; a yielding material, not iron wedges, generally made too narrow to give a good bearing. Probably nothing is better than seasoned, rived, cedar shingles, which are almost as hard as horn. Bolts to hangers are perhaps necessary for very heavy shafting, but they have been largely superseded by lag screws, or, as some call them, coach screws. If bolts are used, the heads should be slightly convex, strengthened by washers under the head, and both washer and head partially sunk into the floor. When lag screws are used, the holes for their reception should be bored only as large as the core of the screw, leaving the thread to make its own way through the wood.

Shafting is continually getting out of line or level, from one cause or another; the walls of the building may settle, or the floor may be depressed in one spot by an unusual weight; a heavy strain by a belt may cause a cutting of a box and consequent derangement of the line. Frequent periodical inspections should be made to readjust hangers and brackets, if necessary,

and to ascertain if there is undue strain on any particular portion. Neglect of these duties will surely cause waste and expense.—Polytechnic Review.

Trade Notices.

OFFICE OF OGLESBY, BARNITZ & CO., 154 and 156 Clark street, Chicago, February 22, 1877.

TO OUR CUSTOMERS.—We have this day disposed of our entire stock and good will in the paper business to

MESSRS. CLARKE, FRIEND, FOX & CO.

In thus retiring from the trade in Chicago, we desire to express our thanks to our friends and customers, and to commend to them the firm who purchase our stock as possessing all the facilities required to supply their wants.

Very respectfully, OGLESBY, BARNITZ & CO.

OFFICE OF CLARKE, FRIEND, FOX & CO., 150 and 152 Clark street, Chicago, (Mills at Lockland, Ohio) February 22, 1877.

In connection with the above announcement we desire to assure the friends and customers of Messrs. OGLESBY, BARNITZ & CO. that we are prepared to extend to them every facility that they have enjoyed with Messrs. O., B. & Co. for supplying their wants, our own stock being large, and by this purchase made the largest and most complete line in the West. Besides our facilities as manufacturers, we represent some of the largest and best mills in the country, and can fill any orders for special sizes and qualities promptly and at mill prices.

Yours truly, CLARKE, FRIEND, FOX & CO.

William Ruth was formerly sheriff of Muskingum County, Ohio. He is also of the Teutonic persuasion. When he was elected he was in blissful ignorance of his duties, and was greatly troubled about the proper way of opening Court. He confided his troubles to Congressman Southard and several other young members of the bar, and they coached him in his duties, giving him to understand that he was a higher officer than the Court itself, and that Judge Frazier, of the Common Pleas, was in the habit of interfering with the sheriff in a manner that no well-regulated sheriff ought to tolerate. "Py shimming, is dot so?" said the functionary. "Vell yust wait till I opens the gort and he find that Bill Root is not Pense Lloyd by a chug full." When Court came on, Sheriff Ruth verified his prediction. For weeks he had been practising on his opening speech, and when Judge Frazier turned to him with a look of judicial dignity and said, "Mr. Sheriff, open the Court," Mr. Ruth struck an attitude and began: "O yesh, hear ye eferpody und de peebles in sheneral, that the honorable gort of Common Sessions, in und for de honorable podydy of Mooskingum gounty, ish now in pleas, und dat its doors are open for to hear the gomblicants of all the yeomary and gemmons und take gognizance of all mishdemonears und—"

"Hold on there! Hold on, Mr. Sheriff. What is the meaning of all this rigmarole?" exclaimed Judge Frazier. "Shust hold a leedle on, Mr. Shudge," returned the sheriff; "I'm Bill Root, the sheriff of this gounty, und I know my pishness; und all you who haf any pishness to transact mit dis gort und any gauses to present for its honorable consideration vill now approach und dat same make known, und may Gott Almighty haf mercy on your souls, und all of you of nit your hats right avay quick!" By the time the sheriff concluded, even Judge Frazier was roaring with laughter. It took the constables half an hour to restore order. The first case was called, and the Judge said: "Mr. Sheriff, call Peter Jones, John Smith and Sarah White three times at the door." Advancing to the door, and opening it about three inches, and pinching his voice in the highest key, he began: "Peter Shones, Shon Smit, Sarah Vite, Shon Shones, Peter Smit, Sarah Vite, Sarah Shones, Peter Smit, Shon Vite, come right into Court mit you dree times. Your Honor, they comes." Judge Frazier—That will never do. Call them three times, one at a time. Sheriff Ruth—Peter Shones, Shon Smit, Sarah Vite, dree dimes, von at a time, come into Court midout any delay. Judge Frazier—That's worse that it was before. Call one of them three times. Sheriff Ruth—Mr. Shudge, yust look a-her. Dot is ven you make foolish mit me. You say to gall dem dree dimes voice, und den you say gall dem vonce dree dimes, und den you say dot ish wors und wors. Of you vant Peter Shones, und John Smit, und Sarah Vite vonce dree dimes or dree dimes vonce, you petter gall dem yourself. I not stand dot kind of foolishness. Sheriff Ruth retired to Fred. Dittmer's and refreshed himself with sundry glasses of lager, while the constables called the witnesses.

Every little while some one is heard of who has run a rusty nail into his foot, or some other part of his person, and lockjaw has resulted therefrom. All such wounds can be healed without any fatal consequences following them. The remedy is simple; it is only to smoke such a wound, or any wound or bruise that is inflamed, with burning wool or woolen cloth. Twenty minutes in the smoke of wool will take the pain out of the worst case of inflammation arising from any wound.

Meaning goes but a little in most things, for you may mean to stick things together, and your glue may be bad, and where are you!

SPECIAL NOTICES.

[Insertions under this heading will be charged 50 cents a line. Payment invariably in advance.]

Any one having one or more Copies of No. 106, May 13, 1876, of THE PAPER TRADE JOURNAL, and wishing to dispose of same, will please address Box 5,514, New York. Copies must be in good condition.

PAPER-MAKING MACHINERY

Paper Mill Property FOR SALE.

The undersigned offers for sale, in whole or in part, a large line of second-hand Paper-making Machinery, including:

Several complete Fourdrinier and Cylinder Machines, different widths. Engines, including several Kingsland's. A large variety of Calendar and Press Rolls. Several fine stacks of Super-Calenders, Cylinder Moulds, Rag Cutters, Steam Boilers, Steam and Power Pumps, Steam Engines, Screen Plates, Wooden and Iron Tanks, Water Wheels, Paper Cutters and Presses, and an extensive list of Miscellaneous Machinery.

PAPER MILLS.

A number of Paper Mills in Massachusetts, New York, Connecticut, Pennsylvania, Ohio and Michigan, are also offered for sale, at low prices, and on easy terms.

PAPER COLLAR MACHINERY.

A full set of Paper Collar Machines capable of turning out from 30,000 to 100,000 collars per day, together with license for making the same is offered for sale on easy terms.

The undersigned is also agent for the following specialties:

THE LAHOUSSE PROCESS

For Reducing and Bleaching Straw Pulp. Now in successful operation in over sixty mills in Europe. It will give a larger yield and produce a better pulp for the chemicals used, than any process in existence.

THE PROCESS FOR BLEACHING JUTE.

(Owned by the Inter-State Fibre Bleaching Company.) This process comprehends all the improvements in working jute and flax into white paper, and is the best adapted for these fibres.

J. N. PADDACK'S IMPROVEMENT

For equalizing the pressure on the Making Roll in the manufacture of Straw, Binders, Leather and Press Boards.

THE BAGLEY & SEWALL ROTARY FORCE PUMP.

Adapted especially to Paper Mills (see advertisement in another column).

MACHINERY AND ROLLERS FOR EMBOSHING.

Embossing Machines, with Paper Rolls, for all kinds of Printing or Embossing of Calicoes, Satinets, Fapers, Book Binders' Muslin, Leather, Crap, Shirt Fronts, Cuffs, Watered Ribbon, Silk or Paper, Imitations of Morocco, Pebble, &c. Jeweler's Plain and Engraved Rolls, Knerls to order for figures, Diagonals, Crossings and Corrugated Lines, any number to inch; Crimping and Fluted Rolls and Frames, Rollers Furnished and Engraved, from six inches up to six feet, of steel, copper, brass and iron.

THE GIFFORD IMPROVED INJECTOR FOR FEEDING BOILERS.

This Injector has been improved and simplified so that a boy twelve years old can work it. It is well adapted for use in Paper Mills to feed boilers when other parts of the Machinery are stopped.

Full description of the Mills, Machinery and Processes will be given on application.

Address

EDWARD CONLEY,

No. 74 Duane Street, N. Y.

Third Edition—Now Ready.

LOCKWOOD'S DIRECTORY OF THE Paper Trade. 1877.

This Directory contains a full and detailed description of every Paper Mill in the United States and Canada.

This Directory is octavo in form, is printed on the finest book paper, handsomely bound in cloth, and as a work of reference is indispensable to every Paper-maker, Paper and Paper Stock Dealer, Stationer, or any one connected with the trade.

LOCKWOOD'S DIRECTORY is the only STANDARD authority of the kind, and is constantly consulted by the Trade in all parts of the country.

READY FOR DELIVERY IN ABOUT ONE WEEK.

To secure early copies, send in your orders at once. PRICE, in advance, \$2.00.

Address,

HOWARD LOCKWOOD,

Publisher, 74 DUANE STREET, N. Y.

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY EVENING, March 23, 1877.

THE MONEY MARKET.—The market has been well supplied with funds, and the rates on call have been quite steady at from 2 to 3 per cent. Occasionally a spurt is made, and the rates are temporarily advanced, but soon settle back to old figures. The rate at banks and trust

companies continues at 4 per cent. Commercial paper does not meet with such sharp inquiry, but the offerings are small and rates are still favorable to borrowers.

Government bonds are steady. Railroad bonds still show weakness, and transactions are restricted. State bonds are very dull.

The gold market was dull and without special feature during the early days, but towards the close showed some advance under the influence of European news. The quotations for the week are:

Table with columns: Opening, Highest, Lowest, Closing. Rows: M'ch 17, 19, 20, 21, 22, 23.

Foreign Exchange is in small demand, and rates show very little change. The quotations are: Sterling, 60 days, \$4.83 1/2 to \$4.84; do. sight, \$4.85 1/2 to \$4.86; Commercial sterling, prime long, \$4.83 to \$4.83 1/2; do., good long, \$4.82 to \$4.83; Paris, bankers', 60 days, 5.18 1/2 to 5.16 1/2; do., sight, 5.15 to 5.13 1/2; Antwerp, bankers', 60 days, 5.18 1/2 to 5.16 1/2; do., sight, 5.15 to 5.13 1/2.

THE PAPER TRADE.—Nothing out of the usual course has transpired during the past week. Trade yet remains moderate in volume, and prices do not show any marked fluctuations. The feeling is, however, a hopeful one, and while no sudden reaction is probable, there are good reasons for believing that a gradual improvement will become apparent as the months roll by.

JUTE BUTTS.—The arrivals at this port during the past week have been 3,800 bales per Furness Abbey, 3,388 bales per Naturalist, and 2,550 bales per Edward Percy. These, with the arrivals previously reported, make the receipts at New York since March 1, 28,052 bales, and at Boston 7,931 bales—a total of 35,983 bales. The natural consequence of so large a supply has been to stock manufacturers beyond their present needs, and cause a decline in prices for such parcels as are pressed to a sale, landing. Sales of small parcels have been made at 3 1/2 c., cash and time, aggregating several hundred bales in all, and about 2,000 bales, landing here, at 3 1/2 c. cash, and 1,000 bales in Boston at 3 1/2-16c. cash. Thus far there seems to be a readiness on the part of the larger dealers to buy round lots at 3 1/2 c. cash, and buyers look to see the market react to 3 1/2 c. as soon as the pressure, caused by the late heavy arrivals, is removed. We hear of no transactions in late shipments from Calcutta, although cable advices indicate lower landed cost, owing to the decline in silver and exchange.

FOREIGN RAGS AND PAPER STOCKS.—The general tone of the market is unchanged. Rags are receiving little attention, such demand as does exist being principally for the medium and low grades of Linens and cheap Cottons. Waste Papers continue in steady movement. Bagging Stock is not looked after so much, but as the supplies coming forward are not over-large, holders seem to be rather indifferent about selling, except at full rates. Our advices from London indicate continued strength in that market. The imports for the week are 911 bales Rags; 969 bales Old Papers; 1,776 bales Manila Stocks.

DOMESTIC RAGS.—Little variation in the situation of the market is noted. The demand is still of a moderate character, and no changes have taken place in quotations. Sales are 50 bales No. 1 Whites at 5 1/2 c.; 100 bales City Seconds at 2 1/2 c.; 10 tons No. 1 Cotton Canvas at 6 1/2 c.; 15 tons City Seconds at 2 1/2 c.

WOOLEN RAGS.—The movement in some grades continues. The demand is principally for Softs, especially for new clips of light colors. Prices remain unchanged.

OLD PAPERS.—We have nothing essentially new to say regarding the market, the situation varies so little in its principal features as to leave no room for comment. The demand, although it cannot be called a stirring one, is yet sufficient to keep down any accumulations of stock, and in some grades to make it rather difficult to get enough of reliable packing to fill orders. This is particularly noticeable with Manila Papers and good Newspaper Stock. Light stock has been offering rather freely for some days owing to the slackening in demand from some of the Hanging mills. We note sales of 15 tons Clean, Pure, Manillas at 3 1/2 c.; 10 tons Pure Manillas at 3 1/2 c.; 10 tons Pure Manillas at 3c.; 30 tons No. 1 Light Stock at 2 1/2 c.; 10 tons Book Stock at 3 1/2 c.; 15 tons No. 1 White Shavings at 5 1/2 c.; 200 bales Light Book Stock at 2 1/2 c.

BAGGINGS, &c.—The inquiry for Bagging Stock runs considerably smaller, but holders appear to be very confident in their views, and evince little disposition to recede any from quoted figures. The stock of strictly No. 1 Bagging, while fuller than a few weeks ago, is still not more than moderate. The offerings of lower grade stock, which, although called No. 1, will not bear the test of close inspection, are larger, and some lots of this class have been sold at a concession. The supply of Rope is larger, and buyers do not evince that desire to purchase which they have shown for some time past. Some lots have been offered at a shade less than quoted rates, but holders of desirable parcels are firm in their figures. Hemp Stock is scarce, and in good request. Sales are reported of 25 tons Gunny Bagging at 3c.; 8 tons No. 1 Jute Threads at 3 1/2 c.; 25 tons Grass Rope at 3 1/2 c.; 7 tons Kentucky Bagging at 4 1/2 c.; 30 tons Scrap Bagging at 2 1/2 c.; 25 tons Grass Rope at 3 1/2 c.; 25 tons No. 1 Gunny Bagging at 3 1/2 c.

STRAW.—Continues in good request, and the quotations are steady at 75c. to 80c. for Long Rye; 60c. to 65c. for Short Rye; 55c. to 65c. for Oat.

ROSINS.—Trade is rather quiet. The better grades have moderate movement only at about old figures.

CHEMICALS.—There is no increase in business to report. Sales are still restricted in amount, and prices show very little variation. The in-

quiry for some of the heavy chemicals appears to be better, and the prospect for an improvement in demand seem better than for some time past. Soda Ash is steady, and Caustic Ash has a little better demand. The receipts of Bleaching Powders have been light, and with few lots offering from dock the price has been held somewhat stronger. Sal Soda does not show any change. Sales are 100 barrels Lump Alum, at 2 1/2 c. currency; 100 barrels Ground Alum, at 2 1/2 c. currency; 100 lbs. Potash Alum, at 2 1/2 c. currency; 100 lbs. Porous Alum, at 3 1/2 c. currency; 150 casks Bleach, spot, at \$1.95 currency; 50 drums 60 per cent. Caustic, at \$4.60 gold; 50 tons Sal Soda, at \$1.40 gold; 100 tons Soda Ash, at 2 1-16 gold; 30 tons English China Clay, on spot, at \$17.50 gold.

THE COAL TRADE.—The market for Anthracite remains very quiet so far as general trade is concerned. The large sale by the Pennsylvania Coal Company occasioned considerable interest. The prices realized, allowing for the difference in freight between Hoboken and Newburg, show an average decline of about 7c. per ton from the sale of February 28. A conference of the representatives of the leading large producers was held on Wednesday, and a committee appointed to prepare a plan for a combination.

NEW YORK MARKET.

PRICES CURRENT.

Paper Market.

Table of Paper Market prices including Flat Caps and Ledger, Blotting, English, Book, super-sized and calendered, etc.

Woolen Rags.

Table of Woolen Rags prices including Comforter Stock, White Wooleens, Blue Grey Stockings, etc.

Rags, Rope and Bagging.

Table of Rags, Rope and Bagging prices including White Shirt Cuttings, Mill Assorted Whites, Unbleached Muslins, etc.

Shavings and Old Paper.

Table of Shavings and Old Paper prices including White Collar Cuttings, White Envelope Cuttings, etc.

English Rags, &c.

Table of English Rags, &c. prices including New Cuttings, cotton, Essex Fines, London Fines, cotton, etc.

English Old Papers and Shavings.

Table of English Old Papers and Shavings prices including Hard Shavings, No. 1, Soft Shavings, No. 1, etc.

Hamburg Rags, &c. LINENS.

Table of Hamburg Rags, &c. LINENS prices including Linen Cuttings, S P F F F, long bale, etc.

COTTONS.

Table of Cottons prices including Shirt Cuttings, square, C S P F F F, square bale, etc.

Rope.

Table of Rope prices including W R (white), M R (manilla), etc.

Old Papers.

Table of Old Papers prices including Old Book Paper, Old Printed Books, etc.

Leghorn and Genoa Rags.

Table of Leghorn and Genoa Rags prices including P P No. 1 Linens, S S No. 2 Linens, etc.

Alexandria Rags.

Table of Alexandria Rags prices including Whites, Blues, Colors, etc.

Memel Rags.

Table of Memel Rags prices including S P F F F, S P F F, F G, L F B, etc.

Trieste Rags.

Table of Trieste Rags prices including S P F F F, S F F, S F B, etc.

Konigsberg Rags.

Table of Konigsberg Rags prices including S P F F F, S P F, F F, L F B, etc.

Spanish Rags.

Table of Spanish Rags prices including W L Whites, D L Whites, C C Whites, etc.

Japanese Rags.

Table of Japanese Rags prices including Whites, Blues, Colors, etc.

Chemicals, Coloring Materials, &c.

Table of Chemicals, Coloring Materials, &c. prices including Alum, lump, Alum, ground, Alum, porous, etc.

BOSTON MARKET.

Paper.—Demand light, with prices that leave but small margin for profit. Paper Stock—Certain grades wanted, but goods scarce. Gunny firm, stock very small. Butts more plenty, prices lower. Manilla rope firm at quotations. Chemicals.—Ash, prices quite firm. Johnson's Caustic scarce, at full price. Bleach in good supply, demand fair, but manufacturers do not want to pay asking figures. Sal soda firm. Caustic soda, full stock, demand small. Rosins.—Stocks light, not much inquiry. No. 2, little firmer in price. General market can be reported as quiet, with but little, if any, better call for goods than has been since the year opened.

Paper Stock.

Table of Paper Stock prices including Mill Assorted Whites, Cotton Canvas, etc.

Table listing various paper and rag products such as Cotton Canvas, Linen Canvas, White Shirt Cuttings, Country White Rags, etc., with their respective prices.

Table listing Leghorn Rags, P.P. No. 1 Linens, S.S. No. 2 Linens, T. No. 3 Linens, etc., with their respective prices.

Table listing Alexandria Rags, Whites, Blues, Colors, etc., with their respective prices.

Table listing Smyrna Rags, Whites, Blues, Colors, etc., with their respective prices.

Table listing Constantinople Rags, Whites, Blues, Colors, etc., with their respective prices.

Table listing New Papers, Superfine Book, Fine Book, Rag News, etc., with their respective prices.

Table listing Hardware, No. 1, No. 2, No. 3, etc., with their respective prices.

Table listing Boston Chemicals, Alum, English lump, Alum, English ground, etc., with their respective prices.

Table listing Alum, American lump, Alum, American ground, etc., with their respective prices.

Table listing Alum, ground, Concentrated, Anti-Chlorine, Bi-Chromate Potash, etc., with their respective prices.

Table listing Clay, English, Clay, American, Coppers, American, etc., with their respective prices.

Table listing Extract Logwood, Lime, common, Prussian Blue, etc., with their respective prices.

Table listing Rosin, common strained, Rosin, No. 2, Rosin, No. 1, etc., with their respective prices.

Table listing Soda, N. O., Soda, American, Soda Ash, gold, etc., with their respective prices.

Table listing Soluble Blue, Sugar Lead, White, Sulphuric Acid, etc., with their respective prices.

Table listing Terra Alba, Ultramarine, Venetian Red, etc., with their respective prices.

Table listing Yellow Ochre, etc., with their respective prices.

Table listing China Clay, English, China Clay, American, etc., with their respective prices.

Table listing Orange Mineral, Rosin, good strained, Rosin, No. 2, etc., with their respective prices.

Table listing Rosin, pale, Soda Ash, gold, Spanish Brown, etc., with their respective prices.

Table listing Sugar of Lead, white, Sulphuric Acid, etc., with their respective prices.

Table listing Venetian Red, English, Yellow Ochre, American, etc., with their respective prices.

Table listing Yellow Ochre, French, etc., with their respective prices.

Table listing CINCINNATI MARKET, Paper Stock, City, No. 1 Whites, etc., with their respective prices.

Table listing Soft Woollens, mixed, White Cotton Canvas, etc., with their respective prices.

Table listing White Shavings, No. 1, White Shavings, No. 2, etc., with their respective prices.

Table listing White Collar Cuttings, Country Whites, No. 1, etc., with their respective prices.

Table listing White Collar Cuttings, Country Whites, No. 2, etc., with their respective prices.

Table listing Manila Envelope Cuttings, new, Manila Papers, etc., with their respective prices.

Table listing Hardware and Manillas, Straw Board Cuttings, etc., with their respective prices.

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Table listing Manila Envelope Cuttings, new, Manila Papers, etc., with their respective prices.

Table listing Hardware and Manillas, Straw Board Cuttings, etc., with their respective prices.

Table listing CHICAGO MARKET, Rags and Paper Stock, City Whites, No. 1, etc., with their respective prices.

Table listing Mixed Shavings, White Shavings, etc., with their respective prices.

Table listing Book Papers, mixed, Print Papers, etc., with their respective prices.

Table listing Flour Sacks, Common Paper, etc., with their respective prices.

Table listing Straw Board Cuttings, Seamed Cloth, etc., with their respective prices.

Table listing FOREIGN MARKETS, London Market Report, LONDON, March 10, 1877, etc., with their respective prices.

Table listing English Chemical Market, MANCHESTER, March 10, 1877, etc., with their respective prices.

Table listing The French Market, PARIS, March 5, 1877, etc., with their respective prices.

Table listing PAPER AND PAPER STOCKS, etc., with their respective prices.

Table listing WOOLEN RAGS, etc., with their respective prices.

Table listing JUTE, etc., with their respective prices.

Table listing Advertisements, WANTED, etc., with their respective prices.

WANTED.—PAPER MILLS, NEAR NEW YORK or Boston market.—One small Wrapping Mill, capacity about 3,000 lbs.; two good Manila Mills, capacity from 3,000 to 5,000 lbs.; one good Book and News paper Mill. Parties having such mills for sale will please communicate with the undersigned, stating condition and capacity of mill, and terms of sale. All communications strictly confidential, if so requested. EDWARD CONLEY, 74 Duane street, New York.

THE MANUFACTURERS OF SATIN PAPER.—A young German is ready to introduce the manufacture of Cigarette Paper for a moderate compensation. He can produce samples as well as the very best references. Address A. S., Post-Office, Holyoke, Mass.

A THOROUGHLY PRACTICAL AND EXPERIENCED paper-maker who understands his business in all its details, a live man, and who knows how to run a mill successfully and intelligently, would like a situation as foreman in a mill making fine book, colored or manilla papers. Engine-sized papers a specialty. A good situation more desirable than a high salary. Address SUPERINTENDENT, care of this paper.

FOR SALE. Two double-riveted, 6-18 Rotary Bleach Boilers one new and one second-hand, in complete order One 80 H. P. Corliss Steam Engine, damaged a little by fire. Two second-hand Water-Wheels, one 18-inch Dayton, and one 15-inch Stevenson, in good order. All or any of the above will be sold at a bargain. Address CASE BROTHERS, South Manchester, Conn.

New Paper Machine for Sale. Made by "Seaverns" for Print, Hanging, or Manilla papers, 42 inches wide, six Dryers, 28-inch copper. First and Second Press, Vat Cylinder, Fan and Stuff Pumps, Shafting, Stands, and Boxes, never used, offered at a bargain. BOYNTON'S MACHINERY AGENCY, Hartford, Conn.

FOR SALE. One Stack Calenders, 62-in. face, three 12-in. Rolls and six 6-in. Rolls, with Frames and Boxes. One Iron Tub 300-lb. Engine, with Iron Rolls, 28x32, in good order; with washer and pulley. Six Brass Screen Plates, 12x36, in good order, cut between Nos. 0 and 1. SMITH PAPER CO., Lee, Mass.

FOR SALE. The SUBSTANTIAL, Elegantly finished 76-inch FOURDRINIER Paper-Making Machine WHICH RECEIVED THE HIGHEST AWARD and unanimous approval of the group of Judges at the CENTENNIAL EXHIBITION, FOR THE SUM OF \$8,000. Set up in Mill on reasonable terms. Sold at this price only to make room.

For further information, apply to the GAVIT PAPER MACHINE WORKS 224, 226, 228 and 230 North Broad Street, PHILADELPHIA.

PAPER MILL PROPERTY For Sale Very Low. Mill has four Engines, 36-inch Rolls; one Machine, 52-inch face; Fall, 32 feet. Is on first-class stream; in an excellent location for Straw. Has been run on Straw wrapping-paper. There is a Farm of eighty-five acres and five Tenements included in the property. Price \$12,000.—Terms easy. For further particulars address PAPER MILL, Care of Paper Trade Journal.

SUPERIOR QUALITY Wood Pulp. For price and samples address, J. HENRY BLANCHARD, Boston, Mass.

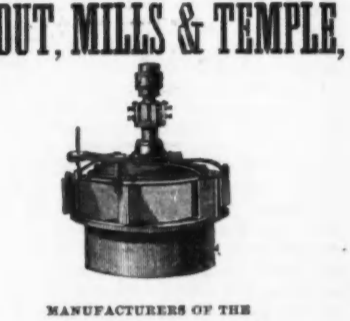
J. G. DITMAN & CO., Wholesale Paper and Rag Warehouse, 30, 32 and 34 SOUTH SIXTH STREET, PHILADELPHIA. CORNER OF JAYNE STREET.



J. G. Ditman & Co. take pleasure in informing their patrons of the Removal of their place of Business to 30, 32 and 34 South Sixth Street, corner Jayne, lately occupied by Charles Magarge & Co., where they will be happy to receive all their own, together with the Patrons of the Old House. Respectfully, J. G. DITMAN & CO. M. S. BULKLEY, J. G. DITMAN.

HANWELL & WISSAHICKON PAPER. On hand and made to Order, WHITE and TINTED.

MIAMI FELTS SHULER & BENNINGHOFEN, HAMILTON, OHIO. PERKINS & GOODWIN, 84 Duane Street, N. Y., SOLE AGENTS FOR THE EASTERN AND MIDDLE STATES.



AMERICAN Turbine Water Wheel, GEARING & SHAFTING, Rag Engines, Wood or Iron Tubs, RAG-CUTTERS, DUSTERS, Pumps, &c.

These Felts are largely used by mills in the Western States, where they have given universal satisfaction, and have proved equally satisfactory in the mills in this State and the East wherever used. EQUAL TO THE BEST ENGLISH FELTS AT A MUCH LOWER PRICE. GIVE THEM A TRIAL. SATISFACTION GUARANTEED.

PETER HERDER, Paper Warehouse. Fine Manillas, Pure Rope, Bag and Tag, Book and News Paper, Mailing Paper.

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JARVIS' PATENT FURNACE For the Setting of Steam Boilers. Will save twenty-five per cent. in fuel, and make an increase of twenty-five per cent. in Steam Power. Will burn coal dust without blast. We guarantee fifteen per cent. increase in evaporation and capacity where we can have evaporative test before and after setting. Boilers set this way can be seen at RUSSELL PAPER CO., Lawrence, Mass. W. W. HARDING'S PAPER MILL, Philadelphia, Pa. HOWLAND & CO., Sandy Hill, N. Y. BYRON WESTON, Dalton, Mass. HARMONY MILLS, Cohoes, N. Y. ALLEN PRINT WORKS, Providence, R. I.

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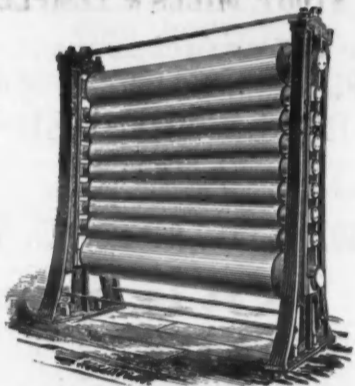
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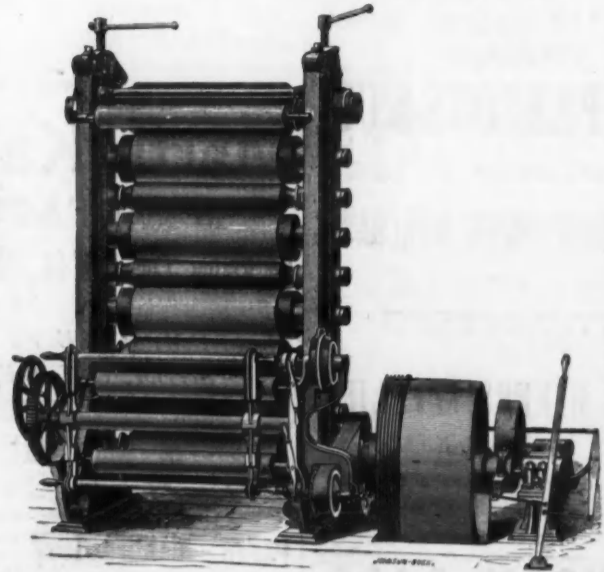
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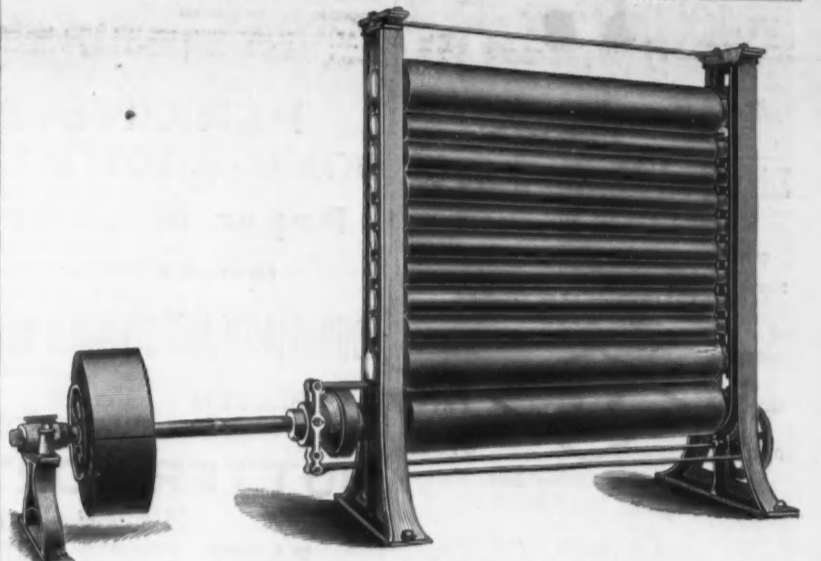
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