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

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Trade Topics.

Silk from Cellulose.

[WRITTEN FOR THE JOURNAL.]

About the middle of 1892 a report went through the technical press that success had at last attended Count Chardonnet's experiments in making artificial silk or weavable cellulose, and that a well backed stock company had been formed, including J. B. Weibel, of Norillars, Doubs, France; Mr. Darblay, of Paris, and other names well known in the cellulose industry. We were informed that the object of this stock company was primarily to purchase and control the French and other patents of Count Chardonnet for making artificial silk from wood cellulose, and that works were to be erected immediately to put the process into operation on a manufacturing scale. This report may have been bona fide, but if so it is rather remarkable that so little has lately been heard of cellulose silk. The fact of the matter appears to be, on impartial investigation, that the whole affair of the preparation of silk from sulphite or other wood cellulose, as well as the entire subject of weavable wood fibre, is at present in embryo, and remains in the experimental stage thickly incrustated with theoretical barnacles.

In spite of the investigations, experiments and patents of Mitscherlich, Wolff, Chardonnet, Kellner, Du Vivier and others, no commercially practicable process seems so far to have been developed to any further extent than to produce small samples of textiles and yarns, but not in quantity sufficient to permit competent practical men to make tests and critically handle the goods. That "seeing is believing and feeling is God's truth" applies very well to the question in point. The inflammable feature which was so prominent in the earliest samples of the Chardonnet fibre has, it seems, been done away with to a considerable extent, but the "feel" or "handle" of the latest productions of the Du Vivier process (the last born) seems to leave a good deal to be desired, if we can believe what appear to be authentic reports from Lyons and Crefeld. An attempt will now be made to state in as few words as possible the views of competent authorities on the products of the Chardonnet and the Du Vivier processes respectively:

The Chardonnet process is that most familiar to those interested, as much has been written and talked about it, while the Du Vivier process has been quite recently developed. The thread or fibre obtained by either process is nothing more nor less than a nitrated cellulose, viz., a species of gun cotton, and is consequently exceedingly inflammable, although not necessarily explosive under ordinary circumstances. Hence the fibre is in course of process subjected to the action of certain chemicals which reduce its stage of nitration, thus decreasing its inflammability. The artificial product, however, still remains a good deal more inflammable than the natural product. In brief, the manufacture of artificial silk by either the Chardonnet or the Du Vivier process consists of the following main steps or processes:

- (a) The manufacture and solution of gun cotton.
 - (b) The bringing of this solution into the form of threads by passing through almost capillary tubes.
 - (c) The coagulation of the surface of these threads.
 - (d) Partial denitration and treatment with accessory chemicals.
- It is quite probable that in the case of the Chardonnet silk the main objections which have hitherto prevailed against this product will be removed in course of time and further experiment, although this has not yet been done. This refers to improvements in both the quality of the fibre produced and its dyeing properties. These are two points which have given an immense amount of trouble even in the experimental stages.

As at present produced Chardonnet silk will not stand the temperature of boiling water, and must therefore be dyed in the cold, which entails going back to the older methods of silk dyeing, as the most improved methods now in vogue mostly require a boiling process. Further, it must be said that all samples hitherto shown have lacked proper tenacity, although white and brilliant. To quote the opinion of one of the most famous silk experts of Lyons: "It is nothing but warp. Its glossiness has a certain value for a limited number of grades of goods. If the artificial product can combine cheapness with other indispensable qualities it will be successful, otherwise probably not."

In connection with this remark about cheapness attention is called to the important fact that it seems impossible so far to obtain any precise data as to the actual cost of manufacturing artificial silk under existing processes, and this state of affairs does not engender confidence. The lowest estimate which the writer has seen makes the cost of manufacture 32.72 cents per pound, on the Chardonnet process, while in a recent report the president of the Chamber of Commerce of Crefeld (Germany) figures it at about \$1.00 cents per pound, which is apparently likely to be much nearer the truth. Another report by United States Consul Loomis, of St. Etienne, France, states that the Chardonnet experiments so far are more interesting than important, although the results obtained appear valuable.

Consul Loomis also states that in well informed trade circles it is believed that before very long the company owning the Chardonnet patents will be able to offer to the trade a substitute for silk which will possess all of the essential qualities of the same at about half the cost of the genuine article. Now as to the product of the Du Vivier process, it is stated on good authority that skeins of this article, dyed a good black, were recently submitted to experts at Crefeld with the following results: It was pronounced that the product in question very closely resembled the genuine article and was not as inflammable, and was decidedly finer than Chardonnet silk. Further, that silk neckwear with Du Vivier tram could be manufactured 20 per cent. cheaper than with China tram. Also, that black damassé with Du Vivier tram presented an excellent appearance and cost much less than similar goods from the genuine fibre.

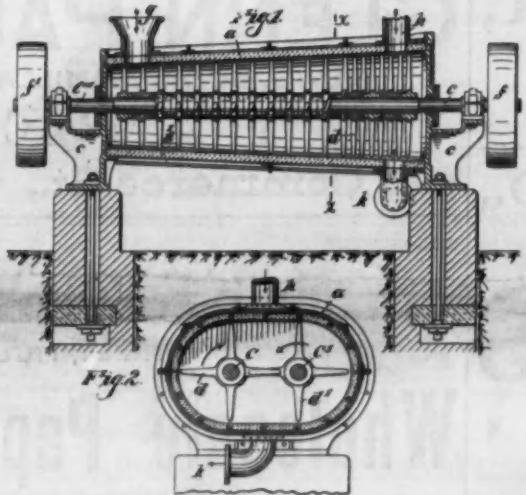
After sifting all reports and opinions to the bottom, it appears that undoubtedly many improvements are also needed before Du Vivier silk can become an assured success. The threads must be stronger and there must be a better "handle" or "feel." It seems that almost all fabrics so far made from Du Vivier silk have had a comparatively hard and straw like feel, which it is most essential to avoid. There is reported a loss of ten to twelve per cent. on quilling, which is too much, besides another considerable loss caused by the frequent breaking of the thread. There is, however, no doubt at all of there being so much improvement in the samples now shown over earlier specimens as to encourage the hope that the Du Vivier people will show the same energy and persistence which Count Chardonnet has exhibited in following up his early experiments in the manufacture of artificial silk from wood cellulose.

As to a comparison of the products of the two processes little can be said at present beyond giving the opinion of Louis Blanc, an expert, who is specially qualified for such investigations. These covered the methods of manufacture, the tenacity and elasticity, structure, chemical and physical properties, as well as a careful comparison with the genuine articles, viz., both mulberry *bombyx* and tussak silk. Two samples of Chardonnet silk examined by Mr. Blanc were very supple and glossy, and their feel was

quite similar to that of silk. The weak point was that they broke easily and offered very poor resistance while being drawn. A sample of Du Vivier silk had more gloss than natural silk, but the thread felt rough and dry. The material offered quite a good resistance. Comparing the four materials it was found that the Chardonnet silk gave the greatest variations in elasticity, while the Du Vivier product was more constant, but still inferior to natural silk.

The general results of Mr. Blanc's experiments were that the constancy of tenacity and elasticity were far less than in the case of the genuine article. He, however, claims that the perfection of the drawing process has much to do with these matters, and that it is quite possible that an improved manufacturing process will give far better results on these points.

Finally, it should be stated that those manufacturers who have made weaving ex-



BEATING ENGINE FOR CHEMICAL FIBRE.

periments have pronounced both products as being deficient in elasticity and tenacity. In a future article the matter will be further gone into, but the above is probably sufficient to show about how matters stand at present with the art of manufacturing artificial silk. The subject is of vital importance to more than one industry, and it is to be hoped that both inventors and investigators will succeed in enlisting sufficient capital to aid them in bringing the matter speedily to commercially valuable results.

Machine for Reducing Chemical Fibre.

The object of the machine herewith illustrated is to provide means for beating chemical fibre, whereby the separation of the individual fibres from one another is more effectually attained, and the grinding up or disintegration of the knots or hard, resinous bodies mixed with the cellulose is avoided, the product after leaving the machine being like cotton and very easily felted.

Figure 1 is a longitudinal sectional elevation and Fig. 2 is a transverse section on line x-x of Fig. 1 of the machine.

A separator shell *a* is of more or less ellipsoidal form in cross section, the sides of the ellipse being flattened so as to cause the ends of the beater arms or blades to revolve in close proximity to the inner surfaces of the shell, which is made tapering, its cross sectional area being gradually reduced from the discharge to the feed end.

The separator shell is supported on suitable end standards, *c, c*, in which are formed bearings for two shafts, *b* and *b'*, armed with beaters or blades, *d* and *d'*, respectively, four such beater arms being preferably formed on a bearing or sleeve mounted on the shafts. The beaters or blades, *d*, are so arranged on the shaft *b* as to work between the teeth or blades, *d'*, on the shaft *b'*, but not in contact with each other, sufficient space being left between them to allow the

knots or hard, resinous bodies to pass without being ground up. The beaters or blades, *d, d'*, are made longer as they approach the discharge end of the shell, so as to conform to the cross sectional area thereof; and as the material being treated nears the discharge and the fibres become more and more separated from one another, the number of beaters or blades on the shafts are increased to complete the separation and to thoroughly mix the fibrous material with the water fed into the cylinder at the discharge end and to facilitate and expedite the discharge of the pulp.

The shafts are revolved toward each other either by suitable gears, or, as shown, by means of a driving pulley, *f, f'*, respectively, mounted on the opposite outer ends of the shafts *b* and *b'*. By reason of the more or less conical form of the separator shell *a*, its inner lower face or bottom inclines more or less from the feed to the discharge end, whereby the material is automatically caused to move toward or to the discharge end irrespective of the pressure exerted by the material fed to the separator through feed hopper *g*.

In order to further facilitate the discharge of the material from the separator shell a pipe, *h*, is provided at the discharge end, through which water is introduced into the shell so as to thin out the fibrous material and cause it to flow readily through the discharge pipe, *h*.

In practice the cellulose is fed to the separator in the form of a thick semi-dry paste, the water having been first drained off, and the two shafts are rapidly revolved in opposite directions, the beaters acting on the fibres effectually to separate the same from one another and from the knots or hard, resinous bodies, while the latter pass freely between the beater arms without being crushed or ground up, so that they can be readily removed by straining the pulp in the usual manner after leaving the machine.

Trials and Triumphs of a Millwright.

Fortieth Paper.

[WRITTEN FOR THE JOURNAL.]

By JAMES F. HOBART.

From time to time Tramp has had occasion to relate his observations of a paper making plant which tried to burn oil for fuel under their steam boilers. This plant was situated many hundreds of miles from the oil fields, and it was stated as one of the reasons for abandoning oil as fuel that "they were unable to contract ahead for a constant supply of oil, the fluctuation of the market value of the substance making it impossible to buy more than practically from day to day." Just how much stock to take in that view of the matter he never determined, but he did know that many days were lost by the mill standing idle from want of oil to keep up steam.

Tramp has nothing more to say on the oil burning question, but he wants to chronicle how the plant in which the oil was unsuccessfully tried came to deteriorate from a first class mill making book and news to a mere mechanical wreck, which will soon have to be totally reorganized and rebuilt, or else go where all old paper mills which fall out in the race for the "survival of the fittest" and dollars go. For many years this mill property paid a handsome dividend. It was in charge of an agent of recognized ability, who, with his lieutenant, one of the best paper makers in the country, kept the mill in fine condition to turn out a large quantity of paper of as good a quality as the orders called for. Thus the matters continued for years, until a "volcanic eruption" in the city office of the mill owners brought to the surface an element of disturbance which proved the beginning of the decline

of profits from the mill and of pleasant relations all around.

Under the old management it was the policy to turn out every pound of paper possible, while both mill and product were kept up to a very high standard. That is: When first-class paper could not be made, the mill would be repaired to make it turn out such paper. Furthermore, the mill would not be crowded beyond its capacity to turn out more paper at the expense of quality. In other words, the owners were satisfied with the safe and conservative management of their agent, who would not make paper unless he could make good paper and keep up a good plant.

When the eruption occurred in the office the mill was soon put at work turning out every pound of paper possible, totally regardless of whether the plant was in good or bad condition. For a time the good name of the mill kept up its sale of production, but a limit was very soon reached in this direction, as the owners quickly found. Matters continued in this way for some time, continually going from bad to worse, the mill being run at high pressure and the pressure being constantly increased, without the least attention to the decreasing strength of the mill plant. The capable agent and his paper maker soon got disgusted with this way of running a mill and resigned, and then the "fun" began in earnest. A new agent was quickly secured, and as an agent can be made out of anybody this was an easy job.

The new agent was a young man fresh from school. He was a very fine man, and evidently had a good deal of snap to him; but he was inexperienced; he knew nothing about paper making or about the management of a paper mill. He soon saw that something was wrong with the concern—that it was not being kept up as it should be, and that the plant needed improving in many ways. Just how to make the required improvements he did not know, having no past experience in this line to guide him. Consequently he was quite susceptible to the pressure for production from the city office, and while doing his best to respond to the demand, and at the same time get the plant back to something of its former standing, this man grievously got hold of the wrong end of the matter and worked in such a manner that his efforts were worse than useless. A single instance will suffice to show this: In trying to improve the boiler rooms nearly half a ton of white lead paint was spread over the surface of the woodwork, to become in less than a month as black as the coal pile. Experience had not taught this man that in such a case whitewash was just as good as white lead, and a good deal cheaper.

It was so all around. He got hold of the wrong end; and one day another man walked into the mill office with letters from headquarters in his pocket, authorizing him to take charge of the mill as agent forthwith. From this time the deterioration of the plant was rapid. The stock had already gone down in value, and the condition of the plant and machinery was as usual very close to the value of the stock.

The new agent soon showed that he was going to have things all his own way, no matter whether that way was best or not. His predecessor took things as he found them, and tried to make the best of them that he knew how. The new man, however, made many changes in the personnel of the mill, and discharged right and left to make room for his favorites. At this time a number more of the best men in the mill became disgusted, and abandoned it, to have their places quickly filled with men of the new agent's liking. Then another factor entered the equation, and rum made its presence felt. The new agent was addicted to its use, and it was quickly seen that business must take a back seat when rum was aboard, and it was aboard all too often.

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the master mechanic requesting that gentleman to come at once and restrain and quiet down the agent, who was smashing things generally. His business was neglected. An order would be worked off the file, and then a man would have to go to the agent's house and rouse him from his bed, often in the daytime, in the hope of finding him capable of telling what order was to be next begun. A well informed ex-employee of the concern remarked: "For twenty years there was a prayer every morning in the house where the agent lives; now, there is cursing and swearing; I wonder what the rats think!"

All this time the mill was steadily going down in condition. The repairs were very superficial, and, to use a paper mill expression, things were patched up "with a chip and a string," instead of being properly attended to. The repair force was increased, iron working tools were added to the plant, the repairs always before having been done at a neighboring machine shop; but in spite of the expensive additions to the mechanical department the mill grew worse instead of better. The repairs were merely superficial and often ill directed. The repair men were not worked to good advantage, and frequently spent hours on work which could and should have been done in minutes, and done better at that.

A new and very expensive chimney was built for one battery of boilers, and after they were connected thereto, effort ceased in that direction. The steam connections in one part of the mill were so badly neglected that they drenched the entire room with water of condensation, and the whole place looked as if it had been visited by a rain storm. The entire steam plant was neglected and a capable engineer would hesitate before trusting himself in the premises without authority to at once attend to things so as to make them safe to life and property.

One occurrence, the breaking of the back line to one of the machines, may be cited as an instance of the celerity with which repairs were made in that mill. Perhaps, however, it would be better not to detail the modus operandi of the operation, which should be avoided by all progressive mechanics, and simply state that the machine lay idle three days while the piece of shafting was being patched up.

One more custom of this mill spoiling agent should be ventilated, and that is the manner in which the visitor from the home office was disposed of when he came to the mill. There are many points of great interest, historically and otherwise, in the vicinity of the mill, and when the man from the city put in an appearance he was hurried off as soon as possible in a nice team and

driven around the country until there was barely time to catch a train home, so that the mill received very little inspection from him, and much of the "cussedness" escaped discovery.

Probably if some of the liquor bills received at the mill office should find their way to the owner of the mill he might awaken to the true state of affairs in time to prevent the total wrecking of the mill plant. At any rate, the matter as here outlined, may serve to awaken the owner of some other mill to vigilance which possibly may save him the loss of a number of dollars, not only from the laxity of the agent, but also from the danger of forcing a mill beyond its capacity in the effort to get ahead in the competition for large production. Two morals at least may be drawn from the above, and they are at the service of any mill man who cares to apply them.

Correspondence.

Chicago Notes.

[FROM OUR REGULAR CORRESPONDENT.]

WESTERN OFFICE PAPER TRADE JOURNAL, 116 La Salle Street, CHICAGO, ILL., January 10, 1898.

Chicago is having a regular old-fashioned winter, the mercury keeping pretty close to zero day and night for several weeks.

W. O. Tyler, of the American Paper Company, has been seriously ill for several days, but his condition has changed somewhat for the better, and his early recovery is looked for.

Geo. H. Taylor, of Geo. H. Taylor & Co., is also slightly indisposed.

Although in the new quarters at 236 and 238 Monroe street, the Calumet Paper Company has plenty of work ahead before the business will be running in its accustomed systematic manner; but affairs are sufficiently shipshape to promptly handle the increasing business of the house.

The Columbia Straw Paper Company is rapidly getting its affairs in order, but Messrs. Beard, Stein, Holladay and Church have had a Herculean task.

The year has opened up quite promisingly, and so far no failures affecting the paper trade have been announced.

The William Burgess Printing Company was closed by the sheriff yesterday, but with no loss to the trade. The liabilities approximate \$15,000, which is equal to the nominal assets.

It is hoped and expected that the space in the Manufactures Building will all be allotted this week. There will be numerous bitter disappointments among the applicants

for space, inasmuch as not more than one in eight will get any space at all, while those who are fortunate will be disappointed at the curtailment.

A. S. Gage, proprietor of the Wellington Hotel, has been finally awarded the restaurant privilege at the exposition grounds, the Exposition Company to receive 25 per cent. of the gross receipts. Accommodations will be provided to furnish food of every variety and quality, from a 5 cent sandwich up. The majority of the restaurants will be operated to please the masses as to price, if not in the quality.

L. S. D.

St. Louis Notes.

[FROM OUR REGULAR CORRESPONDENT.]

ST. LOUIS, Mo., January 10, 1898.

While the holidays are now a thing of the past their soothing effects on business linger and will until inventories tell their tales and salesmen resume their "beats." Account of stocks having all been taken, goods are now being priced and figured and undergoing the "comedy of errors," usually attending this nightmare of business, and proprietors are awaiting results with poorly suppressed anxiety.

Traveling men are now being coached for the "greatest effort of their lives;" salaries are being adjusted; changes are taking place; policies (which will doubtless be promptly discarded) are being outlined, and the machinery will soon be in motion for the coming year's campaign, and business will start out on its annual journey with the usual new year's aggression.

That the past year was prosperous in the paper business is very evident. It brought the jobber and the printer into closer union, and established a clearer and more just idea of each other's rights and interests, which augurs well for the future.

The year opened by the enlargement of the old house of the F. O. Sawyer Paper Company, which under the able management of Mr. Sawyer, assisted by Mr. Pollard, has been steadily advancing.

Across the street the Geo. R. Dickinson Paper Company has not only added to its store room, but has made radical changes in management, the dual system being continued; but Messrs. Kingsland and Clark have been succeeded by Messrs. Brown and O'Meara, both from Chicago. Mr. Kingsland is now engaged in the brokerage business in this city, while Mr. Clark has the Chicago agency of his employer.

The American Roll Paper Company continues its successful career under Mr. Tivy, and the Pioneer Roll Cutter Paper Company, although still in "swaddling clothes,"

reports good achievements and brighter prospects.

The Libby & Williams Paper Company shows evidence of having its bird in the hand instead of in the bush. Messrs. Williams and Bull are the capable managers of this firm, Mr. Bull having entire charge of the sales department.

The St. Louis Paper Company made a decided and wise change in location early in 1892 when it moved into the building formerly occupied by the St. Louis Type Foundry, whose paper stock it purchased. Its building is large and commodious and I hear that if its business continues to increase it will soon need the two upper floors, now occupied by a tenant. This firm is managed by Messrs. Chappell and Pirie, young men who have shown their enterprise and progressiveness in many ways, the most noteworthy being the purchase of Snider & Holmes' business some years ago and latterly the already mentioned purchase of the type foundry's stock. These gentlemen are experienced, hard working members of the trade and fully deserve the success which has evidently attended their efforts. W. L. Chappell has charge of the company's fine paper department, and R. B. Brashear of the wrapping papers. Mr. Haltze, the oldest clerk, looks after city orders.

The Graham Paper Company has demonstrated the wisdom of admitting the young men who had contributed so long and earnestly to its prosperity. Its new secretary, George D. Allen, who was formerly agent for this company in St. Paul, has with his associates been successful in largely increasing the business of his house. The Graham Paper Company has just remodeled and enlarged its business office, which now covers a space of 50x150 feet, and is a model of convenience.

One of the most important local changes—in fact, "a tale of two cities"—is the withdrawal from the wrapping paper department of the Graham Paper Company of Frank Grubb, whose meritorious work has helped the management to bring this branch of the business up to its present efficiency and magnitude, and when J. B. Halladay accepted the management of the Columbia Paper Company it was only natural that Mr. Grubb should have been looked to as a desirable successor.

He has now, in connection with Mr. Cady, Mr. Halladay's former partner, bought the business of J. B. Halladay & Co. and will continue it in Chicago. Mr. Grubb's St. Louis friends wish him abundant success in his new venture.

The outlook for the coming year is locally all that could be reasonably desired, not only in the paper business but in all lines.

Building is going on at an unprecedented rate.

Several large hotels are projected, an item which will greatly interest and rejoice our visitors who have in the past been compelled to accept accommodations which did not accommodate, owing to the overcrowded condition of the hotels.

The new Union Depot, 625 by 750 feet, and the largest building of its class and purpose in the world, will be completed during the coming summer, and will release the traveling public from the cramped, inconvenient place now being used, which has for many years been wholly inadequate.

These improvements cannot fail to benefit all lines of trade, and the paper business is on the alert to meet and be benefited by it.

It is a matter of local interest and felicitation that the printing of the souvenirs for the world's fair has been awarded to C. B. Woodward & Co., of this city, on account of the superiority of their artistic work. D.

Boston Notes.

[FROM OUR REGULAR CORRESPONDENT.]

EASTERN OFFICE PAPER TRADE JOURNAL, 67 Federal Street, BOSTON, January 12, 1898.

For some days Boston has been weather bound, snow, ice and arctic winds giving the thermometer a freezing sensation.

For a few days trade seemed to freeze up, but evidence of renewed activity is observed as the winds grow milder.

Developments in paper trade circles are rather limited this week outside of the regular daily movement.

There is little change in the paper stock market. Arrivals of paper stock for the time seem large, but these imports are shipments afloat at the time that the late Government circular was issued.

Prices, of course, range higher and any odd lots of rags offered are quickly taken out of the market. After the receipt of paper stock now in transit imports will possibly stop, unless some modification of quarantine regulations is effected.

The outlook at present has no encouragement for paper stock importers.

Domestic packers are preparing for all that the changed conditions promise.

All kinds of wood fibre are being talked up on short supply and increasing demand.

Papers makers' chemicals are inclined to lower prices for the moment, with the exception of bleaching powders. Quotations on bleaching powders are 2 1/4 c. for spot lots, lots to arrive being shaded a little, but trade is quiet. Caustic soda is off a little, 2.80@2.85c. being present quotations and in very quiet demand. Soda ash is dull at 1.60@1.65c.

THE GLEN MFG. CO., 244 WASHINGTON STREET, BOSTON, **THE HAVERHILL PAPER CO.**
News Paper and Wood Pulp.

W. A. BINGHAM & CO., 186 & 188 FRANKLIN STREET, NEW YORK.
 PAPER, PAPER BAGS, FLOUR SACKS, &c.

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 SOLE AGENTS FOR THE UNITED STATES AND CANADA **Soda Ash and Alkali.**
 OF THE UNITED ALKALI CO., Lim. of Great Britain, **BLEACHING POWDER.**
 FOR THE SALE OF THEIR VARIOUS BRANDS OF

THE WARDLOW-THOMAS PAPER CO.,
 Manufacturers of **PURE ROPE PAPERS,** Middletown, Ohio.

PERKINS, GOODWIN & CO.,
 Nos. 66 and 68 DUANE STREET, NEW YORK,
 Have on hand and to arrive all grades of Bleached and Unbleached

SULPHITE AND SODA PULPS. SEND FOR SAMPLES AND PRICES.

Alkali has dropped to 1.25@1.30c. Soda crystals have also declined, prices ranging from 87½@90c. The chemical market as a whole is very dull.

The case of the New York Paper Bag Machine and Manufacturing Company v. The Hollingsworth & Whitney Company is up to-day in the Circuit Court of Appeals, before Judges Colt, Putnam and Webb. The hearing is on an appeal from the decision of Judge Nelson, of the Circuit Court, taken by the New York Company. The Hollingsworth & Whitney Company is represented by its former counsel, Charles E. Mitchell, ex-Commissioner of Patents, and Francis H. Betts, of New York, represent the New York Bag Company. The case will take until to-morrow for the presentation of arguments.

F. W. Leinbach, of Bethlehem, Pa.; Edward Howlett, of Philadelphia, and Mr. Lorenz, parties interested in the case, are in town watching its developments.

Other trade visitors during the past week were: C. R. Milliken, of Portland, Me.; Sam Rust, of Holyoke, Mass.; A. W. Eaton, of South Lee, Mass.; Joseph Philbrick, of North Dighton, Mass.; W. N. Smith, of North Windom, Conn.; Mr. Cauger, of Lancaster, N. H.; Charles W. Gray, James Logan and Charles Keith, of Worcester, Mass.; Mr. Barden, of Adams, Mass.; Charles L. Chapin, of Springfield, Mass.; Charles Dobilinski, of Philadelphia; E. P. Arnold, George Briggs, J. Fred Atterbury, and Edward Watson, New York.

Ex-Governor Cheney, of Manchester, N. H., the lately appointed Minister to Switzerland, left last week for his official post, accompanied by Mrs. Cheney.

Charles D. Brown and William H. Clafin are doing New York this week.

The January meeting of the Boston Paper Trade Association will be held at the Brunswick, on Wednesday evening, January 25, arrangements for which are now being made.

Stone & Forsyth are favoring their numerous patrons with very serviceable calendars for the new year. These calendars are designed to show a few samples of the firm's varied stock, the pads being made up of different kinds of wrapping paper—"Utility" straw, "Bucksin" express, "Signet" manilla, "Diamond Mills," "English" glazed, "Red Manilla," &c. The pad is mounted upon a sample of tag stock. At the top of the mount are views of the firm's store, one view showing the spacious warehouse and the other showing Stone & Forsyth's salesroom and office.

The prettiest of the many handsome new calendars seen hangs over the mantel in the Boston office of the Glen Manufacturing Company. This calendar is of large size and has a picture of a very pretty Parisienne girl—à la militaire. The face is so express-

ive of innocence and loveliness that one is lost in admiration of the little beauty. The calendar was sent to Mr. Knowles from Paris by Mr. Porter, president of the Haverhill Paper Company, who, with his family, is spending the winter in France.

DELESDEBNIER.

Holyoke Notes.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., January 12, 1893.

The new year is well under way and the manufacturers have nearly finished their balance sheets. Very little grumbling is heard over the result; therefore it is safe to infer that the business of 1892 was satisfactory. The profit in some cases was not as large as could have been desired, but, on the whole there was very little cause for complaint.

The outlook for future business is not unfavorable by any means. The mills are very well supplied with orders as far as can be learned. All kinds of goods made in our mills are moving well and prices are as favorable as could be expected. Many mills have been improved during the past twelve months and are better than ever equipped for good work. The new mills will be ready for business by early spring and everything seems to point to a good spring business.

The Norman Paper Company begins the new year on a much better foundation than it has had since its business began. The new superintendent will be James Stalker, recently of the Nonotuck Paper Company. Mr. Stalker comes of a family of born paper makers, three brothers already holding important positions in the mills of this city. David Stalker, also of the Nonotuck Paper Company, will have charge of the machine room. James W. Stebbins, a grandson of ex-President Stebbins of the Holyoke Water Power Company, will succeed E. N. Towne as bookkeeper and paymaster. During the recent shut down of the mill a new steam plant, consisting of a 250 horse power Corliss and a 75 horse power Fitchburg engine, was put in. The mill is producing a good quality of fine writing paper and will build up a satisfactory trade.

The directors of the Connecticut River Railroad met at Springfield on Tuesday forenoon to act on the proposed lease to the Boston and Maine Company, but very little headway was made. The proposition made by the Boston and Maine people is a guaranty of 10 per cent. on the stock and a cash bonus of \$50 a share added. This is satisfactory to the stockholders, but there are certain conditions imposed which do not meet general favor. Another meeting will be held soon to settle the question.

The national banks have been holding their annual meetings this week, and as

many manufacturers are interested in these institutions several familiar names appear among the officers. E. P. Bagg, Timothy Merrick, J. S. McElwain and E. C. Taft are directors of the City Bank; C. H. Heywood is a director of the Holyoke Bank, and James H., Moses, J. C., D. H., J. S., E. T. and F. H. Newton, James Ramage, F. H. Chamberlin, J. T. Abbe, G. A. Clark and William Jolly are directors of the Home Bank.

The Board of Trade, with a membership of 250, is about ready to go the way of similar organizations. Business men here are too busy to give their time to the board, and as a result the organization has not been a pronounced success. A meeting will be held to-morrow night at the rooms to see whether it will be continued or changed to a business men's club. Many favor the latter scheme.

The Coburn Trolley Track Company held its annual meeting this week and elected these officers: President, A. A. Coburn; treasurer, G. W. Collins; clerk, G. D. Miller; directors, A. A. Coburn, Lemuel Coburn, G. W. Thayer, Mark Wood, L. D. Buxton and R. G. Kilduff. A dividend of 3 per cent. was declared. The company now employs forty men and the year's business amounted to \$81,000, against \$40,000 in 1891.

Some of the daily papers have already established the new managers of the Valley Mill in their positions, but the present owners will not abdicate until two weeks hence, when the annual meeting is to be held. It is pretty well understood, however, that A. H. Morton, of Fairfield, will be superintendent; John Fenton, of the same place, will have charge of the finishing department, and William Dowd will be foreman of the calendars.

A. G. Holman, for a number of years with the Deane Steam Pump Company, will succeed Homer J. Stratton, who was recently made agent of the Norman Paper Company, as traveling salesman for the Hampshire Paper Company. He will travel mainly in the West. This is Mr. Holman's first connection with the paper trade and those who have dealings with him will find him a very pleasant gentleman to meet.

W. R. Peddington, formerly of this city but more recently superintendent of the Fort Orange Paper Company's mill at Castleton, N. Y., has been secured by the Fairfield Paper Company to fill a similar position.

The Holyoke Hydrant and Iron Works have just shipped a plater to A. W. Eaton, to be placed in the Tanner & Faxon Paper Mill at East Lee.

Theophilus Le Pearle, employed in the Chemical Paper Company's mill, was badly scalded one day this week by steam which escaped from a broken pipe.

Edward N. Towne, who has been paymaster and bookkeeper for the Norman Paper Company, has returned to his former position with the National Blank Book Company.

William F. Whiting has gone to New York on a business trip.

Eagle Lodge, Brotherhood of Paper Makers, will have its annual ball at the City Hall on February 3.

For several days past the mercury has ranged from 10° above to 10° below zero, and the ice on the river is about 13 inches thick. There is no danger of a failure of the ice crop this year.

Philadelphia Notes.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Pa., January 12, 1893.

If "a green Christmas makes a fat churchyard," the graveyards this year will be leaner than Pharaoh's kine. This is pre-eminently a white winter, and the white is laid on, coat after coat, with an unsparing hand. In other words, we are having what the unveracious "oldest inhabitant" calls "an old fashioned winter"; and if this was the fashion of old, most of us are thankful that the fashion has changed.

What with our self-accommodating Traction Company, which emphatically seconds Mr. Vanderbilt's motion as to the bestowal of the public, our narrow streets blocked with snow, and the thermometer down to zero, we are inclined to feel pessimistic just now, as regards trade and everything else; but we keep up our health, since the stoppages of the cable lines give us the pleasure of walking to or from our places of business about three days out of seven. I have heard delicate and refined females in the street cars calling down the vengeance of heaven on the company by expressing the hope that its "nasty old stables would be burnt up or something,"—to such a pitch are we put upon. The same company is going to show you how not to carry passengers in New York, and you will soon know all about it.

There is a dearth of news in the trade at present, for even Camden—dear old Spanish Camden!—is divorced from us for the moment by ice and snow, to the detriment of the matrimonial industry of the place, but such as there is I give you below:

There is to be a meeting of the creditors of the American Wood Paper Company in the Board of Trade Rooms to-morrow, of which I shall telegraph you the result.

Edward Bedloe, in a letter from Amoy, China, to the *Ledger*, has the following to say of the paper industry: "A great industry in Amoy is the manufacture of paper. In fact it is the largest business, and gives employment to many thousands. A wonderful variety of paper is produced, ranging

from the thinnest tissue to heavy and extra heavy book paper. Nearly all is yellowish white, that tint being regarded by the Chinese as the best for eyes, although the manufacturers will produce any color desired at practically no increase in price. Despite the tariff and transoceanic freight, many varieties of paper could be exported direct from Amoy to the Pacific Coast, if not to the Atlantic, and then sold at a very fair profit. Among these may be mentioned cheap wrapping paper, fine and fancy wrapping paper, blotters, envelope paper, rough binders and drawing paper. The Chinese do not use wood pulp or wood flour in the manufacture. As a result, their paper will last a century without becoming brittle. American paper is, I regret to confess, so full of these substances as to seldom last longer than five years. In fact many of our great newspapers are printed on a fabric which breaks like dry leaves in less than a year."

Mr. Bedloe advocates the application of the principles of reciprocity to our Chinese trade.

The boiler of the McDowell Paper Mill, on the canal bank opposite Levering street, Manayunk, exploded with a terrific report shortly after 5 o'clock yesterday morning, killing Amos Borden, the engineer, and burying him beneath the debris of brick and mortar.

The boiler was one of a pair of the Bates long tubular pattern, and was located in a one story 20x45 feet brick and stone building, and "built in" with brick masonry. The cause of the explosion is not definitely known, but is attributed by some to a defective plate, while others think it was from the freezing of water in the injector pipe, which was located on the outside of the building.

The boiler was made in 1881 and was inspected last on March 28, 1892. It was about 20 feet long and was surmounted with a steam drum of the same length. A large hole was torn out of one side of the boiler, the steam drum and boiler were thrown several feet, the brickwork was scattered about the building and the roof blown from its position by force of the explosion. The fire from beneath the boiler was scattered and the hot coals set fire to a quantity of paper and timber. This was quickly extinguished by the Manayunk firemen.

Borden, who was about thirty-five years old, leaves a widow and one child, a daughter, eight years old. He had been in the employ of the Messrs. McDowell for a number of years and was always very careful and particular with his work.

The mill proper was badly shaken but only slightly damaged by the explosion. The damage by the fire was insignificant.

The Philadelphia inspectors examined the exploded boiler and found it in good condition, attributing the explosion to the injec-

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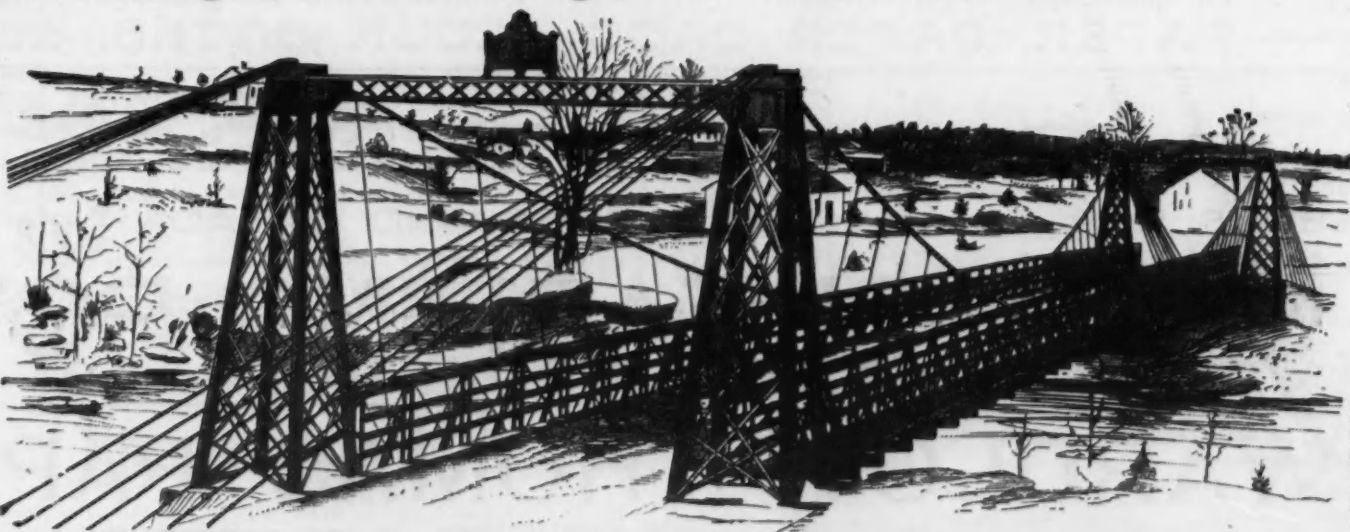
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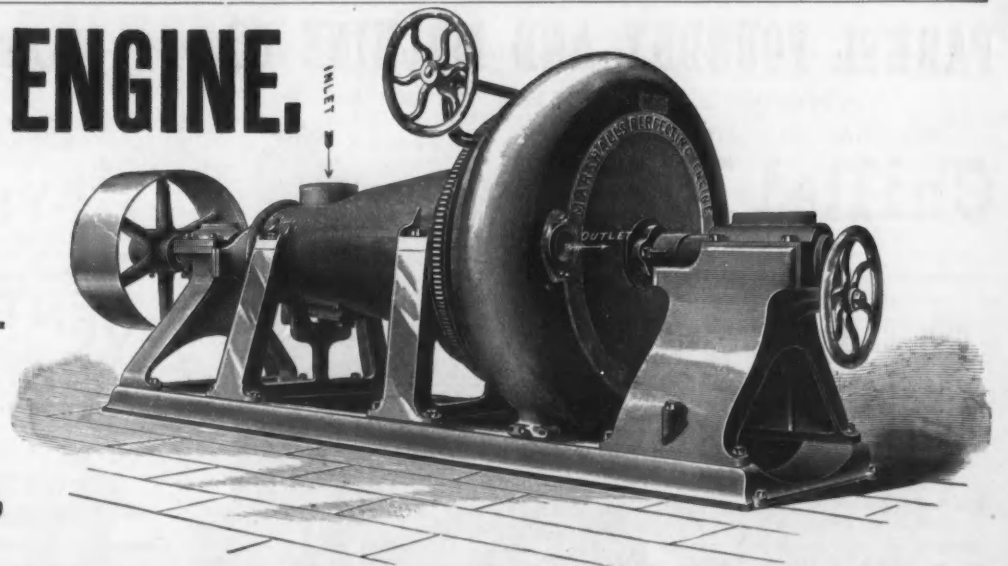
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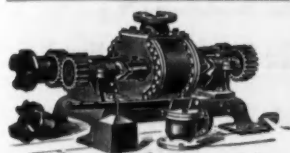
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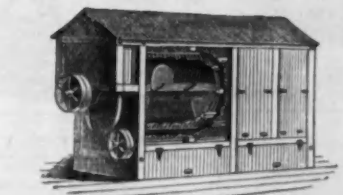
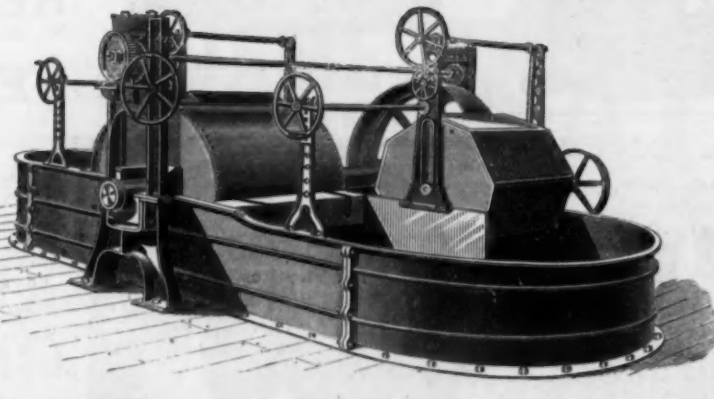
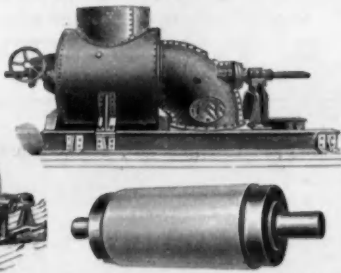
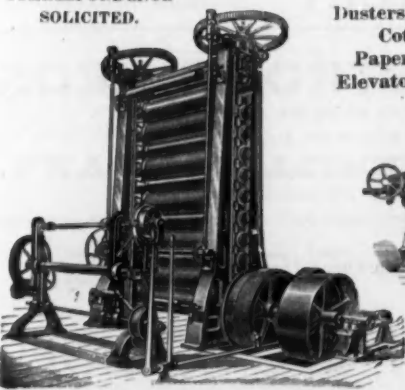


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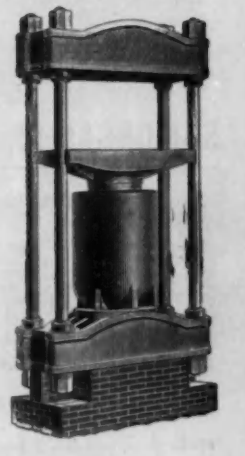
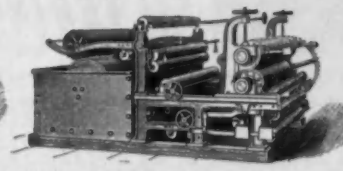
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FOURDRINIER PAPER MACHINES

AND PULP AND PAPER MACHINERY.

G. W. KNOWLTON, Pres. Office of THE ONTARIO PAPER CO., JOHN A. DECKER, Supt.
WATERTOWN, N. Y., August 12, 1890.

THE BAGLEY & SEWALL CO.:

GENTLEMEN—The following is the record of the 86 inch wire Fourdrinier Machine purchased of you for the past week:

August 4, . . . 24,335 lbs.	August 6, . . . 24,020 lbs.	August 8, . . . 23,337 lbs.
August 5, . . . 23,330 lbs.	August 7, . . . 24,010 lbs.	August 9, . . . 24,865 lbs.
Average per day, . . . 23,992 lbs.		

These figures are the net shipping weight of the paper, averaging 31 lbs. to the ream, 24 x 36 in.
Yours respectfully, E. B. STERLING, Sec'y.

FRONTENAC PAPER CO.,

DEXTER, N. Y., August 20, 1890.

BAGLEY & SEWALL CO., WATERTOWN, N. Y.:

GENTLEMEN—At 8:30 to-night our machine tender shut down to put on a NEW FIRST FELT. The paper was off the reel less than ELEVEN MINUTES. It cannot be done on any other make of machine than the BAGLEY & SEWALL.

Hastily,

F. W. SPICER, Sec'y and Treas.

SPECIAL NOTICE TO THE TRADE.

—I have recently acquired the entire business of THE NEW ENGLAND PULP MACHINE CO., including also the business of the late SCOTT & ROBERTS CO., and shall continue to manufacture the celebrated

"NEW ENGLAND" WOOD PULP GRINDER,

which has a record of making 9,520 pounds fine pulp, dry weight, in twenty-four hours, with 250 horse power; 28,000 pounds good news pulp, dry weight, in twenty-four hours, with three grinders, using 750 horse power; 84,000 pounds news pulp in twenty-four hours, with eleven grinders, using 2,150 horse power. Can be seen in operation daily.

Has displaced over 100 other pulp grinders, including many of the well-known popular kinds, among which are the Northwestern, the Voelker, the Mills, the Allen & Jones, the Eilers, the Trevor, the Taft, the Watertown, the Frambach, the Dilts, the Millard, the Curtis and others, while NO "NEW ENGLAND" GRINDER has ever been displaced by any other kind. Ten different styles of grinders, each adapted to its own special work.

WET MACHINES, from New Patterns. NOISELESS SCREENS, New and Effective.

RAILWAY CUT-OFF SAWS, Single or in Gangs.

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SHAFTING PULLEYS, MORTISE GEARS AND GENERAL MILL WORK.

All machines sold with ample guaranty as to efficiency and NO PAY asked until they perform all that is claimed. We have competent engineers and make no charge for estimates. Plans and drawings furnished. Machines on hand for prompt delivery.

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- Indiana Pulp and Paper Co., Marion, Ind.
- Kane's Falls Pulp Co., Fort Ann, N. Y.
- Umbagog Pulp Co., Livermore Falls, Me.
- Marion Pulp Co., Marion, Ind.
- Hon. Wm. A. Russell, Boston, Mass. (2 orders).
- Nova Scotia Pulp and Paper Co., Mill Village (2 orders).
- G. H. P. Gould, Lyons Falls, N. Y.
- F. C. Cheney Co., East Tilton, N. H.
- National Metal Edge Box Co., Readsboro, Vt.
- Battenkill Paper Co., Middle Falls, N. Y.
- Lake Sunapee Wood Pulp Co., Sunapee, N. H.
- Bennington Valley Pulp Co., North Bennington, Vt.
- Westmoreland Paper Co., West Newton, Pa. (3 orders).
- Winnipisaukee Paper Co., Franklin, N. H.
- Alvin Record, Livermore Falls, Me.
- Augusta Pulp Co., Augusta, Me.
- F. C. Cheney, Manchester, N. H.
- J. C. McIntire, Fort Ann, N. Y.
- Kennebec Fibre Co., Benton, Me.
- Carrabassett Pulp Co., Skowhegan, Me. (2 orders).
- Richards Paper Co., Skowhegan, Me.
- Salmon River Paper Co., Malone, N. Y.
- Fort Leyden Pulp and Paper Co., Fort Leyden, N. Y.
- Rocheater Paper Co., Rocheater, N. Y.
- Saranac River Pulp and Paper Co., Cadyville, N. Y. (2 orders).
- Piscataquis Falls Pulp and Paper Co., Montaus, Me.
- Glens Falls Paper Mill Co., Glens Falls, N. Y. (2 orders).
- Marquette and Menominee Paper Co., Menominee, Mich.
- Smith Paper Co., Lee, Mass. (3 orders).
- Passumpsic Pulp Co., Passumpsic, Vt.
- Goddard Wood Paper Co., Wendell Depot, Mass.
- Atlas Paper Co., Appleton, Wis.
- Kimberly & Clark Co., Kimberly, Wis.
- Farley Paper Co., Erving, Mass.
- Fonda Lake Paper Co., Fort Leyden, N. Y.
- Mason-Perkins Paper Co., Bristol, N. H.
- Buckingham Pulp Co., Buckingham, Canada.
- Godfrey & Clark, Pittsburg, Pa.
- Eau Claire Pulp and Paper Co., Eau Claire, Wis. (3 orders).
- Hartford Pulp Co., Hartford City, Ind.
- Glen Manufacturing Co., Berlin Falls, N. H. (8 orders).
- James Davy Thorold, Canada.
- Tombahawk Pulp Mills, Tombahawk, Wis (2 orders).
- John E. Waller, Skaneateles, N. Y.
- Kokomo Wood Pulp Co., Kokomo, Ind. (2 orders).
- Herkimer Paper Co., Lyons Falls, N. Y.
- The Geo. H. Friend Paper Co., West Carrollton, O.
- Sebago Wood Board, South Windham, Me.
- The Geo. H. Friend Paper Co., Miamisburg, O.
- Anderson Paper Co., Anderson, Ind. (2 orders).
- Herkimer Paper Co., Lyons Falls, N. Y. (2 orders).
- Musquehanna Water Power and Paper Co., Conowingo, Md.
- Fall Mountain Paper Co., Bellows Falls, Vt. (4 orders).
- Adirondack Pulp and Paper Co., Malone, N. Y. (2 orders).
- DuPont Paper Mill Co., Louisville, Ky. (2 orders).
- Crescent Paper Manufacturing Co., Hartford City, Ind. (2 orders).
- Marselles Wood Pulp Co., Marselles, Ill.
- The E. B. Eddy Co., Hull, Canada.
- Wisconsin River Pulp and Paper Co., Stevens Point, Wis.

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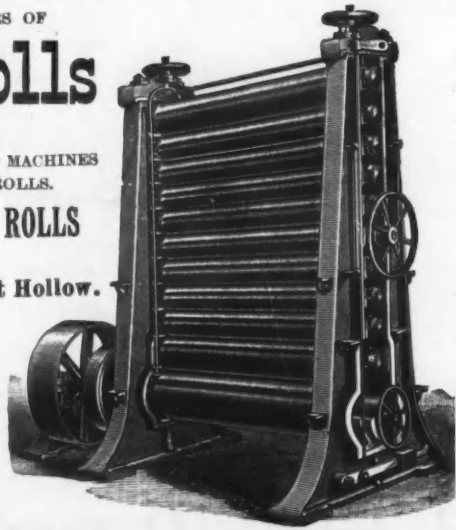
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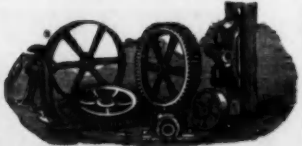
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Is in use driving Paper and Pulp Mills under 4 to 100 feet head. One company is using a Single Horizontal "Success" Wheel developing almost 2,000 horse power. The Wheel is very strong, durably constructed and finely finished. Gives a higher percentage from the water used, when working from half to full gate, than any other turbine.

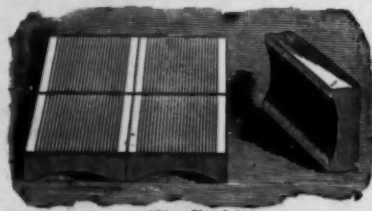
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State requirements and send for Catalogue.



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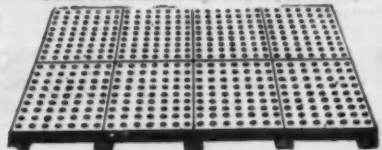
SAMUEL SNELL,

Holyoke, Mass.,

MANUFACTURER OF

FILTERING STONES,

Under the KLABY and SNELL Patents.



(See No. 2.) SEND FOR CIRCULAR.

REFER TO: HOLYOKE PAPER CO., PARSONS PAPER CO., BYRON WESTON, BREWSTER & MOORE, KIMBLEY & CLARK CO., ALEX. HUNTER & CO., FATTEN PAPER CO., MORRISON, BARE & CARR, And many others.

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MANUFACTURERS OF

Fourdrinier Wires,

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Sellers' Patent Truss Dandy Rolls.

WATERMARKING A SPECIALTY.

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Licensed under Friction Clutch Patents of 1870, 1880, 1888, 1899, and other patents pending. All kinds of Machinery for the Transmission of Power. SEND FOR CATALOGUE.

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THE F. GRAY CO.,

PIQUA and AKRON, OHIO,

Principal Office, PIQUA,

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FELTS.

Press Felts and Jackets for all kinds of Paper.

TRY OUR HARPER FELTS. THEY ARE THE BEST MADE FOR ALL GRADES OF PAPER.

THE UNITED STATES CHEMICAL CO.,

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ALUM

U. S. Refined Alum, Neutral, U. S. Refined Alum, Basic, U. S. Refined Alum, Acid, and ALUM CAKE. PURE ALUMINA. DOUBLE REFINED ALUM.

AGENTS: H. C. HULBERT & CO., New York.

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71 & 73 DUANE STREET, NEW YORK.

Works,

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PAPER MAKERS' COLORS,

FELTS AND JACKETS,

55 Maiden Lane, New York.

A. KLIPSTEIN,

BRANCH: 120 Arch St., Philadelphia. OFFICES: 134 Milk St., Boston.

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SODA ASH 58% OR REFINED ALKALI,

MADE BY THE AMMONIA PROCESS. Correspondence solicited for Contracts over 1893.

VENETIAN AND STRONG REDS AND COPPERAS.

MANUFACTURED EXPRESSLY FOR PAPER MAKERS' USES BY

THE S. P. WETHERILL COMPANY, 925 CHESTNUT STREET, PHILADELPHIA.

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Chemically Pure Colors

FOR PAPER STAINERS.

62-86 NORTH ELEVENTH STREET, BROOKLYN, N. Y.

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WM. PICKHARDT & KUTTROFF,

98 Liberty Street, New York,

BRANCHES AT BOSTON, PHILADELPHIA, PROVIDENCE AND CHICAGO,

IMPORTERS OF

Aniline Colors, Carmine, Pulp Colors, Ultramarines.

AURAMINE, PATD.

MASON, CHAPIN & CO.,

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Sole Receivers for United States and Canada of Following Brands

BLEACHING POWDERS:

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141 Milk Street, BOSTON.

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FERRIC CHEMICAL AND COLOR CO.,

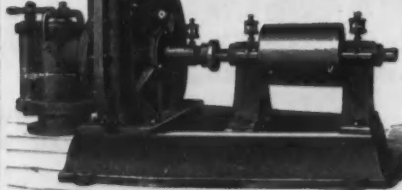
MANUFACTURERS OF

Pillar Copperas, Venetian Red and Oxides of Iron,

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THE OLD RELIABLE

Heald & Cisco Centrifugal Pump.



MORE OF THEM USED BY PAPER MAKERS THAN OF ALL OTHER KINDS COMBINED.

More than SIXTEEN Thousand in Use.

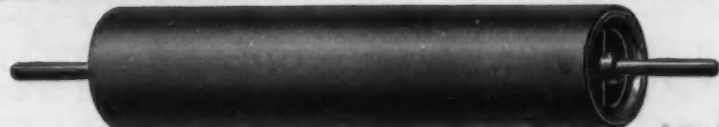
CAUTION! Other pump makers are advertising their wares as the "Baldwinsville" Centrifugal Pump. This claim is fraudulent and intended to deceive. We are the only manufacturers of Centrifugal Pumps in Baldwinsville, and we warn all purchasers against parties falsely claiming otherwise.

MORRIS MACHINE WORKS (formerly Heald & Morris), Baldwinsville, N. Y., U. S. A.

BOSTON BELTING COMPANY,

BOSTON. Established 1828. NEW YORK.

ORIGINAL MANUFACTURERS OF RUBBER GOODS.



RUBBER COVERED COUCH ROLLERS FOR FOURDRINIER, CYLINDER AND WET MACHINES (Warranty given with each Roller).

Also make Rubber Covered Press and Sizing Rollers, Rubber Belting, Hose, Packing, Dechel Straps and all kinds of Rubber Goods for Mechanical Purposes.

256 to 260 Devonshire St., BOSTON. 100 Chambers St., NEW YORK.

And Agencies in the principal cities of the United States, Canada and Europe.



CHAS. S. BARTON, President and Treasurer.

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RICE, BARTON & FALES MACHINE AND IRON CO.

(At Old Stand of Rice, Barton & Co.)

WORCESTER, MASS.,

MANUFACTURERS OF

PAPER MACHINERY,

HILL'S PATENT SQUARE AND DIAGONAL CUTTERS,

Iron and Brass Castings, Chilled Iron and Paper Calendar Rolls, Rag Engines, Rag Cutters, Steam Pressure Regulators, &c.

HYDRAULIC PRESSES, FROM 5 TO 14 INCH PISTON.

tion of cold water into a boiler with a red hot crown sheet. The second boiler was uninjured.

Before Vice-Chancellor Pitney, in Camden, on the 4th inst., testimony was heard on the application of the receiver of the W. H. Fay Manila Paper Company to sell the plant. Receiver Chalmers testified that he found the open accounts to be \$73,000, and had only collected \$4,927 of the amount. The balance in bank on December 31 was \$5,678. He thought that only about 10 per cent. of the amount could be collected. The apparent liabilities were stated to be \$118,000, with less than 25 per cent. of assets. At the conclusion of the taking of the testimony Vice-Chancellor Pitney allowed an order to sell the plant. The sale will take place within twenty days in the presence of and under the direction of Howard M. Cooper, a master of the Court of Chancery.

The Whiting Paper Company issues a very neat leather note purse as an advertising souvenir.

The sample book of S. M. Kennedy & Co. is out and is very tasteful and beautiful.

State Representative J. H. De Velin, of A. G. Elliot & Co., spends most of his time at present in Harrisburg legislating for the benefit of the paper trade and others.

McIntyre, Weldin & Co., Limited, is the style of a new printing firm which will occupy the present quarters of the Glen Mills Paper Company at 516 and 518 Minor street, the latter company removing its office to 322 Minor street, over Stoever & Co.'s store.

J. Walsh, formerly of Newburgh, N. Y., and F. E. Miller, from Bulkley, Ward & Co., have organized the Syndicate Paper Company and will open a store on Minor street, above Fifth street.

P. Zeigler, formerly with Bulkley, Ward & Co., is now with Megargee Brothers, of Scranton, Pa.

The Segal Manufacturing Company, of Camden, N. J., has shut down its parchmentizing plant permanently and will make no parchment paper at that place, but will most probably remove to some location where it will have to buy the water it uses.

Mr. Rudolph, of Manayunk, it is rumored, is having trouble with the Pennsylvania Railroad Company in regard to his settling pond and water supply, and a lawsuit may result.

STYLOGRAPHIC PEN.

Paper for the Public Printing.

Proposals for supplying the Public Printing Office with paper from March 1, 1893, to February 28, 1894, will be opened by the Joint Committee of Congress on Public Printing on January 27, at 10 o'clock A. M.

The requisition calls for the following described quantities:

Book printing paper, Class A.....reams.	60,500
Book printing paper, Class B.....	27,700
Writing paper.....	31,100
Cover paper.....	1,700
Plate paper.....pounds.	75,000
Map paper.....	100,000
Wood cut paper.....	100,000
Manilla paper.....reams.	1,550
Glazed bond paper.....pounds.	80,000
Artificial parchment.....	17,000
Card and Bristol board.....sheets.	1,825,000
First-class ledger paper.....reams.	10,300
Second-class ledger paper.....	8,500
Tissue paper.....	2,700
Blotting paper.....	45
Tar paper.....	300
Plaid, marble and comb paper.....	305
Paper for proofs and overlaying.....	80

Class A is divided into thirteen lots and Class B into thirteen lots. Writing paper is divided into twenty-three lots and the other grades into the usual subdivisions of quantities. Paper containing ground wood will not be accepted, and deliveries must be made strictly in accordance with sample. Specifications can be obtained by addressing the Public Printer.

The manufacturers of the Hardy & Pinder screen plates, Fitchburg, Mass., have got out a calendar for 1893, bright in coloring and with a pretty picture of little girls.

The Jeffrey Manufacturing Company, Columbus, Ohio, has issued its 1893 illustrated catalogue. This contains 256 pages, having illustrations and lists of all of the material which the company manufactures, including chain belting and engineering specialties. It is a valuable book for users of machinery and a copy can be had on application.

WILL. MUNDS,
Dresden, Germany.
—CENTRAL OFFICE FOR THE SALE OF—
Sulphite, Sulphate and Soda
PULPS.

Bleached and Unbleached; supplied in all qualities and by all processes.

Specialty: The Strongest Fibred Qualities (MITSCHERLICH PROCESS.)

STRAW PULP—FIRST-CLASS BLEACHED.

Suggestions as to Books and Accounts.

The cashier of the Lockwood Press, having had the full confidence of the house by which he was employed for about twenty years, unfortunately became a defaulter. William Waddell, expert accountant, 71 Wall street, New York, was called in to examine the books of the firm, and having done so contributes the following suggestions, which should be pasted on the inside of every cash book.

CASH.

When engaging a cashier it is well to require him to give a bond from a surety company, as a guard against irregularities. The cost is small—generally about 1 per cent.

The cashier alone is responsible for the cash, and no other persons should be permitted to handle it. The cash on hand should be balanced every night, and noted in the balance book—how much in checks, specie or bills, and who (if any) owes any change to it. No one should be allowed to borrow from the cashier, except with the sanction of the firm.

The cashier should procure vouchers for all payments; for instance, if stamps are required, the person who gets the stamps should give a ticket for them to the cashier. All payments should be made as far as possible by check. Little cash should be kept in the office. Every particular relating to expenditure should be insisted upon, to whom paid, and for what purpose, and be inserted in the cash book.

When a check is not used write "cancelled" on the stub and on the body of the check and take the next number, it being a bad practice to cut checks from the end of the book to supply deficiencies. All checks should be made payable to the parties to whom they are due.

The bank book should be left at the bank on the last business day of each month, and

when returned should agree with the balance as shown by the check book, and a reconciliation statement should be made on the stub of the check book.

Any vacant lines left on the page of the cash book upon carrying over should be ruled down at the time of carrying over, so that no additional entries can be made after the columns have been added up. Errors should be ruled through in red ink and the correct figures should be inserted. Knives or alterations of figures by erasure should be prohibited.

STATEMENTS.

It is advisable that all statements should go out on the first of every month.

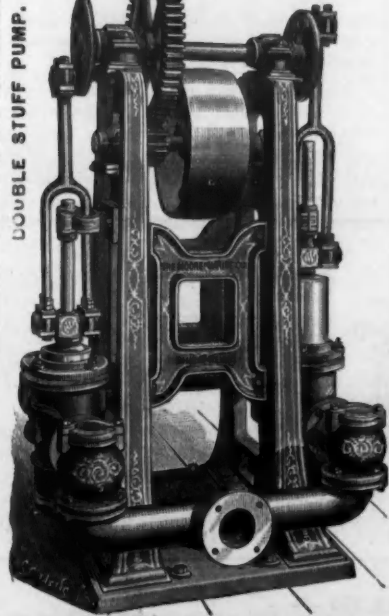
There are some customers who allow nothing to trouble them—not even their debts—and in consequence of this independence, a list of such customers should be given to the firm on the 10th of every month, with a statement of all past due accounts, and another on the 20th of every month, so that instructions may be given as to what steps shall be taken to collect these amounts.

There are some customers for whom it is best, when the monthly statement is sent, to fill out and inclose with the same, notes for them to sign and return.

Statements should be begun as early as the 15th of the month for the coming first. The ledger folios should be written on the top of such statements, and the latter should be kept in the regular order of these folios; then, when the bookkeepers have no other work to perform, they can turn to these pages and add the new items to the statements. The credits for and footings

THE MOORE & WHITE CO.,

15th Street and Lehigh Avenue,
PHILADELPHIA,
Germantown Junction Station
Pennsylvania R.R.



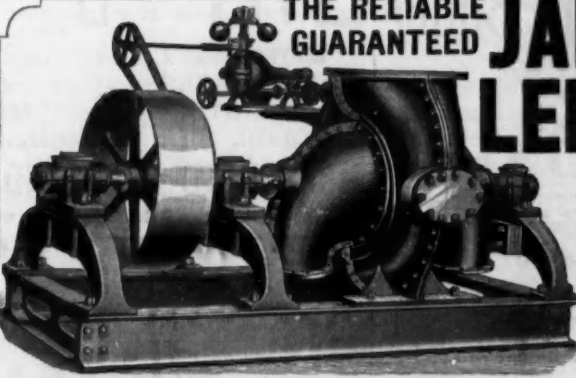
DOUBLE STUFF PUMP.



THREE PLUNGER SUCTION PUMP.

Paper Machinery
FOURDRINIER
AND
Cylinder Machines,
FRICTION
CLUTCH
PULLEYS,
&c., &c.

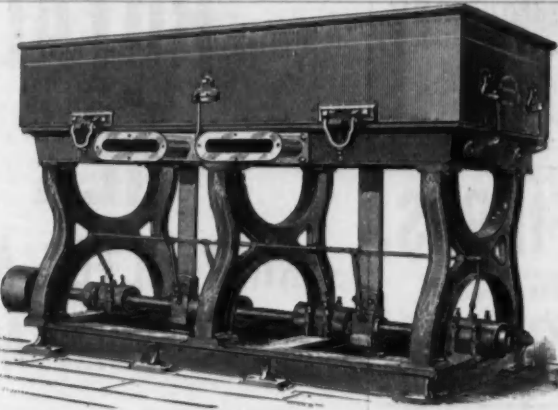
THE RELIABLE GUARANTEED JAMES LEFFEL WATER WHEEL



SIX inches to NINETY-SIX inches diameter, under heads ranging from 2 to 350 feet, in many of the finest paper mills of this country, several companies using TWENTY to THIRTY-TWO Leffel Wheels each. Their New Wheels give HIGHER SPEEDS under low heads, and LOWER SPEEDS under high heads than any Water Wheel now made.

The Company are now in better condition than ever before to supply these justly celebrated Wheels with dispatch and promptness. Send for their fine catalogue, nicely illustrated, and write them your wants fully. Address

THE JAMES LEFFEL & CO.,
SPRINGFIELD, OHIO, or 110 Liberty St., New York City.



HAVE YOU THE BEST SCREEN?

These People Have.

SPECIALTIES.

- Hudson River Pulp and Paper Co., Palmer's Falls, N. Y. 80 Screens.
- Glens Falls Paper Mill Co., Glens Falls, N. Y. 22 "
- Glens Falls Paper Mill Co., Fort Edward, N. Y. 30 "
- Herkimer Paper Co., Herkimer, N. Y. 1 "
- Herkimer Paper Co., Lyons Falls, N. Y. 1 "
- John Forman, Montreal, Canada. 1 "
- Hudson River Power and Paper Co., Mechanicsville, N. Y. 1 "
- Allen Brothers Co., Sandy Hill, N. Y. 4 "
- Sandy Hill Power and Pulp Co., 4 "
- Wilkinson Brothers & Co., Birmingham, Conn. 2 "
- Lake George Pulp Co., Ticonderoga, N. Y. 2 "
- Combined Locks Paper Co., Combined Locks, Wis. 2 "
- Chemical Paper Co., Holyoke, Mass. 2 "
- Riverside Paper Co., Holyoke, Mass. 1 "
- And many others.

- Noiseless Screens,
- Friction Pulleys,
- Pulp Grinders,
- Wet Machines,
- Double and Single Stuff Pumps.
- SPECIAL PAPER MACHINERY.

THEY BOUGHT THEM OF THE
FRICTION PULLEY AND MACHINE WORKS, SANDY HILL, N.Y.

Munro, Spiro

IRON FOUNDERS AND MACHINISTS.

& Wendler,

.... MANUFACTURERS OF

WENDLER & SPIRO'S SPECIALTIES

For Pulp and Paper Mills.

WORKS: CARTHAGE, N. Y.

MAIN OFFICE: WATERTOWN, N. Y.

of the statements, with discounts, should of course be deferred until the end of the month, at which time the statements are completed and ready to be sent out to customers.

BOOKS AND BALANCES.

The monthly balances of the ledger should be written in the trial balance book, as near the beginning of every month as possible, and at once, when correct, the trial balance book should be given over to an expert for his inspection. All of the books should be kept constantly written up and the cashier should check all and every book kept by himself and others each day, so as to vouch for the previous day's work.

A register of all books in use should be kept on the first folio of the ledger.

NOTES AND INSURANCE POLICIES.

All notes should be paid into the bank for collection a few days before they become due.

Fire insurance policies should not be kept in the safe on the premises, but lodged with a safe deposit company, or with a member of the firm at his private residence. Great care must be taken that everything is kept fully insured, and that all payments are made on the policies as and when due.

Typhothetæ of New York.

The regular meeting of the Typhothetæ of New York was held at its rooms, 19 Park place, on Tuesday, 10th inst.

The subject of delay in the transmission of second-class mail matter through the New York Post Office was brought up and the following preambles and resolutions were adopted unanimously.

Whereas, The failure of the New York Post Office to handle second class and third class matter promptly has been self evident for a long time, to the great annoyance of New York publishers and printers, and their customers all over the country, and

Whereas, The Postmaster General and the New York Postmaster both admit the grievance, and assert that permanent relief and proper postal service in this great city can only be had by action of Congress; therefore, be it

Resolved, By the Typhothetæ of New York, in regular meeting assembled, that, as our interests are closely identified with those of publishers, and that as our own mail matter is also unnecessarily delayed, we call upon Congress to provide the means for adequate postal facilities in New York city, and we impress upon our representatives in Congress the importance of prompt action; and

Resolved, That a copy of the foregoing, duly attested by the president and secretary of this body, be forwarded to each representative in Congress from New York city and Brooklyn, and also to the Speaker of the House of Representatives and that like action be taken when the new Congress assembles on March 4 next.

The society has completed its arrangements for celebrating the birthday of Benjamin Franklin by a banquet at the Hotel Brunswick on Tuesday evening, January 17.

Mortgages, Etc.

[In the appended list R. signifies a renewal of a pre-existing mortgage; B. S., bill of sale; T. D., trust deed, and Real, a mortgage on real estate.]

EASTERN STATES.		Amount
Mortgages.		
Geo. S. Davis, Worcester, Mass.	.....	\$300
Louis A. Basinet, Providence, R. I.	.....	250
Anne L. Dodge, Biddeford, Me.	.....	300

MIDDLE STATES.		Amount
M. Sullivan, New York, N. Y.	.....	600

WESTERN STATES.		Amount
E. F. Howe (Facts), Redlands, Cal.	.....	5,000
S. J. Peffey, Moscow, Idaho.	.....	300
J. J. McInerney, Alton, Ill. (Real)	.....	2,500
J. F. Barrett, Sterling, Ill.	.....	1,000
W. B. Wildman, Marshalltown, Ia. (B. S.)	.....	—
A. J. Salscheider, Tacoma, Wash.	.....	3,850
C. A. Bancroft, West Liberty, Ia.	.....	400
F. W. Lyon (Lyon & Auger), Little Falls, Minn.	.....	113
J. W. Ellingham (Independent Era), North Platte, Neb.	.....	350
P. C. Levar (Levar Brothers), Salem, Ore. (Real)	.....	500

SOUTHERN STATES.		Amount
H. H. McNeil (H. H. McNeil Company), Phoenix, Ariz. (Deed)	.....	3,000
Kerr Brothers, Kansas City, Mo. (B. S.)	.....	3,000
A. J. Childers, St. Louis, Mo.	.....	716

LIENS DISCHARGED.		Amount
H. H. McNeil (H. H. McNeil Company), Phoenix, Ariz. (Real)	.....	3,000
W. H. Gould et al (Gould, Hutton & Co.), San Diego, Cal.	.....	500
J. R. Ewing (Ewing & Raymond), Portland, Ore. (Real)	.....	400
C. H. Hopkins, Muskegon, Mich.	.....	481

The Ticonderoga Pulp and Paper Company has issued a daily pad calendar, designed for use with a patent stand. The different sheets are samples of the company's products.

The F. G. Keller Fund.

Subscriptions to the fund for the relief of F. G. Keller, the inventor of wood pulp, are earnestly invited. Following is a list of contributions so far reported:

Through A. Pagenstecher:		Amount
Hudson River Pulp and Paper Company, by A. Pagenstecher, president	.....	\$300.00
Wm. A. Russell, Boston, Mass.	.....	300.00
The Glen Manufacturing Company, Berlin Falls, N. Y.	.....	100.00
Montague Paper Company, Turner's Falls, Mass.	.....	100.00
Ontario Paper Company, Watertown, N. Y.	.....	50.00
Otis Falls Pulp Company, Livermore Falls, Me., by Hugh J. Chisholm	.....	50.00
Wildor & Co., Boston, Mass.	.....	50.00
Remington Paper Company, Watertown, N. Y.	.....	50.00
C. R. Remington & Son, Watertown, N. Y.	.....	10.00
Watertown Paper Company, Watertown, N. Y.	.....	10.00
Taggart Brothers Company, Watertown, N. Y.	.....	10.00
Through Wendler & Spiro:		Amount
Wendler & Spiro, Watertown, N. Y.	.....	\$50.00
Moosehead Pulp and Paper Company, Solon, Me.	.....	25.00
Cash, Watertown, N. Y.	.....	10.00
A. Drewson, Dexter, N. Y.	.....	10.00
F. G. Weeks, Skaneateles Falls, N. Y.	.....	10.00
Cliff Paper Company, Niagara Falls, N. Y.	.....	10.00
Lowville Iron Works	.....	10.00
J. A. Otterson, Potsdam, N. Y.	.....	10.00

Accidents.

Gus Swenson, of the Denver Paper Mills, Denver, Col., had his left hand caught and mashed to a jelly on December 29.

Theophile La Pearle was seriously scalded by the explosion of a valve at the mill of the Chemical Paper Company, Holyoke, Mass., on January 5.

James Hammond, a colored man employed as a laborer at the Scioto Pulp and Paper Mill, Chillicothe, Ohio, fell down a shaft, from the second story of the mill recently, a distance of twelve feet. He sustained an ugly compound fracture of the left knee cap.

On December 30 a flooring in Taggart Brothers Company's paper mill, Watertown, N. Y., gave way and fell, killing Mark Purdy, a night watchman. It is supposed that the weight of the machinery and paper stored there had placed too great a strain on the flooring. The deceased was a paper maker by trade.

The rotary boiler at William Robertson's paper mill at Putney, Vt., exploded early Thursday morning, the 12th inst. No one was killed or injured, but the force of the explosion was terrific and was felt all over the village. One end of the mill was com-

pletely demolished, while the windows all over the building were shattered. Much other damage was done. Loss, \$5,000 to \$6,000.

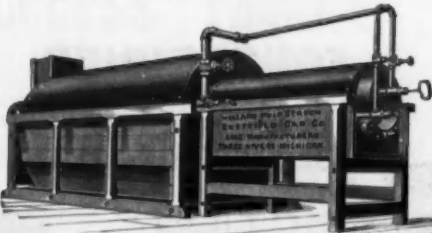
The employees of McDowell's paper mill, at the foot of Levering street, Manayunk, Pa., were startled by the noise of a terrific explosion about 4:30 A. M. January 11. Some of them at once ran in the direction of the boiler house and engine room, and reaching there found that the boiler had exploded and that there was danger of a conflagration. An alarm was quickly responded to by the firemen, who helped quell the flames and remove the debris from the side of the boiler, where the engineer, who was also fireman, was supposed to be, as he was missing. The boiler had exploded from the side, and the force of the explosion had thrown down the wall next to the boiler. After four hours' digging the body of the engineer, Amos Borden, was found buried under the bricks and mortar and other debris, at the place where the injector was located. When found life was extinct, and

he was removed to his home on Prospect street, near Ridge road, where he resided with his wife and one child, a girl ten years of age. The opinion of the inspectors is that the boiler was dry. The rent in the boiler sheet over the fire was 2 feet 5 inches wide and about 4 1/2 or five feet long. The machine tender, Sam. J. Hanson, pulled the fire from the unexploded boiler.

Personals.

G. F. Steele has been appointed assistant general manager of the Manufacturing Investment Company, and will have his office at the general offices of the company, 15 Broad street, New York. He will continue in charge of the sales department.

Joseph F. Pynchon, who was formerly with the Valley Paper Company, but who for the past four years has been the Holyoke agent of Atterbury Brothers, has severed his connection with that house, much to the firm's regret. Mr. Pynchon goes to Fairfield, Mass., where he takes a responsible position with the Fairfield Paper Company.

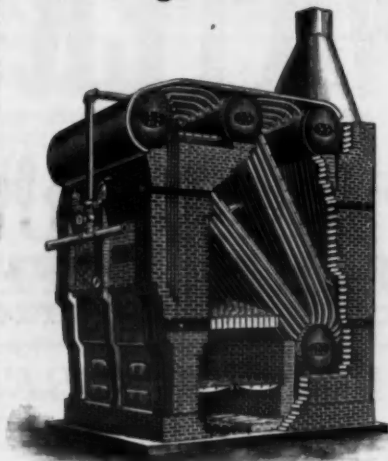


Millard's NOISELESS Revolving Mill, for separating SLIVERS from Wood Pulp.

SHEFFIELD CAR CO., Three Rivers, Mich.

No waste of stock.
No attention required.
Noiseless.
No wearing parts to give out.
Works automatically.
Delivers slivers clear of screen without attention.
Less help required in running.
Screen plates warranted for three years without recutting.
Requires only 1/2 Horse Power to operate.

Stirling Water Tube Steam Boiler



Is pushing its way to the front as an economical, safe, high pressure boiler, and invites your careful investigation as to its merits. No cast metal parts of any kind. Circulation unexcelled. Four man-hole plates removed give access to every tube. No hand hole plates to make steam tight.

Write for Catalogue to

The Stirling Company,
PULLMAN BUILDING,
CHICAGO.

Branches in all Principal Cities.

SODA AND SULPHITE FIBRES,
IN STORE AND TO ARRIVE.

CHAS. D. BROWN & CO.,
156 & 158 CONGRESS ST., BOSTON.

The Oakland Paper Co.,
MANCHESTER, CONN.,

Manufacturers of No. 1 Engine Sized, ALL RAG, White and Colored, Flat and Envelope PAPERS.

All Best Duplex Envelope a Specialty. Send for Sample Book. N. T. PULSIFER, Treasurer.

W. J. THOMPSON & CO.,

Book, News and Manillas,

34 HIGH STREET, BOSTON.
Cor. Federal.

MILLS HAVING SPECIALTIES IN THESE LINES, WRITE US.

Wood Pulp, Soda AND Sulphite,

IMPORTED BY

G. RAU, BUILDING, New York.

SOLE AGENT FOR THE U. S. AND CANADA:

ROZES AINÉ & FRÈRES, Agen,

Well-known Packers of Linens and Cottons.



MOOSEHEAD PULP

UNIFORMITY, CLEANLINESS, STRENGTH, COLOR. FOR BOOK, MANILLA, No. 1 NEWS. PERFECT GROUND SPRUCE PULP.

MOOSEHEAD PULP AND PAPER CO., SOLON, ME.
Office, 306 Sears Building, Boston.

BROOKLYN AND BUFFALO, N. Y.; BAYONNE, N. J.

ROYAL ALUM,
REX ALUM,
KING FILTER ALUM,
LUMP AND GROUND ALUM.

Our Alums are used in more than 100 mills in the United States and Canada. Write us for quotations and state the kind of paper you make and we can save you money.

Martin Kalbfleisch's Sons Co.,
55 FULTON ST., cor. of CLIFF ST., New York.

TRUE & McCLELLAND,

(LATE E. A. TRUE & CO.)

PACKERS AND IMPORTERS OF

Paper Stock and Wastes.

OFFICE: 104 SUMMER STREET, BOSTON.

Foreign Packing Branches: 19 Corporation St., Manchester; 97 Park St., Liverpool.

ESTABLISHED 1823.

INCORPORATED 1891.

STANDARD STAVE & COOPERAGE CO.

MANUFACTURERS OF

CEDAR, CYPRESS, PINE OR OAK

RESERVOIR TANKS

OF ANY SHAPE OR CAPACITY, FOR

PAPER AND PULP MILLS.

19 WHITEHALL STREET, NEW YORK. OFFICES: 160 STATE STREET BOSTON.

—Illustrated Catalogue upon Application.—



ALUM! ALUM!

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We also manufacture all other grades of Sulphate of Alumina and Ammonia Alum that are required by the paper maker.

Address **MERRIMAC CHEMICAL CO.,** 13 Pearl Street, Boston, Mass.

Imports and Exports.

IMPORTS AT NEW YORK.

FOR THE WEEK ENDED JANUARY 7, 1893.

An. Colors..	235	\$14,852	Lead Pencils	15	\$1,777
Alum.....	121	626	Paper.....	1,134	33,536
Alum's Cake	—	—	Steel Pens...	3	228
Bl. Powders.	225	3,830	Stationery...	9	695
Soda Ash...	2,971	16,993	Slate Pencils	1	113
Soda, Caus..	18	311	Clay.....	—	2,092
Soda, Sal....	—	—	J'te B'ts, &c.	—	—
Soda, Hypo..	—	—	P. Hangings.	5	430
Ultramarine	76	2,616	P'p'r Stock.	4,538	97,953
Books.....	165	19,013	Terra Alba..	—	—
Newspapers.	98	8,063	Waste.....	—	—
Engravings.	93	7,905	Wood Pulp.	708	4,508
Printing and	—	—			
Litho. Inks.	9	650			
Writ'g Inks..	—	—	Totals.....	10,504	217,141

Imports General Merchandise for the week ending January 7..... \$9,169,056

IMPORTS OF PAPER STOCK AT NEW YORK.

FROM JANUARY 1 TO JANUARY 11, 1893.

Whence Imported.	Rags.	Old Papers.	Chemical Fibre.	Ground Wood.	Manilla Stock.
	Bales.	Bales.	Tons.	Tons.	Bales.
Antwerp.....	—	—	—	86	—
Aspinwall....	50	—	—	—	—
Bristol.....	—	—	—	—	176
Copenhagen..	—	—	206	—	—
Dundee.....	—	—	—	—	159
Glasgow.....	30	—	—	—	—
Hamburg.....	254	131	43	—	118
Hull.....	749	—	—	—	454
Liverpool....	—	—	—	—	131
London.....	426	224	—	—	1,551
Marseilles...	—	—	—	—	58
Newcastle...	—	—	—	—	134
Rotterdam...	30	28	389	—	—
Stettin.....	—	42	196	—	62

a. Cotton waste.
b. Cotton waste.

NEW YORK IMPORTS.

FROM JANUARY 4 TO JANUARY 11, 1893.

Paper Stock.
L. Gottheil, Westernland, Antwerp, 54 tons chemical fibre.
Perkins, Goodwin & Co., by same, 22 tons chemical fibre.
Charles Harley Company, Colombia, Aspinwall, 50 bs. rags.
J. W. Mason, Exeter City, Bristol, 176 manillas.
F. Bertuch & Co., Island, Copenhagen, 183 tons chemical fibre.
E. Hatton & Co., by same, 23 tons chemical fibre.
G. W. Millar & Co., Critic, Dundee, 18 bs. manillas.
J. Libmann & Co., by same, 141 bs. manillas.
True & McClelland, Corean, Glasgow, 20 bs. rags.
G. Hamilton, Dania, Hamburg, 43 tons chemical fibre.
F. Salomon & Co., Amalfi, Hamburg, 118 bs. manillas, 254 bs. cotton waste, 131 bs. papers.
Jessup & Moore Paper Company, Francesco, Hull, 749 bs. cotton waste.
J. Blakeley & Son, by same, 454 bs. bagging.
W. A. Brown & Co., Tauric, Liverpool, 131 bs. manillas.
F. Salomon & Co., Mississippi, London, 36 bs. bagging.
R. H. Overton & Son, Manitoba, London, 397 bs. bagging.
J. Libmann & Co., by same, 53 bs. bagging.
James Pirnie, Mariposa, London, 158 bs. bagging.
Burgass & Co., by same, 248 bs. bagging.
R. H. Overton & Son, by same, 499 bs. bagging.
G. Rau, Canada, London, 426 bs. rags.
R. F. Downing & Co., by same, 142 bs. manillas, 244 bs. papers.
George Stratford, Egyptian Monarch, London, 66 bs. manillas.
Burgass & Co., Britannia, Marseilles, 58 bs. manillas.
Horace Dutton & Co., Douro, Newcastle, 134 bs. manillas.
L. Gottheil, Rupina, Rotterdam, 248 tons chemical fibre.
J. Libmann & Co., Dumbledam, Rotterdam, 30 bs. rags.
Atterbury Brothers, by same, 28 bs. papers.
W. A. Castle, Werkendam, Rotterdam, 91 tons chemical fibre.
Watson & Co., by same, 30 tons chemical fibre.
Watson & Co., Veendam, Rotterdam, 30 tons chemical fibre.
Atterbury Brothers, Italia, Stettin, 39 ton chemical fibre.
F. Bertuch & Co., by same, 10 tons chemical fibre.
Perkins, Goodwin & Co., by same, place 129 tons chemical fibre.
G. Rau, by same, 18 tons chemical fibre.
Burgass & Co., by same, 42 bs. papers, 62 bs. bagging.
Paper.
Dennison Manufacturing Co., Bothnia, Liverpool, 10 cs.
J. B. Moland, Westernland, Antwerp, 1 cs.

Henry Bainbridge & Co., by same, 9 cs.
G. W. Sheldon & Co., by same, 21 cs.
L. C. Wagner & Co., by same, 8 cs.
Photo Material Company, by same, 50 cs.
W. H. Ward & Co., Tauric, Liverpool, 13 cs.
G. J. Kraft, Runic, Liverpool, 13 cs.
H. M. S. Lloyd, by same, 2 cs. hangings.
Lazard Brothers, Weimar, Bremen, 38 cs.
E. & H. T. Anthony & Co., by same, 6 cs.
Lazard Brothers, Dubblebam, Rotterdam, 23 bs.
H. S. Leclercq, by same, 10 cs.
Miller & Flinn, by same, 13 cs.
E. & H. T. Anthony & Co., by same, 1 cs.
F. R. Arnold & Co., Mariposa, London, 24 cs.
H. Allen, Canada, London, 8 cs.
Lazard Brothers, Veendam, Rotterdam, 42 bs.
True & McClelland, Corean, Glasgow, 30 bs.
Schall & Co., Stubenhuk, Havre, 2 cs.
W. Seyd, Apollo, Antwerp, 7 cs.
Nevius & Haviland, Adriatic, Liverpool, 10 cs. hangings.
G. W. Sheldon & Co., La Bourgogne, Have, 15 cs.
American Tobacco Company, by same, 10 cs.
A. H. Abbott, by same, 14 cs.
L. De Jonge & Co., Cheruskia, Hamburg, 49 bs. 15 cs.
Davies, Turner & Co., by same, 8 cs.
Hensel, Bruckman & L., by same, 14 cs.
Hermann Isaac, by same, 9 cs.
H. G. Ramsferger, by same, 3 cs.
A. V. Benoit, Cheruskia, Havre, 34 cs.

PHILADELPHIA IMPORTS.

FOR THE WEEK ENDED JANUARY 7, 1893.

Paper.
F. Weber & Co., Indiana, Liverpool, 3 cs.
Paper Stock.
Brown Brothers & Co., Nestorian, Glasgow, 186 bs. waste paper.

BOSTON IMPORTS.

FROM JANUARY 5 TO JANUARY 11, 1893, INCLUSIVE.

Paper, &c.
A. K. Johnson, Bostonian, Liverpool, 14 bs. paper.
Wm. Guild & Co., by same, 6 bs. periodicals.
Dennison Manufacturing Company, by same, 23 bs. tissue paper.
Hooper, Lewis & Co., Peruvian, Glasgow, 2 cs. paper.
A. P. Schmidt & Co., Rhenania, Hamburg, 4 cs. printed music.
Wm. Guild & Co., Pavonia, Liverpool, 6 bs. periodicals.
Carter, Rice & Co., by same, 2 cs. paper.
W. A. Noseworthy, Kansas, Liverpool, 7 cs. paper.

Paper Stock.
Train, Smith & Co., Kansas, Liverpool, 256 bs. rags, 140 bs. waste paper.
C. A. Cheney, by same, 394 bs. rags, 80 bs. manillas.

True & McClelland, by same, 181 bs. rags, 136 bs. waste paper.
Horace Dutton & Co., by same, 15 bs. and 61 coils manillas.

T. F. Ring, British Empire, London, 98 bs. waste paper.
Horace Dutton & Co., by same, 55 bs. rags, 85 bs. waste paper, 90 bs. flax waste, 9 bs. and 117 coils manillas.

Train, Smith & Co., Peruvian, Glasgow, 174 bs. rags, 23 bs. waste paper, 14 coils Manillas.
C. A. Cheney, by same, 131 bs. rags.
Horace Dutton & Co., by same, 23 bs. rags, 82 bs. waste paper.

True & McClelland, by same, 94 bs. waste paper, 46 coils manillas.
Order, by same, 92 bs. rags, 12 bs. waste paper, 14 bs. manillas.

Train, Smith & Co. Felicians, London, 1,280 bs. rags, 62 bs. waste paper.
True & McClelland, by same, 99 bs. waste paper.
Wheelwright Paper Company, by same, 116 bs. waste paper.

Crocker, Burbank & Co., by same, 147 bs. waste paper.
C. P. Sumner & Co., by same, 55 bs. waste paper.
Burgass & Co., by same, 173 bs. waste paper.
Train, Smith & Co., De Ruyter, Antwerp, 334 bs. rags.

Gill & Looz, by same, 291 bs. manillas.
Horace Dutton & Co., by same, 457 bs. rags.
J. B. Moors & Co., by same, 91 bs. rags.
S. D. Warren & Co., Buffalo, Hull, 291 bs. rags.
Horace Dutton & Co., by same, 170 bs. rags, 55 bs. and 8 coils manillas.

Hollingsworth & Whitney Company, by same, 234 bs. manillas.
C. A. Cheney, by same, 228 bs. manillas.
Train, Smith & Co., Durham City, London, 1,348 bs. rags, 35 bs. waste paper.

T. F. Ring, by same, 185 bs. waste paper.
Wheelwright Paper Company, by same, 162 bs. waste paper.
Crocker, Burbank & Co., by same, 166 bs. waste paper.

Wood Fibre.

Perkins, Goodwin & Co., Durham City, London, 239 bs.
Fred. Bertuch & Co., Buffalo, Hull, 2,095 bs.
Perkins, Goodwin & Co., by same, 300 bs.
Gill & Looz, De Ruyter, Antwerp, 102 bs.

Sizing.

W. A. Castle, Pavonia, Liverpool, 456 bags.
C. A. Cheney, Kansas, Liverpool, 164 bags.
Baeder, Adamson & Co., by same, 116 bags.

Bleaching Powder.

J. L. & D. S. Riker, Bostonian, Liverpool, 300 cks.
J. L. & D. S. Riker, Peruvian, Glasgow, 12 cks.
J. L. & D. S. Riker, Pavonia, Liverpool, 153 cks.
J. L. & D. S. Riker, Kansas, Liverpool, 372 cks.

Caustic Soda.

E. Hill, Sons & Co., Kansas, Liverpool, 300 drums.
Soda Ash.
Wing & Evans, Bostonian, Liverpool, 600 bags.
J. L. & D. S. Riker, Pavonia, Liverpool, 148 cks.

Wing & Evans, by same, 86 cks., 300 bags.
Jerome Marble, Kansas, Liverpool, 15 cks.
Warren & Co., by same, 119 cks., 600 bags.
Soda Crystals.
Warren & Co., Kansas, Liverpool, 280 bbls.
Crude Sulphur.
Linder & Meyer, Bostonian, Liverpool, 477 bags.

Exports of Paper, &c., from New York for the Week Ended January 10, 1893.

BOOKS, cases, to Cuba, 22; Bremen, 3; Liverpool, 11; British Australasia, 6; Central America, 5; British West Indies, 9; Brazil, 7; British possessions in Africa, 12; Chili, 2 cs.; Hamburg, 4; Leipzig, 2; San Domingo, 1; Venezuela, 2; London, 5.

PAPER, to Cuba, 511 pkgs.; Liverpool, 1 cs.; Hamburg, 19 cs.; Mexico, 83 pkgs.; Ecuador, 5 cs.; Brazil, 459 pkgs.; British Australasia, 68 cs.; Central America, 84 pkgs., 26 rms.; Antwerp, 4 cs.; Bremerhaven, 25 cs.; Bolivia, 6 cs.; Central America, 84 pkgs., 20 rms.; Chili, 52 cs.; Havre, 4 cs.; Dutch West Indies, 15 pkgs.; London, 223 cs.; New Zealand, 129 cs.; Venezuela, 4 pkgs.; San Domingo, 183 pkgs., 1 bale; Hayti, 23 pks.

STATIONERY, cases, to Cuba, 17; London, 18; British West Indies, 5; Central America, 5; British Australasia, 23; Hayti, 5; Hamburg, 4; Mexico, 7; San Domingo, 19; Brazil, 33; British East Indies, 1; Dutch West Indies, 2; New Zealand, 15; Porto Rico, 1; Rotterdam, 1; Colombia, 1; Venezuela, 12. CARDBOARD, cases, to Venezuela, 1 cs. PAPER BAGS, to Central America, 3 bbls., Cuba, 15 bs.; New Zealand, 84 bs. ASBESTOS MILLBOARD, cases, to Chili, 2.

AGGREGATES AND VALUES.

Paper, reams.....	20	\$47
Paper, pkgs.....	1,392	4,610
Paper, cases.....	542	9,111
Books, cases.....	78	3,991
Stationery, cases.....	198	9,909
Rosin, bbls.....	4,967	13,988
Totals.....	7,135	\$41,016

Exports General Merchandise for the week ending January 10, 1893..... \$6,515,980

THE SELKIRK PROCESS

Will (with less Soda than you now use) increase the Daily Yield of

CHEMICAL FIBRE

From your
SODA DIGESTERS
FIFTY PER CENT.

Address
THE SELKIRK STANDARD FIBRE CO.,
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JUTE AND LINEN Paper Stock.

J. & W. SMITH,

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Packers and Shippers of
Clean Jute Threads, Clean Jute Ropes, Gunny Bagging, Manilla Ropes, Bleached Linen Cuttings and Bleached Linen Threads.

ENGINE CLEANING WASTES,
Colored Jute Wastes, Bleached Jute Wastes
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STRONG! PURE! FELTY!

OF ALWAYS EVEN QUALITY.

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SOLE AGENT FOR THE UNITED STATES.

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A. WERTHEIM & CO., Times Building, New York, IMPORTERS OF

Chemical and Mechanical Wood Pulp.

Sole Selling Agents in United States and Canada for {SODA PULP MILLS OF HUGO GRAF HENCKEL, OF DONNERSMARK. FAMOUS "LION BRAND" UNBLEACHED SULPHATE PULP.

"Patent Olive Compound" Lubricating Grease.

Cazenovia Paper and Pulp Felts and Jackets.

TRAIN, SMITH & CO.,
IMPORTERS OF AND DEALERS IN
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Paper Makers' Supplies,
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BRANCH OFFICES: { 36 BEEKMAN STREET, NEW YORK.
21 ST. MARY AXE, E. C., LONDON.
EDMUND ST. CHAMBERS, LIVERPOOL.

WM. J. CORBETT & CO.,
SUCCESSORS TO BARLOW & CO.,
WHOLESALE DEALERS IN AND PACKERS OF

Woolen Rags and Paper Makers' Supplies,
237 and 239 SOUTH STREET, and 66 and 68 UTICA STREET,
THE OLD STAND, BOSTON, MASS.
WOOLEN RAGS GRADED IN COLORS AND QUALITY.

ESTABLISHED 1855.

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No. 194 Fulton Street, SOLE AGENTS FOR New York City, U. S. A.

JOSEPH PORRITT & SONS'

ENGLISH FELTINGS.

ALSO IMPORTERS AND DEALERS IN
MARINE BLUE (Aniline) for Newspaper Mills,
Jacketing, Roll Cloth, Double Extra Canvas, Ultramarine Blue.

W. A. CASTLE,
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IMPORTER OF

FINE GRADES LINEN AND COTTON RAGS.
All Grades of Sizing.

Waldhof Bleached Sulphite Pulp.

GRIFFIN & LITTLE, PAPER MILL

CHEMISTS,
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EXPERTS IN THE SULPHITE PROCESS AND ALL CHEMICAL MATTERS PERTAINING TO THE MANUFACTURE OF PULP AND PAPER.

HENRY WILDMAGEN,
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Will furnish plans and superintend the construction of

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Makes a specialty of Planning, Superintending and putting into operation

ALL KINDS OF SULPHITE FIBRE MILLS.

ALSO WILL GIVE INSTRUCTIONS IN REGARD TO THE MANUFACTURE OF SULPHITE FIBRE.

Has had a wide experience in this line, having built several of the largest mills of the above description, to which he will refer if desired.

—APPLETON, WIS.—

The Paper Trade Journal.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF

The American Paper Trade.

Weekly, \$4.00 per Annum.

Single Copies, 10 Cents

HOWARD LOCKWOOD & CO.,
Publishers.

HOWARD LOCKWOOD. WILLIAM P. HAMILTON.

NEW YORK: SATURDAY, JANUARY 14, 1893.

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.

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. The rates for standing and displayed advertisements to be had on application. Card in Directory Column and one copy of paper, \$15 a year. Subscription per annum and postage for Great Britain, £1. Subscription and postage for France, per annum, 25 francs. Subscription and postage for Germany, per annum, 30 reichsmark. Foreign subscribers may address our New York office.

Payment for subscriptions or advertising may be made by express money order, draft, post office order or registered letter.

All communications must be addressed to

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Boston Office—A. L. DELESDERNIER, General Manager, 67 FEDERAL STREET, BOSTON, MASS.

LOCKWOOD PRESS PUBLICATIONS:

	PER YEAR.
Paper Trade Journal, Every Saturday,	\$4.00
American Stationer, " Thursday,	3.00
American Bookmaker, Monthly,	3.00
American Mail and Export Journal, separate editions, English and Spanish (EL CORREO AMERICANO Y DIARIO DE EXPORTACION), Monthly,	3.00
Lockwood's Directory of the Paper and Stationery Trades, Annually,	2.00
All Pioneer Publications.	
HOWARD LOCKWOOD & CO. 126 & 128 DUANE ST., NEW YORK.	

PROPOSALS for furnishing paper for the public printing during the coming year are called for. In another column our readers will find an abstract of the quantities required, the call being almost the same as that of last year.

PERHAPS it is a little too early to announce definitely the results of last year's business; but the consensus of opinion appears to be that the trade of the last twelvemonth was profitable and that, generally, the members of the paper trade, in common with other manufacturers and dealers, have reason to express satisfaction and congratulate themselves on the business returns of 1892.

A REPRESENTATIVE in Congress from the State of Minnesota has introduced a bill to authorize the Post Office Department to supply stamped envelopes at the face value of the stamps, charging nothing for the material used in the envelopes, nor for their manufacture and printing. Such a law would strike heavily at a number of interests and would be a most injurious encroachment upon the industries of the country. This is not a step toward cheap postage, such as is demanded by the general public exigency, and it ought to be resisted by all whose interests are involved.

WHEN the cholera scare had its innings several years ago it was suggested that rags might be imported in the form of half stuff. The same proposition has again been made. One of our English contemporaries broaches the subject anew, and it is now engaging the attention of the trade in Great Britain. When this idea was originally projected samples of half stuff were sent to this country, but nothing came of the attempt, and we doubt if any-

thing in this direction can be done now. Still, the suggestion calls for consideration, and paper stock dealers and paper manufacturers might as well "put on their thinking caps" and look at the question from its practical standpoint.

AGAIN we have occasion to recur to the delay in forwarding second class matter through the mails. An illustration of the trouble is given in a communication from a subscriber, which appears in another column. The Typothetae of New York, at its last meeting, voiced the views of the representatives of some of the principal printing and publishing houses in the city, and called on Congress to accord the relief so urgently required. The resolutions adopted by the Typothetae are reprinted elsewhere. We trust that action by Congress will be speedy and efficient. There is great need of enlarged facilities at the New York Post Office and means should be provided by the Government for an ample clerical force and greater accommodations for its operations.

THE people of Nova Scotia are to be congratulated on their method of dealing with insolvents. A merchant of that ilk having bought goods which at the time of purchase he had no reasonable expectation of paying for was sentenced to imprisonment for two months, and during that period will have abundant reason to bewail his attempt to do business at the expense of his creditors. We think that the punishment is just, and if it could be applied in this country it would put a stop to many fraudulent bankruptcies or weak efforts to avert an inevitable consequence. It would be well to have some provision covering cases where purchases are made beyond the limit of reasonable expectation of payment incorporated in a general bankruptcy act. The chances, however, appear to be against the passage of any general law, relating to insolvency, by the present Congress.

THERE is a reasonable probability that the present Congress will pass the amendments to the Interstate Commerce law in spite of the covert and open opposition of some of the railroads. Since Judge Gresham, of the United States Circuit Court of Illinois, decided that the law was not mandatory and that the carrying companies were not bound to answer certain questions or to produce their books as required by the commission the roads appear to have been impressed with the idea that the act is, after all, of no real consequence. They naturally care little about the provisions of an act which ostensibly was created to regulate traffic as well as those companies which handled it, but which, however, by a United States judge has been shorn of its most important character. The amendments, therefore, which are pending in Congress are heartily supported by the business community. If the Interstate Commerce Commissioners cannot compel the companies to answer questions and thus enable that body to secure information upon which it can intelligently act, the law cannot be of real service to the shippers and others who are interested in fair and equitable rates. All of the commercial organizations ought to urge the passage of these amendments.

THE Chicago correspondent of THE JOURNAL refers to the delay in the allotment of space at the World's Columbian Exposition and gives warning that many would-be exhibitors are likely to be grievously disappointed. Many Eastern manufacturers have already come to this conclusion. In another column we print a series of interviews with a number of disgusted manufacturers, representative in their respective lines of business, which set forth the feeling on this subject. The situation, to say the least, is peculiar, and if we are to form judgment upon the experiences narrated we must reach the conclusion that there is either culpable mismanagement by those who are intrusted with the duty of awarding space, or that there is a disposition to thwart the efforts of enterprising American manufacturers, particularly those who represent our Eastern seaboard. No such complaints have come to

us from localities more immediately in touch with Chicago, and if discrimination is being made the representative character of the exposition will be seriously impaired. We are more disposed to believe that incompetent management is the cause of the trouble. Delay in dealing with applications for space made in conformity with the regulations must lead to confusion and create uncertainty, which must be disadvantageous. We had expected better executive capacity than seems to have been so far exhibited.

Watermarks.

By DANDY.

And now the scheme of bringing in rags in the shape of half stock is being talked over. One man suggests that if this plan is put in operation it would be very easy for the man who bought SPFF half stock to have sent to him a considerable quantity of SPFF rags in that shape, or in other words, that inferior goods would be substituted. Well, suppose they were, the average paper maker knows how to make claims, if his early education has not been neglected.

There has also been raised the objection that one paper maker treats rags differently from another and that the making of "stuff" should be a continuous operation, or at least an operation conducted under one controlling system in order to reach the results desired.

However, the practical way is for some packer on the other side to send over some half stock and see how it will go. Perhaps that may work out a solution of the present difficulty as to quarantine regulations.

The cotton mill strike in Manchester is yet on, and notwithstanding the diminished output of gunny, the price of that article continues to droop. I suppose that if the output was stopped altogether the price would drop out of sight, according to the rule of contraries which seems to govern the jute market.

"Tommy Tucker" has gone "where the woodbine twineth." In other words, he is dead, having "crossed the range" on the 6th inst., aged fifteen years. "Tommy" was a cat which belonged to the paper warehouse of E. Tucker's Sons, Hartford, Conn., and was quite a celebrity in his way.

"Tommy" weighed 17 pounds, was prettily marked, and had on his neck a handsome collar. He could perform many tricks, and seemed very proud of his accomplishments. He would shake the hands of visitors and sit up when asked to. He was especially fond of ladies, and in suitable weather would sit in front of the store to receive the attentions showered upon him by the admiring passers-by. When young, "Tommy" was fed with milk, and each morning a bowl was placed in front of the store with 5 cents to pay the milkman. It was the custom of the cat to look into the bowl to make sure that the money was not forgotten. At times when the dust was blowing a cover would be placed over the bowl. "Tommy" was bound to find out if the nickel was in the bowl and would push the cover off. If the coin was seen he would rest content until the milkman arrived; but if the bowl was empty he would make the fact known by an unusual activity between the office and the store front.

As a rule he preferred to lead a domestic life, and only on one occasion—about two years ago—did he fall from grace. Then he went on a spree for seven days, and when he got back, looking somewhat frayed but still the same old T. T., he had lost 7 pounds in weight. "Tommy" will be missed, and a New York paper dealer, touched by the story of his life and death, suggests that on his tombstone should be "Requies-cat in pace." Scat!

Trade Talks.

Charles F. Zengraf, International Ultramarine Company, New York—I have not so far heard any rumor to the effect that the recent ultramarine combination was to be revived. If such were the case I, at least, ought to know it. Each firm is "padding its own canoe" so far, and there has been no offer or proposition on the part of anyone to organize a new combination. Prices are low, but business is working smoothly. I know of no reason why there should be another combination.

Hon. Warner Miller, New York.—No, I have not seen any reference to importing rags in the shape of half stock instead of the condition in which they now come here. I have not heard the subject spoken of before, but I doubt that the scheme is feasible. If the half stock was brought in dry, it would require about as much power to treat

it as is now required for rags, so I do not see where there would be any gain. Then again, the half stock would be dutiable, and while I do not at the moment know under what section of the tariff law it would fall, it would undoubtedly have to pay duty.

R. H. Overton, of R. H. Overton & Son, New York—Importing half stock, no, I never heard of it. I do not know how that would work. I should think that it would simplify matters for the importer considerably. At present an importer brings in rags. He uses his best endeavors to have them right and believes they are right. They reach a mill and a claim is made. It seems to me that with half stock a good deal of that trouble could be avoided. The half stock would have to be brought in moist and it certainly could be handled as well as moist pulp. Whether it would give a chance for the use of inferior rags in making the half stock I do not know, and whether the paper maker would like it as well I do not know, but I would like to see the experiment tried.

Communications.

The Mail's Delays.

CHADWICK COPYING BOOK COMPANY, 1 SPRINGFIELD, MASS., January 10, 1893.

Howard Lockwood & Co.:

As we have before made complaint that we did not receive the PAPER TRADE JOURNAL promptly, we think it is only fair to say that it reached Springfield on Sunday this week, the first time we have ever known it to do so; but we did not receive last week's Stationer until Monday morning, one day later, although it was published two days earlier than THE JOURNAL.

CHADWICK COPYING BOOK COMPANY,
H. E. PRATT, President.

American Wood Paper Company.

[By Telegraph to THE PAPER TRADE JOURNAL.]

PHILADELPHIA, Pa., January 13, 1893.

The creditors of the American Wood Paper Company were in session from 12 to 4 to-day. A conservative estimate of the assets is as follows: Real estate and machinery, \$500,000, and personalty, \$6,000. The liabilities are: Bonded debt, \$270,000; general unsecured indebtedness, \$145,000.

The committee of creditors which had investigated the condition of the company reported a proposition to reorganize with \$500,000 capital, subject to the bonded indebtedness, \$100,000 of fresh capital to be put in, and creditors' claims to be paid in stock of the new company.

This report was tabled, and W. Rennyson, E. R. Bulkley and T. H. Savery were appointed as a committee to consider the proposition. By request, George F. Perkins, of Perkins, Goodwin & Co., consented to act as adviser of the committee.

The meeting then adjourned subject to the call of the committee. It is probable that the assignee will run the mill for a short time, but unless cash is forthcoming the works will have to be shut down.

STYLOGRAPHIC PEN.

Changes, Removals and New Firms.

Varn & Varn, printers and publishers, Bartow, Fla., have sold out.

J. M. Kennedy, publisher, Boise City, Idaho, has leased his plant.

H. L. Osborne, book seller and stationer, Garnett, Kan., has sold out.

H. T. Spordling has opened a job printing office in St. Louis, Mo.

The Star Paper Box Factory has been incorporated at Peoria, Ill.

Robert Johnson, publisher of the Times, Corvallis, Ore., has sold out.

J. C. Hassinger, bookseller and stationer, Santa Barbara, Cal., has sold out.

P. J. Lang, dealer in paper hangings, &c., Grand Rapids, Mich., has sold out.

Phillips & Walton, stationers, Springfield, Mass., have dissolved partnership.

The Crisman-Sargent Company, printer, Olympia, Wash., has been dissolved.

Story & Co., lithographers, Chicago, Ill., have been succeeded by J. C. Story.

Goldberg & Steinweg, printers, New York, have been succeeded by M. Goldberg.

J. M. Hagarty, publisher, Oro, Wash., has been succeeded by Allison & Granger.

J. Q. Cronkhite, publisher, Stephen, Minn., has been succeeded by Martin Novotny.

J. D. Wirt Publishing Company is a new corporation at Chicago, Ill. Capital, \$10,000.

The West Michigan Printing Company, Grand Rapids, Mich., has been dissolved.

The Castle Tribune Publishing Company, Castle, Mon., has suspended its publication.

Fairfax & Lynch, dealers in paper hangings, Pueblo, Col., have dissolved partnership.

The Saxe Guide Publishing Company, at Chicago, Ill., has been incorporated with a capital stock of \$5,000, for the publication of books, guides and periodicals. The in-

corporators are De Forrest W. Saxe, Victor Barothy and Robert McCabe.

W. P. Pool & Son, Calais, Me., paper box manufacturers, have sold out to George E. Elliott.

The San Diegan, Cal., Sun Publishing Company has been incorporated. Capital, \$25,000.

The Bearings Publishing Company, Chicago, Ill., has been incorporated. Capital, \$50,000.

Shinn & Fuller, publishers of the Democrat, Newayzo, Mich., have dissolved partnership.

Moore & Sterner, dealers in paper hangings, &c., Omaha, Neb., have dissolved partnership.

R. S. & Geo. Oliver, booksellers and stationers, Americus, Ga., have dissolved partnership.

The Rumford Falls (Me.) Publishing Company is a new corporation and the capital is \$10,000.

The Boys' Brigade Publishing Company, Detroit, Mich., has been incorporated with a capital of \$50,000.

The printing plant of H. F. Smart has been removed from Concord, N. H., to Hillsboro Bridge, same State.

The Wooster Paper Box Company has been incorporated at San Francisco, Cal. The capital is \$50,000.

J. W. Fordyce & Son, dealers in paper hangings, &c., West Winsted, Conn., have dissolved partnership.

The Clover Leaf Publishing Company, South Bend, Ind., is a new corporation having a capital of \$10,000.

The Duluth Book and Paper Company, Duluth, Minn., has changed its style to the Duluth Paper Company.

Whitley & Todd, publishers of the News-Record, Clinton, Ont., have dissolved partnership. Mr. Todd continues.

Rowe & Goodwin, wholesale paper and twine dealers, Utica, N. Y., have been succeeded by James W. Rowe.

Barr & Bradley, manufacturers of cardboard, Philadelphia, have dissolved partnership. James O. Barr continues.

Robert A. Reid has withdrawn from the firm of J. A. & R. A. Reid, printers and publishers, Providence, R. I.

The interest of Baker Brothers in the Treadwell's Mills Pulp and Paper Company has been sold to Orrs & Co., of Troy.

Behm & Gerhart, booksellers and stationers, Philadelphia, Pa., have dissolved partnership. J. C. Gerhart continues.

The Charles T. Davis Publishing Company has been incorporated at Chicago, Ill., to do a publishing business. The capital is \$250,000.

A new paper, the Star, Toronto, Ont., is the result of a strike by the compositors of the Evening News, same city. It is an evening paper.

J. F. Green has sold his interest in the firm of Green, Baldwin & Ward, booksellers and publishers of the Gazette, Baldwinville, N. Y.

A new company in New York is that of Bartlett & Co., which will carry on a designing, printing and engraving business. The capital is \$50,000.

The C. & J. Gregory Company, Bay City, Mich., has been organized to engage in the printing, publishing and book making business. The capital is \$8,000.

The Vincennes (Ind.) Post Printing and Publishing Company has been organized to conduct a general printing and publishing business. The capital is \$2,000.

The Statesman, Lansing, Mich., has ceased publication, and the office, which has been sold on mortgage sale, will be hereafter run as a job printing office.

A new corporation at Brownville, N. Y., is the Columbian Box Company, to make and sell fancy boxes and other articles made of pulp and paper. The capital stock is \$10,000.

William E. Peck & Co. have been incorporated under the laws of West Virginia, to act in New York as agents and to publish books and papers generally. The capital is \$200,000.

The Jamestown Paper Box and Printing Company is the style of a new firm, which is composed of John D. Flech and H. M. Allen, who have bought a box factory at Jamestown, N. Y.

A business change has taken place in the North Adams, Mass., Transcript, the firm of James T. Robinson & Son being changed to James T. Robinson & Co., W. R. Sanford having bought an interest in the paper.

L. Lowndes, R. R. Henderson, P. H. Daughtrey, D. P. Miller and A. H. Amick have incorporated the Cumberland Paper Company at Cumberland, Md., to manufacture wood pulp, paper, &c. The capital stock is \$100,000.

The Advertising Playing Card Company, Chicago, Ill., has been incorporated with a capital stock of \$100,000, for the manufacture of playing cards. Incorporators: Ralph

M. Shaw, Amos C. Maple and Lewis W. Parker.

The Litho Improvement Company, of New York city, has been incorporated to carry on the business of lithographing and photo lithographing. Capital, \$15,000; and directors, Henry P. Bailey, of East Orange, N. J., Ralph Trantman, of New York, and Phillip H. Mandel, of Astoria, L. I.

The Bryant Box Company, organized with a capital of \$6,000, succeeds to the business formerly conducted by Edgar Bryant at Westfield, Mass. The officers of the company are, President, O. B. Parks; vice-president, Edgar, Bryant secretary; and treasurer, S. B. Campbell.

The Consumers' Stationery Company has been incorporated at Chicago, Ill., with a capital of \$500,000. It will deal in and manufacture stationery, blank books, general stationery supplies and carry on a printing, lithographing and bookbinding business. W. L. Tidd, is president; F. L. Tidd, vice-president; E. H. Thompson, secretary and treasurer, and K. M. Landis, attorney.

The Schroon River Pulp Company, of Warrensburgh, has been incorporated to manufacture and sell wood pulp. Its capital stock is placed at \$20,000, divided into 100 shares, and its directors are John R. Durkee, Edgar L. Potter, Joseph Goodfellow, of Fort Edward, and Senator L. W. Emerson, and Albert H. Thomas, of Warrensburgh.

The Cumberland Paper Company, of Alleghany County, Md., has been incorporated. The incorporators are Lloyd Lowndes, Robert R. Henderson, Patrick H. Daughtrey, David P. Miller and Arthur H. Amick. The certificate states that the corporation is formed for the purpose of manufacturing wood pulp of all kinds, for the manufacture of paper of all kinds and for the purpose of buying, selling and dealing in wood pulp and manufactured paper. The term of existence of the corporation is limited to forty years. Its operations will be carried on in Maryland and West Virginia. The amount of the capital stock of the corporation is \$100,000 and there are 2,000 shares at \$50 per share. The corporation will be managed by seven directors, as follows: Lloyd Lowndes, R. R. Henderson, John Sheridan, John Wilson, P. H. Daughtrey, Robert D. Wilson and David Sloan. The new company is composed of the bulk of the stockholders of the defunct Potomac Paper Company, of Cumberland, Md.

Failures.

The sheriff has sold out the stock, fixtures plates and publications of the McCall Publishing Company, at No. 46 East Fourteenth street, New York.

Fires.

E. J. Gray, printer, Washington, D. C., has been burned out.

The Omaha Printing Company, Omaha, Neb., has met with a loss by fire.

The Cory Lithograph Co., Boston, Mass., was burned out on the 10th inst.

The paper box factory of D. S. Currier, Haverhill, Mass., has been burned out.

Charles G. Place, dealer in paper bags, &c., Syracuse, N. Y., has been burned out.

W. L. Yetter, dealer in paper hangings, &c., Hastings, Neb., has met with loss by fire.

The office of the Chateaugay (N. Y.) Record was burned on January 10. Loss, \$1,500.

The Herald-Times, Watertown, N. Y., was burned out on the 8th inst. The loss was \$1,000; insured.

The Northern Tribune, Watertown, N. Y., suffered a loss by fire on January 8 of \$400. Insured.

H. C. Busch, envelope manufacturer, Boston, Mass., suffered a loss by fire on the 11th inst.

C. Littlejohn, paper stock dealer, 107 to 113 Purchase street, Boston, Mass., was burned out on the 11th inst.

The Boston Book Company, Albany, N. Y., was burned out January 12. Loss, \$30,000; insurance, \$10,000.

George Z. Collins & Co., manufacturers of and dealers in leather board, Boston, Mass., have been burned out. Their loss is \$20,000.

Dean & Carroll, dealers in paper hangings, &c., Memphis, Tenn., have been burned out. Insured.

On Friday night, January 6, fire broke out in the Clarion Mill of the New York and Pennsylvania Company at Johnsonburg, Pa., injuring six beaters, a good deal of wood-work and a large quantity of paper.

At Racine, Wis., January 8, the Racine Paper Box Manufacturing Company's plant, on Park avenue, was burned. Loss on stock, \$5,000, and on building, \$3,000. Insurance on stock, \$3,000; the building is partly insured.

The insurance on the property of the Bayless Paper Company, Binghamton, N. Y., recently burned, was on building,

\$6,275; machinery, \$14,300, and stock, \$5,425, besides a blanket policy for \$2,500. The loss on stock has been settled for \$800. The loss on building and machinery is total.

George C. Baldwin & Co., booksellers and stationers, Memphis, Tenn., have been burned out. Insured.

At Boston, Mass., January 11, fire broke out on the top floor of 109 and 111 Purchase street, occupied by the Franklin Typewriter Manufacturing Company and the press rooms of H. C. Mandel & Co., printers, and spread downward to the fifth floor. These two floors were gutted and their occupants are the only losers by the fire. On the lower floors were Littlejohn, paper dealer, and the Granston Patent Press Company, who were damaged somewhat by water. Losses aggregate \$30,000, and are nearly covered by insurance.

General Notes.

A receiver has been appointed for the National Tablet and Printing Company, Dayton, Pa.

The trustees of the Stationers' Board of Trade organized on Tuesday last by the election of the following named officers: President, Frank Squier; first vice-president, Charles T. Dillingham; second vice-president, Henry C. Bainbridge, and secretary, W. W. Davis.

One of the handsomest calendars of the new year is that of the De Witt Wire Cloth Company, 32 Reade street, New York. The illustrations are steel plate engravings of "Our New Navy," showing the cruiser Newark as the chief feature. This is appropriate, as the factory of the De Witt Wire Cloth Company is near Newark, N. J. The other ships shown are the Atlanta, Massachusetts, Petrel, Cushing, Chicago and Charleston. The figures on the pads are large and clear.

Thomas Hanrahan, of No. 20 Manhasset place, is employed at the roofing paper factory of W. H. Stewart, at No. 65 Commerce street, Brooklyn, N. Y., and on Sunday saw his son, John, nineteen years old, and Frank Downing, of No. 219 Van Brunt street, stealing goods from the factory. The two youths were arrested for intoxication on Sunday evening, and Hanrahan was sent to jail and Downing paid a fine. They are now charged with burglary. Hanrahan will be arraigned when his present sentence expires, and a warrant has been issued for the arrest of Downing.

Eight judgments, aggregating \$16,974, were entered January 12 in New York city by consent against Joseph Ryan, dealer in wall paper, &c., at Nos. 1059 to 1067 Broadway, Brooklyn, who was burned out on January 4, in favor of the National Wall Paper Company, on assigned claims for merchandise sold by Frederick Beck & Co., H. Gledhill & Co., Cresswell & Washburne, and others. Transcripts of eleven judgments from Brooklyn, aggregating \$32,400, were also filed in New York, the largest being in favor of Hiram Wilkins, \$5,016; James Gascoine, \$4,015; Mitchell & Herr, \$3,416; Margaret Kip, \$2,016, and Mary Jane Kells, \$2,016.

A meeting of the stockholders of the American Wood Paper Company was held at Providence, R. I., on Tuesday, the 10th inst., and a plan of reorganization was approved. The company is to sell out to a new company which is to be capitalized at \$500,000, the old bonds holding good; \$130,000 of common stock is to be issued to creditors in payment of claims; \$100,000 more common stock is to be distributed among the present preferred stock holders according to their holdings; \$200,000 of preferred stock is to be issued at 50 cents on the dollar (or \$25 a share, par value \$50), which would bring in \$100,000 in cash, and \$70,000 of preferred stock to be held in the treasury, bringing the total stock to \$500,000. The committee to carry out the plan of reorganization consists of C. F. Mason, F. A. Chase, W. B. Miller and M. J. Perry.

Owing to a dispute between Messrs. Dillon, Gillen, Tooker and Hayes, the partners owning the Metropolitan Job Printing Office, New York, Mr. Hayes has been appointed receiver of the concern.

F. Bertuch & Co., 5 and 7 Beekman street, have added another line of goods to their assortment, and are now the agents of the International Ultramarine Company, manufacturer of ultramarine blue for paper makers use. This blue is so well known, and the house handling it stands so high that the product will undoubtedly have a much wider sale than heretofore. F. Bertuch & Co. will quote prices on application.

The New York and European Investment Company was incorporated in Newark, N. J., this week, with a capital stock of \$1,000,000, divided into 19,900 shares, of which 9,900 shares are to be common stock of a par value of \$100 per share, and the remainder are founder shares of a par value of \$1 each, and there are 10,000 of them. Five per cent. of the annual net profits of the company will be set aside as a

reserve fund, after which each share shall be entitled to non-cumulative annual dividends of 7 per cent. upon the amount paid up upon such shares. The names of the stockholders, with the number held by each, are as follows: Warner Miller, of Herkimer, 2; Willard Brown, of this city, 2; William Irwin Martin and C. M. Wiecker, of this city, 2 each, and George P. Sheldon, of Greenwich, Conn., and John W. Taylor, of Newark, 1 each. Hon. Warner Miller, when asked about the company and what were its intentions, said: "It is merely a trust company, which proposes to do a trust company business. There is nothing special about it, and there is really nothing to say about it."

Stone & Forsyth, 268 Devonshire street, Boston, Mass., have forwarded to this office their calendar for 1893. It is a large card upon which there are monthly pads, each month exhibiting a sample of paper carried by this house. The conception is good but the execution is miserable. It is a question how "red manilla" can be "made in all colors." Perhaps Messrs. Stone & Forsyth can explain.

A number of Brooklyn city and Kings County officials and some outsiders have been indicted for making and paying alleged illegal bills against the city and county, the bills growing out of the Columbus Celebration last year. The bills against the city were certified by the auditor, who attached the following certificate:

CITY AUDITOR'S OFFICE, BROOKLYN, N. Y., JANUARY 13, 1893. This certifies, that I have duly examined the within account, amounting to \$..... and find the same correct. Said account is hereby audited and allowed for..... dollars, the services specified and articles enumerated therein having actually been performed and furnished, and by due authority of law, and said amount being just and reasonable. Charge the appropriation for..... Auditor.

The Mayor ordered the bills paid, and the indictments then followed. Charles J. Young, a clerk in the stationery house of Dempsey & Carroll, New York, was indicted "for unlawfully, wilfully and feloniously obtaining from the city of Brooklyn the sum of \$630 of the goods, moneys and properties of the said city of Brooklyn, with the felonious intent to cheat and defraud the said city of Brooklyn." The indictment sets up the bill of Dempsey & Carroll for \$630 for 2,000 grand stand cards, to which Young made oath. On Saturday night Young was arrested by Detective Shaughnessy, of the Brooklyn squad, and was locked up in the Brooklyn Fourth Precinct. Later he gave bonds and was released to appear before Judge Henry A. Moore, in the Court of Sessions. Young failed to appear before District Attorney Ridgway on Saturday morning when a request was sent to him, and his arrest followed on a bench warrant. He was found by Detective Shaughnessy at No. 23 West Ninth street, New York. The souvenir invitation card used at the celebration was a mammoth affair and was engraved. The invitation cards were plain, with the simple words: "Admit bearer to aldermanic stand," with the letter of the stand printed. One of the indicted officials is Supervisor Riggs, who at the time of his election was a clerk with the Tower Manufacturing and Novelty Company, but who on taking office severed his connection with the house.

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY, JANUARY 13, 1893.

THE MONEY MARKET.—The stock market was irregular. The loan market was very easy. Call loans on stock collateral were made at rates averaging 3 per cent. Time money was in good supply at 5 1/2 per cent. for practically all terms. Mercantile paper is quiet and steady. Rates are as follows:

Table with 3 columns: Description, Sixty days, Four months. Includes Double named, First-class, Good, Single named, First-class, Good, Not so well known.

The market for sterling was firm, but little business was done. There was an active demand for bills, and the supply was small. There was no evidence of a new supply of bills. Posted rates were \$4.86 1/2 for sixty days and \$4.88 1/2 for sight. Actual rates were 4.86 @ 4.86 1/2 for sixty days and \$4.88 @ 4.88 1/2 for sight.

THE PAPER TRADE.—There is a very fair degree of business in the paper trade, and the year's business starts out well, although the market is not active. The makers of writing papers are feeling the pressure of high prices in the rag market, and if prices there go any higher, manufacturers say paper prices will have to advance. Makers are not yielding to pressure for lower prices, and at least one mill has withdrawn quotations, and given warning that prices may be advanced without notice. Book papers are in fair call; News is fairly active; Manillas are in moderate demand, and Straw Wrappings move slowly.

JUTE BUTTS.—The market is quiet. The statistical position, as given by Cabot, Ray & Co., is as follows: Imported to the United States, 1889, 412,689 bales; 1890, 481,071 bs.; 1891, 560,692 bs. Consumed in the United States 1889, 417,880 bs.; 1890, 496,994 bs.; 1891, 567,972 bs. Stock on hand, New York and Boston, January 1, 1892, 32,970 bs. Imported New York and Boston since January 1, 1892, 232,387 bs.; 1891, 560,692 bs.; 1890, 481,071 bs. Stock, New York and Boston, January 1, 1893, 42,748 bs.; 1892, 32,970 bs.; 1891, 50,250 bs. On passage for United States December 26, 1892, and by cable to December 31, 1892, 240,617 bs.; 1892, 153,222 bs.; 1891, 259,157 bs. Visible supply to May, 283,365 bs.; 1892, 186,192 bs.; 1891, 309,407 bs. Consumption since January 1, 1892, 222,609 bs.; 1891, 567,972 bs.; 1890, 496,994 bs. Delivered to consumers past thirty days, 18,432 bs.; 1891, 14,805 bs.; 1890, 31,320 bs. The same firm say: "Sales on spot have been very light for the month, both bagging and paper quality; in futures the high Calcutta market has prevented business here. Deliveries for the month have been: bagging manufacturers', 14,520 bs.; paper manufacturers', 3,912 bs. Spot stock, 10,126 bs. spinning butts; 32,622 bs. paper butts."

WOOD PULP.—Ground Wood continues in light supply, and the extreme cold weather has further served to lessen the production. Prices range as they did last week.

WOOD FIBRE.—There continues a strong call for Sulphite, and prices are firm. We note sale 100 tons foreign Unbleached Soda in lots at 2 1/2 @ 2.70c. Domestic Soda is quoted at 3 1/2 @ 3 3/4 c. for Bleached. Domestic Sulphite is moving at 2 1/2 @ 3 1/4 c., as to quality, for Unbleached, and 3 1/4 c. for Bleached. Foreign grades are quoted as follows: Unbleached Pine, soda process, 2 1/2 @ 2.75c.; Bleached, same process, 3 1/2 @ 3.00c.; Unbleached, sulphite process, 3 @ 3 1/2 c.; Bleached, do., 4 1/2 @ 5 1/2 c.; Bleached Straw Pulp, 4 @ 4 1/2 c. Imports this week aggregated 920 tons, being 86 tons from Antwerp, 206 tons from Copenhagen, 43 tons from Hamburg 389 tons from Rotterdam and 196 tons from Stettin.

FOREIGN RAGS AND PAPER STOCK.—The market for foreign rags is quite active and there have been a good many engagements entered into this week. The spot lot of Japanese Blues has been cleaned up and futures are held at higher figures. There are offers to buy at 2 1/2 c., but stock cannot be had at that price. Among the sales we note: Two hundred tons German Blue Cottons at 2 1/2 c., 100 tons French Dirty Whites at 3c., 200 tons Light Prints at 2 1/2 c., Mixed White Linens at 5c., 400 tons Colored Cottons at 1 1/4 c., Blue Linens at 3 1/2 c., German White Cottons at 3 1/2 c. Imports for the week aggregated 4,787 bales and 920 tons, being 1,519 bs. rags, 425 bs. papers, 920 tons chemical fibre, and 2,843 bs. manillas. Ports of shipments and quantities are as follows: Antwerp, 86 tons chemical fibre; Aspinwall, 50 bs. rags; Bristol, 176 bs. manillas; Copenhagen, 206 tons chemical fibre; Dundee, 159 bs. manillas; Glasgow, 20 bs. rags; Hamburg, 254 bs. rags, 131 bs. papers, 43 tons chemical fibre, 118 bs. manillas; Hull, 749 bs. rags, 454 bs. manillas; Liverpool, 131 bs. manillas; London, 26 bs. rags, 224 bs. papers, 1,551 bs. manillas; Marseilles, 58 bs. manillas; Newcastle, 134 bs. manillas; Rotterdam, 20 bs. rags, 28 bs. papers, 389 tons chemical fibre; Stettin, 42 bs. papers, 196 tons chemical fibre, 62 bs. manillas.

DOMESTIC RAGS.—There is a very fair call for domestic stock. We quote No. 1 Whites at 4 1/2 c.; Soiled Whites at 3 1/2 @ 3 3/4 c.; No. 2's at 2 1/2 @ 2 3/4 c.

BAGGING, &c.—The market for Gunny is quiet and prices are not over strong. We note sale 100 tons on spot at 1.20c., at which figure shipments are also offered. Manilla imports for the week aggregated 2,843 bales, being 176 bs. from Bristol, 159 bs. from Dundee, 118 bs. from Hamburg, 454 bs. from Hull, 131 bs. from Liverpool, 1,551 bs. from London, 58 bs. from Marseilles, 134 bs. from Newcastle and 62 bs. from Stettin.

OLD PAPERS.—There is a fair call for papers. We quote: No. 1 Hard White Shavings, 3 1/2 @ 3 3/4 c.; No. 1 Soft White do., strictly free from wood, 2 1/2 @ 2 3/4 c.; Soft White do., ordinary, 2 1/2 c.; Old Ledgers, 2 1/2 @ 2 3/4 c.; Solid Printed Books, 1.75c.; Mixed Shavings, No. 1, 1.20 @ 1.25c.; Mixed Shavings, No. 2, 1 @ 1 1/4 c.; Extra No. 1 Manillas, 1.30c.; No. 1 Manillas, ordinary, 1.10c.; No. 2 Manillas, .85 @ 1c.; Light Book Stock, 1 1/4 c.; Folded News, 65 @ 70c.; Mixed Papers, 50 @ 55c.; Commons, 50 @ 55c.; Bogus Manillas, 60 @ 65c.; Straw Clippings, 60 @ 65c.; Binders' do., 50 @ 55c.

STRAW.—Straw is quiet. We quote No. 1 Rye at 60 @ 65c.; No. 2 Rye at 50 @ 55c.; Short Rye at 40 @ 45c., and Oat at 35 @ 40c.

ROSINS.—Low grades are scarce but quiet. Prices are steady. We quote: Common to Good Strained, \$1.55 @ 1.57 1/2; E, \$1.60; F, \$1.62 1/2 @ 1.65; G, \$1.80; H, \$2.05; I, \$2.45; K, \$2.85; M, \$3.30; N, \$3.80; W. G., \$4.30.

CHEMICALS.—There is a fair trade in paper makers' chemicals. J. P. Brunner & Co., Liverpool, under date of December 24, 1892, say: "Dullness is the prevailing feature in heavy chemicals at present. The union has given instructions to close their Caustic Soda plant from the 28th inst., and though these are only the usual instructions given at the dull holiday season, there is an impression that this will mean a longer stoppage than usual, owing to the accumulation of Caustic Soda stocks at the works and the great scarcity of orders. Soda Ash.—There is a fair inquiry for forward deliveries, but quotations are nominal, makers asking for bids. Nominal quotations for January are: Caustic Ash, 48 per cent., £5 @ 5 5s. 3d. per ton; 57 and 58 per cent., £6 per ton. Carb. Ash, 48 per cent., £5 2s. 6d. per ton upward; 58 per cent., £6 2s. 5d. per ton. Ammonia Ash, 58 per cent., £6 per ton, net cash. For contracts over 1893 about 5s. @ 7s. 6d. per ton less money. Soda Crystals in moderate demand at £3 3s. 9d. @ 5 5s. per ton, less 5 per cent. Caustic Soda very slow of sale, and it is reported that large stocks have accumulated at the works. Values are quite nominal as follows: 60 per cent., £8 15s. per ton; 70 per cent., £9 15s. per ton; 74 per cent., £10 15s. per ton; 76 per cent., £11 15s. per ton upward, net cash. For parcels under 10 tons, 5s. per ton extra is charged. For special export markets various concessions on these figures would be accepted. Bleaching Powder firm at £7 15s. @ 8 per ton net cash for hard wood packages, and there is some talk of an advance. Price on the Tyne has already been advanced 5s. per ton." There is a better supply of Bleaching Powder on spot in the New York market, owing to some arrivals, and the market is not quite as strong as it was. Lancashire Bleach remains at 2 1/2 c., but Newcastle Bleach ranges 2.35 @ 2.37 1/2 c. Alkali comes in freely, and while arrivals are mostly cared for by contracts, spot supply is ample. The Caustic Soda department of the United Chemical Company is "down" this month, but so far prices have not responded to any extent. Sal Soda is well in hand and prices are regular. During the week sales have been as follows: 100 cks. Bleach on spot at 2 1/2 c., 50 drums Caustic Soda at 3.10c., 200 bbls. Natrona Porous Alum at 2 1/2 c., — bbls. Merrimac Porous Alum at 2c., 50 bbls. Lump Alum at 1 1/4 c., 100 bbls. Keystone Alum at 1 1/4 c., 50 tons 58 per cent. Alkali at 1.40c.

CHINA CLAY.—There has been a little movement displayed in this department, and sales of a small nature have been made at unchanged quotations. Prices per ton are still held at \$13 @ 18 as to quantity, quality and seller.

TWINES.—There is a moderate trade in twines. Quotations are as follows: Cordage—Manilla Rope, half inch, 12 1/2 c.; Sisal Rope, half inch, 11 1/2 c.; New Zealand Rope, half inch, 6 1/2 c.; Jute Rope, half inch, 7c.; Sisal Hay Rope, 8 1/2 c.; Sisal Lath Yarn, fine, 9 1/2 c., and medium, 9 1/4 c.; Jute Lines, 7 1/2 c.; Jute Reddy, 7c.; New Zealand Hay Rope, 6 1/2 @ 7 1/4 c.; New Zealand Lath Yarn, fine, 9 1/2 c., medium, 8 1/2 c. Twines—Hemp, 4 1/2 and 6 B Russia, 12c.; 4 1/2 and 6 A American, 12c.; 4 1/2 and 6 D Jute, 9 1/2 c.; 4 1/2 and 6 L Jute, 9c.; Hemp Ball, 18 B C, 17c.; 18 C, 15c.; Russian Hemp Hay Rope, 9c.

COAL.—There is a fair trade in Anthracite at New York, and no dearth of supply is to be noted. Soft coal is in demand. Philadelphia reports that trade is in excellent shape and likely to continue so. At Boston the continued cold weather is having a good effect on the hard coal market. Dealers' stocks are diminishing fast, and this is bringing some of them into the market, but they are only inclined to buy for immediate requirements. Receipts by water show a falling off on both quantities of coal, but the all rail tonnage to points heretofore supplied from here has grown.

EDWIN BUTTERWORTH & CO., MANCHESTER ENGLAND. PAPER STOCK, COTTON WASTE AND BUFFALO SIZING, WOOD PULP, MOIST AND AIR DRY PULP, SOFA AND GROUND PULP. 83 GUNNY BAGGING, &c. OFFICE IN NEW YORK: TRACT HOUSE, 150 NASSAU ST., NEAR TRIBUNE OFFICE, JAMES PIRNIE, Manager.

WATERBURY Felts and Jackets, MANUFACTURED BY H. WATERBURY & SONS CO., ORISKANY, N. Y. Adapted to every grade of paper, from the finest to the coarsest.

The Largest Manufacturers of Paper Makers' Felts in the World. Our wet machine or pulp felts are unequalled for durability. For WRITING and We warrant a felt equal to anything LEDGER PAPERS imported.

Wants and For Sale.

Twenty-five cents per line of eight words each insertion. No charge less than one dollar.

WANTED IMMEDIATELY.

PAPER MAKERS AND MEN USED TO PAPER MILL WORK.

A large corporation, about to extensively enlarge its works, in a town of 6,000 inhabitants, where there are all modern advantages of living, desires to engage sober and industrious men who will be a credit to their employers and to the community as good citizens. Weekly payments. Steady employment at all times. Rapid advancement to all worthy of it, and assistance to own their own homes will be given.

WANTED AT ONCE.

Four Machine Tenders used to fast running.

Six Second Hands, to be advanced rapidly.

Four Carpenters used to paper mill work.

One Master Mechanic.

One Boss of machine shop.

Four Millwrights used to paper mill work.

Three Lathe Men for machine shop.

Two Men capable for assistant superintendents.

The Company desires to surround itself with good, reliable men who are eager and can gain rapid advancement.

Address, in confidence, and give full particulars of experience, amount of notice to be given to present employer, &c., &c.

P. O. BOX 5139, Boston, Mass.

A FIRM IN THE WEST, HAVING A LARGE trade in paper boxes and other paper novelties, can take care of the product of a small manila mill to advantage. Send all answers to THE WEST, Care Paper Trade Journal.

WANTED - STEADY MAN TO FINISH coated papers on stack calender; steady wages expected and where last employed. REICHERT & RAMSAY, P. O. Box 505, Toronto, Canada.

WANTED - TWO MACHINE TENDERS TO run fast running news machine; good wages and steady employment to right men. ROCK, Care Paper Trade Journal.

WANTED - POSITION AS SUPERINTENDENT in a mill making book, news, manilla or writings; good references. Apply SUPERINTENDENT, Care Paper Trade Journal.

WANTED - STACK CHILLED ROLL CALENDERS with seven or nine rolls, 12 inch diameter, from 28 to 72 inch face. FLOUR SACKS, Care Paper Trade Journal.

SITUATION WANTED - A YOUNG MAN, twenty years of age, wishes to secure a position in a New York wholesale paper or stationery house to learn the business; excellent references given; refers, by permission, to the editor of this paper. E. D. A. C., Care Paper Trade Journal.

WANTED - SITUATION AS MANAGER OR superintendent of a news or manilla mill, by one who is competent; two machine mill preferred. Address E. C., Care Paper Trade Journal.

WANTED - A SECOND-HAND ROTARY boiler 7 feet in diameter, 30 to 34 feet long. Address D., Care Paper Trade Journal.

WANTED - SITUATION AS FOREMAN; understands mixing stock for all grades of paper; have had long experience making colored papers; have been foreman at one mill twelve years. Address PRACTICAL, Care Paper Trade Journal.

WANTED - TO CORRESPOND WITH ANY parties having, or manufacturing machinery to cut and polish opal and onyx in slabs. L. M. BINGEL, President Opal, Onyx Mining and Milling Co., Pullman, Wash.

WANTED - A PRACTICAL PAPER MAKER, capable of superintending a manilla paper mill, for sheet manilla and bag paper; a man with some capital to take an interest in the mill preferred. Apply EAGLE PAPER CO., 51 Leonard street, New York.

WANTED - SECOND-HAND FOURDRINIER machine, about 90 inch, with dryers. Address, with price, Box 3328, Boston, Mass.

WANTED.

Situation as superintendent of a manilla paper mill; thoroughly understands the manufacture of all kinds of manilla paper, especially rope paper for flour sacks and jute papers for grocery bags; have had large experience; am reliable and competent to manage business if desired; am strictly temperate; can give the best of references. Address RELIABLE, Care Paper Trade Journal.

WANTED.

Foreman, benterman, machine tenders, calender men and finishers; what kind of stock and machine used to; with references. BUCKEYE SUPPLY CO., Franklin, Ohio.

FOR SALE - A PAPER MILL CLOSE TO Boston, in good condition, now running; steam and water power; new steam plant put in within a year; a 62 inch and a 54 inch cylinder machines, suitable for manilla or tissue; price low, terms easy. Address I. S. DILLINGHAM, 67 Federal street, Boston, Mass.

FOR SALE - WILL SELL AT SACRIFICE, owing to ill health, pulp mill now running; orders shod; 2,000 H. P.; 1,200 acres of thickly timbered land; 1 1/4 miles from railroad; best location and water power in the State for paper mill. For further information address N. H. BURHANS, Brown's Station, N. Y.

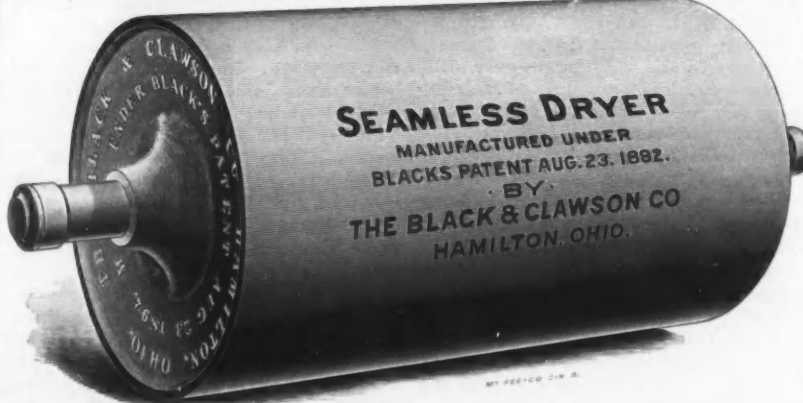
FOR SALE - ONE PAIR 27 1/2 INCH VICTOR turbine water wheels on horizontal shaft; one upright 20 inch Victor turbine water wheel. These are the best wheels made and have been in use but two years and are as good as new; will sell for one-half cost if taken at once. A. C. WILLIAMS, Chagrin Falls, Ohio.

FOR SALE - ONE SINGLE LEVER, PLATED, made by Holroyde Machine Company, HAMPDEN GLAZED PAPER AND CARD CO., Holyoke, Mass.

MACHINERY FOR SALE.

One 40 inch Fourdrinier machine complete, including eleven 28 inch diameter dryers, screens, 3 roll and 9 roll stacks of calenders, standing reel and Finlar cutter; one stack of supercalenders, 30 inch face, Holyoke Machine Co. winder; one 9 roll stack chilled iron rolls and frame, rolls 82 inch face; one 9 roll stack chilled iron rolls and frame, rolls 64 inch face; two Rice, Barton & Fales 72 inch cutters; two Hammond 72 inch cutters; two 25 H. P. engines. POLAND PAPER CO., Mechanic Falls, Me.

THE BLACK & CLAWSON CO., MANUFACTURERS OF Paper Mill Machinery,



WE MAKE THE ONLY PERFECT DRYER.

FOR SALE - ONE 48 INCH FIVE CYLINDER, 17 dryer paper machine; two heavy stacks calenders and everything complete for running board or heavy wrappings. For further particulars write C. F. U., Care Paper Trade Journal.

FOR SALE - ONE 84 INCH HARPER IMPROVED Fourdrinier, part complete, Black & Clawson make; used only three months. CRESCENT PAPER CO., Marseilles, Ill.

FOR SALE - THREE NEWLY FILLED second-hand Jordan engines and two Marshall refining engines; replaced by those of our make; for sale cheap. EMERSON MFG. CO., Lawrence, Mass.

FOR SALE - SECOND-HAND MACHINERY. One complete 62 in. Fourdrinier Machine. One Daniels Rag Cutter. One 80 in. Hammond Cutter. One 22 in. Five Roll Sheet Super Calender. Two 12 x 62 in. Press Rolls. Also the following new machinery: Two 6 in. Gun Metal Plunger Stuff Pumps. Four 6 in. Fan Pumps. One Daniels Rag Cutter. One 25 horse power Steam Engine. CLARK & SPENCER, Lee, Mass.

FOR SALE. Two Gould Screens. Have not been run much; are in first-class order. Each Screen holds eight plates, 19 x 36. APPEL TO F. W. BIRD & SON, East Walpole, Mass.

FOR SALE OR TO RENT. The Laurel Valley Mill; shipping point, Lincoln University, Chester County, Pa.; this mill is adapted for the manufacture of binders' boards; it has a 62 inch wet machine, 42 inch calender rolls, just overhauled, two 400 pound beating engines, ample water power, also 25 horse power steam engine and 40 horse power boiler, rotary boiler and other machinery; will be sold low, as owner has other business which requires all his attention. Address C. K. PETER, P. O. Box 33, Moore, Pa.

Steam and Power Pumps For Sale. Two 2 x 8 upright engines for power or hoisting. One Woodward steam pump, cylinders 14 and 7 in. One 6 x 4 x 8 Worthington. One each Nos. 2, 3, 4 and 5 Blake steam pumps. One No. 3 Deane. One No. 4 Knowles. One No. 5 Worthington single. Write for prices and further particulars to D. B. CRUCKSHANK, Providence, R. I.

FOR SALE. Great Bargain at Bridgeport Paper Mill, Bridgeport, Conn. Two large rotary boilers, with driving gears complete. One 300 horse power Hercules water wheel, with three pieces of shafting and three sets of large bevel gears. Apply to M. M. ARMSTRONG, 941 Drexel Building, Philadelphia, Pa.

FOR SALE. New nine stack chilled calenders, one 18 in., three 8 in., four 9 and one 12 in.; all 92 in. face. One Dryer, 36 x 76 inches. Four Dryers, 25 x 72 inches. Five Iron Dryers, new, 39 x 40 inches. BLACK & CLAWSON CO., Hamilton, Ohio.

NOTICE. My attention having been called to the fact that certain parties are infringing certain Letters Patent granted to me, to wit: No. 212,969, dated March 4, 1879, covering a new form of carpet lining, and No. 225,698, dated December 21, 1880, covering the method of and apparatus for making the same, this is to notify all such persons, whether manufacturers or dealers, that any infringement of either of said patents will be prosecuted to the full extent of the law. MOSES NEWTON, Patentee.

FOR SALE. One 72 in. Fourdrinier machine, 12 iron dryers, 2 stacks chilled rolls. Gould screen. One 64 in. Aerophor dampener (new). One Ross straw cutter (new). One hand power baling press, cheap. One 18x48 in. Corliss, and one 16x36 in. Harris-Corliss steam engines. One 44 in. self clamping power cutter. One 110 in. slitter and rewinder, new; will slit tissue. One 16x36 in., one 11x24 in. Putnam automatic engines. One 1,000 lb., one 800 lb., four 500 lb. beaters. One Marshall engine, newly filled. One Jordan engine, newly filled. All sizes centrifugal pumps. Three first-class rag cutters. Two ventilator fans. Water wheels, various sizes and makes. One new Loring rotary, 7x20; one first-class Loring rotary, 6x22. Shafting, Reeves wood pulleys, hangers. Send for catalogue. F. H. DAVIS & CO., Exchange Building, BOSTON.

WHERE TO LOCATE NEW FACTORIES. Is the title of a 150 page pamphlet recently published by the Passenger Department of the Illinois Central Railroad, and should be read by every mechanic, capitalist and manufacturer. It describes in detail the manufacturing advantages of the principal cities and towns on the line of the Southern Division of the Illinois Central and the Yazoo and Mississippi Valley Railroads, and indicates the character and amount of substantial aid each city or town is willing to contribute. It furnishes conclusive proof that the South possesses advantages for the establishment of every kind of factory working wool, cotton, wood or clay. For a free copy of this illustrated pamphlet address G. C. POWER, Foreign Representative, I. C. R. R., 58 Michigan Avenue, Chicago, Ill.

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BARGAINS.

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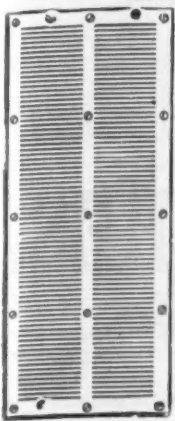
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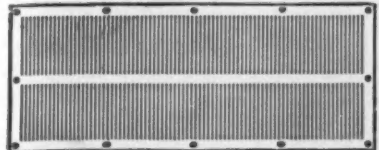
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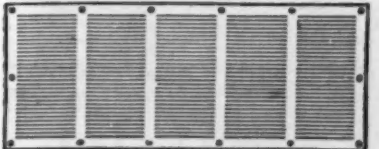


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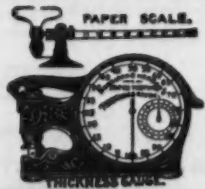


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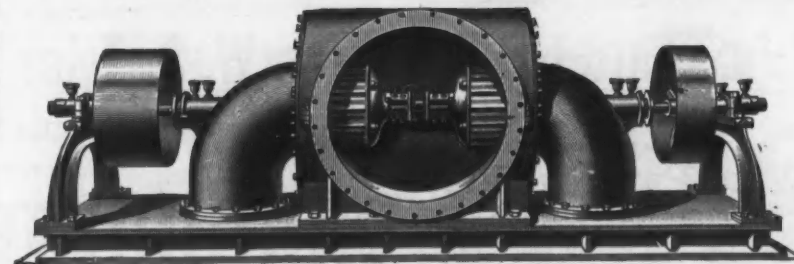
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In use in a large number of best Paper and Pulp Mills in this and other Countries.

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SIZE WHEEL.	HEAD IN FEET.	HORSE POWER.	PER CENT. OF USEFUL EFFORT.
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17 1/2 inch.	17.96	36.35	.8990
20 inch.	18.21	43.00	.8982
25 inch.	17.90	68.62	.8984
30 inch.	17.85	92.54	.8976
35 inch.	17.29	128.19	.8497
40 inch.	16.49	168.93	.8253
46 inch.	15.51	179.29	.8272

Such results, together with its nicely working gate and simple, strong and durable construction, should favorably commend it to the attention of all discriminating purchasers.

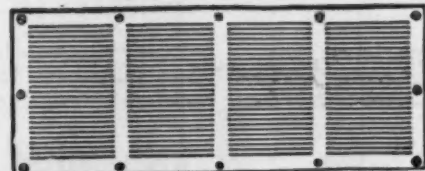
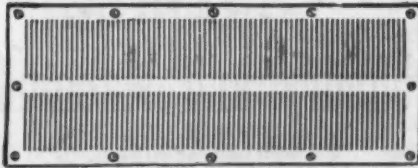
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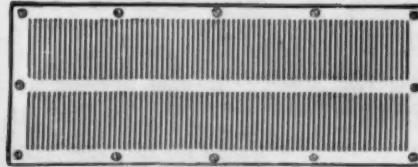
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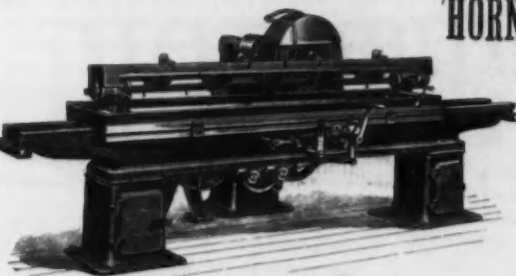
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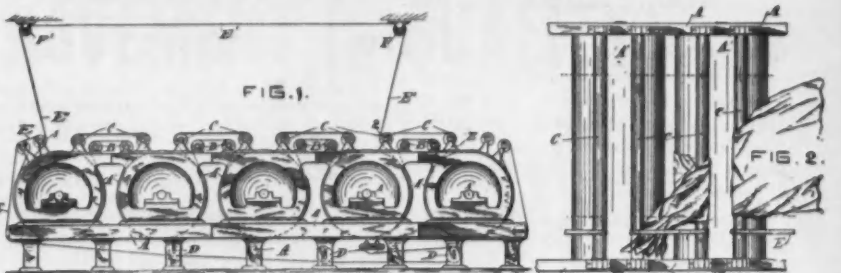
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Manufacturing News.

EASTERN STATES.

The paper machine of the National Metal Edge Box Company, Readsboro, Vt., is making 13 tons of boiled wood pulp board daily. Moses Newton, of Holyoke, is president; Benjamin Wolf is treasurer of the company, and Robert Stevens is superintendent of the mill.

Two carloads of paper mill machinery have been received for Robbins & Eaton's new mill at Lee, Mass.

The chimney of the new Otis Falls (Me.) pulp mill on the Androscoggin will be 185 feet high, 20 feet brick, the remainder steel. One of the largest paper machines in the world is being put in at this plant. A sulphite mill and another paper mill will be built in the near future.

The Agawam Paper Company, Mittineaque, Mass., is to build another stock-house. The dimensions will be 30x150 feet.

It is understood that the sale of the old Curtisville (Mass.) pulp mill property by the Stockbridge Savings Bank to M. Truesdell's Sons for \$4,500 closes out the bank's interests there. This property was formerly valued at \$15,000, but the mill and dam have stood idle for years and rotted down so that present values are in the land and water privileges alone.

MIDDLE STATES.

The Ticonderoga Machine Company, Ticonderoga, N. Y., has received an order from the Bangor Pulp and Paper Company, Bangor, Me., for two of its Ticonderoga balanced sectional diaphragm screens.

John E. Waller, owner of a pulp mill located on the outlet of Skaneateles Lake, N. Y., claims \$1,053 for damages for loss of water power for seventy eight days last spring by reason of detention by the State of the flow of water from the lake.

One of the water wheels in Howland & Co.'s mill, Sandy Hill, N. Y., broke last week, resulting in a shut down in the addition to the paper mill and the new bag factory for a day.

The United Paper Company, of New York city, has purchased the tissue paper mill at Greenwich, N. Y. The superintendent, Frank E. Field, has been retained, and the manufacture of manilla tissue paper will be continued.

The Wyoming Valley Paper Mill, Pittston, Pa., has been wired for electric lighting. The entire building will be thoroughly lighted, about 100 incandescent lamps being required.

A Camden water wheel, to develop 150 horse power, has been put in at O. E. Martin's pulp mill, Norwood, N. Y.

Robbins & Ebert have started a paper box factory at Shenandoah, Pa.

WESTERN STATES.

The Lane Tissue Paper Company, Elkhart, Ind., has been made a joint stock company. J. C. Lane, Oscar Randolph and Clayton Randolph being the incorporators and stockholders.

The strawboard mill at Ellsworth, Ind., had to shut down last week for want of coal.

The Vandalia Paper Mill, Vandalia, Ill., has been bought by the Columbia Paper Company.

The Eagle Paper Company will build a pulp and paper mill at Greentown, Ind. The company is capitalized at \$100,000, and the mill will be in operation by May 1. The stockholders are Milton Bell, A. F. Armstrong, E. A. Armstrong, J. C. Blackledge, F. Elliott, George W. Landon, Monroe Seiberling, A. A. Covalt and C. J. Larry, of Kokomo. The first named is president and the last named superintendent. The mill will manufacture straw, manilla and rag papers, bags, &c. The contract for the buildings has been let. A well for natural gas is being drilled.

A paper mill is to be built at Evert, Mich. It is expected that a paper mill will be put up at Pueblo, Col.

The Western Strawboard Company is erecting extensive works at Gas City, Ind. The mill is to cost \$100,000, and will produce 15 tons of strawboard a day. Curtis S. Barrett is president of the company and O. S. Jacobs manager.

The machinery is being set up at the new pulp mill at Mineral Point, Wis., and will soon be ready to start up.

The Sheffield Velocipede Car Company, Three Rivers, Mich., has shipped two more of its Millard improved noiseless pulp screens to the Cliff Paper Company, Niagara Falls, N. Y., making three which that company will have in use.

James E. Burke and the Bulletin Printing Company, a recently incorporated firm, have started a paper box factory at Anderson, Ind.

SOUTHERN STATES.

The Mathieson Alkali Works are to be established at Saltville, Va. A company with ample capital has been formed to build a soda ash and bleach plant. The product will amount to 50,000 tons of soda ash and bleach per annum.

A 6 ton paper mill is to be built at Randolph, Mo.

A new paper box factory, which will turn out about 2,000 boxes per day, has been started at Middlesboro, Ky.

CANADA.

Hon. George West, Hon. Warner Miller, Hon. Smith M. Weed, Hon. H. C. Burleigh, Hon. H. H. Warner and others have purchased a tract of land containing 128,000 acres, situated about 200 miles from Quebec, on the St. Lawrence River, and are now negotiating for the purchase of another tract of 200,000 acres. The timber will be converted into wood pulp.

Obituary.

F. P. ELLIOTT.

F. P. Elliott, senior member of the firm of F. P. Elliott & Co., Chicago, died on Tuesday, January 10. He left his place of business on January 2, complaining of feeling chilled. The next morning he was taken with a severe chill, but a physician was not called until the next day. The physician at once pronounced the disease to be pneumonia, but did not regard the symptoms as alarming. No uneasiness was felt by his family and friends until Sunday afternoon, January 8, when he was taken worse. Early on Monday morning he became unconscious and at 12:10 o'clock on Tuesday morning his struggles ended.

Mr. Elliott was one of the pioneer paper dealers of Chicago. He was born at or near Worcester, Mass., fifty-eight years ago. In 1854 he went West and entered the employ of Bradner Smith & Co. as bookkeeper. In 1857 he became associated with C. Cornwell in the paper business, under the firm name of Cornwell & Elliott, on Dearborn street, where Geo. E. Cole & Co., stationers, are now located. Two or three years before the great fire Mr. Cornwell withdrew from the firm and Mr. Elliott merged the business with that of Bradner Smith & Co.

In July, 1875, he withdrew from Bradner Smith & Co., and established business on Randolph street in the name of the Ypsilanti Paper Company. In January, 1877, the firm was changed to F. P. Elliott & Co., which name it retained until the present time. Mr. Elliott leaves a widow and two children—a son and daughter. The funeral took place on Thursday, January 12, at his late residence, 141 Oak Park avenue.

Mr. Elliott was esteemed by those who were close to him, either in a social or a business way. His integrity was unquestioned, while his business methods tended to conservatism. He was regarded by the trade as a clear and level headed business man.

At a meeting of the members of the Chicago Paper Trade, called to take action on the death of Mr. Franklin P. Elliott, representatives from all the trade being present, M. J. Fitch was chosen chairman and W. C. Gillett secretary.

After remarks by the president and several others present, upon the sudden death of Mr. Elliott and upon his estimable character and worth, a committee consisting of J. W. Butler, A. T. Hodge and T. F. Rice was appointed to embody in resolutions expressions of sympathy and condolence to his family and business associates.

The resolutions accepted and adopted by the meeting are as follows:

WHEREAS, We are again called together to pay a tribute of respect and mourn the loss, by death, of an esteemed member of the paper trade fraternity of this city, Mr. Franklin P. Elliott,

Resolved, That as a man and a merchant he has left us a worthy example of integrity and honor in all his business transactions, which should inspire us to maintain his commendable business traits of character and sturdy manhood.

Resolved, That we tender our sympathy to the surviving members of his business firm in this sudden loss of so wise a counselor, who has gained a position in the front ranks of the paper trade of the West.

Resolved, That our earnest sympathy is also extended to the family of our deceased friend, in this their hour of sore bereavement.

Resolved, That as many of us as can will attend the funeral.

Resolved, That the secretary be instructed to send a copy of these resolutions to the family of the deceased, to his business partners, and also to THE PAPER TRADE JOURNAL.

Charles Milton Roger, merchant, died suddenly December 31, at his home on Village avenue, Dedham Centre, Mass. He was for many years superintendent of the Howland Falls (Me.) Pulp Company. He was born in Orleans, Mass., May 24, 1842. A widow and one son survive him.

Daniel Clemans, of the firm of Hanna & Clemans, of the Fulton Paper Mill, at Wheeling, W. Va., died recently, aged fifty-nine years. He had been identified with the paper business for twenty years.

Estelia Marshall, wife of Frank Squier, of Perkins, Goodwin & Co., and daughter of

the late Rev. Joseph D. Marshall, died at her residence, No. 39 Ninth avenue, Brooklyn, N. Y., on Wednesday morning, January 11. Mrs. Squier had been sick for quite a long period, but her death was none the less

sudden. The news of her demise will carry a shock to a very wide and devoted circle of friends, and Mr. Squier will have the heartfelt sympathy of those who know him, both in and out of the trade.

Joseph A. Nagle, bookseller and stationer, Corpus Christi, Tex., is dead.

John P. Spaulding, bookseller, &c., Rutland, Vt., is dead.

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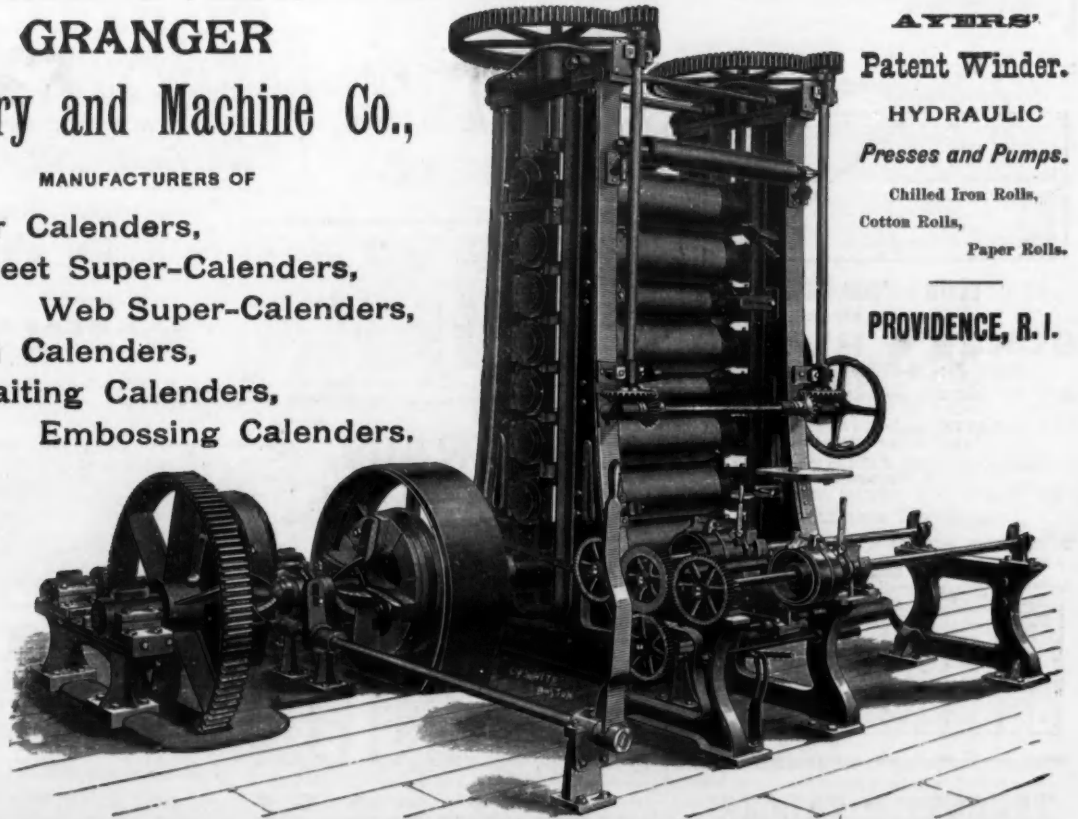
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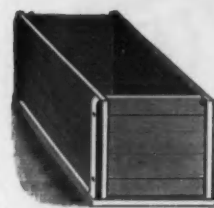
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A Glass Valve, non-corrodible and impenetrable. Especially Constructed to resist the effects of adhesive corrosion or sediment both inside and outside the Sprinkler. A Positive Force, peculiar to the GRINNELL, and more effective than 200 pounds water pressure, severs the valve from its seat, when the solder melts, and thus overcomes the acknowledged danger of adhesion.

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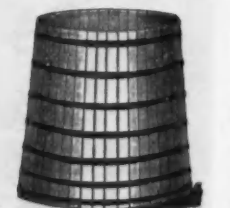


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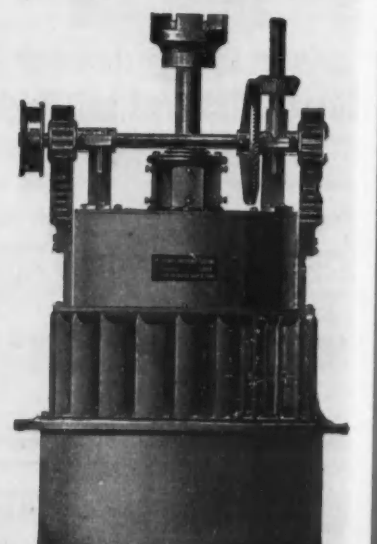
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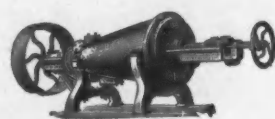
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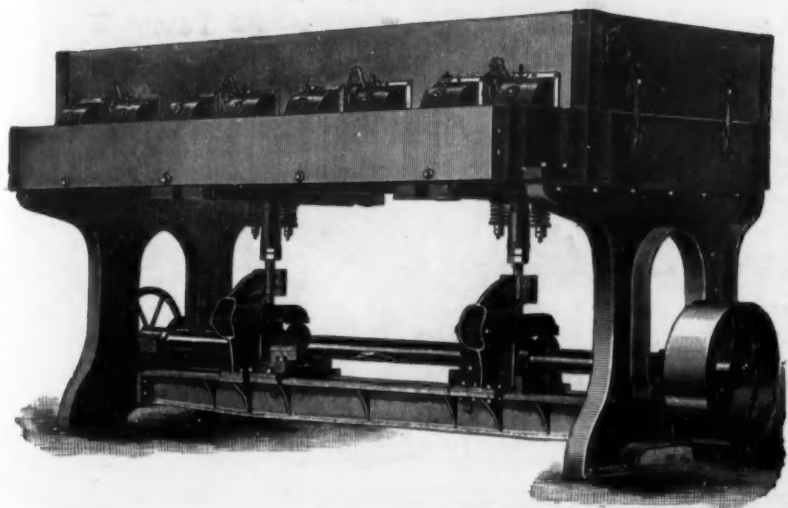
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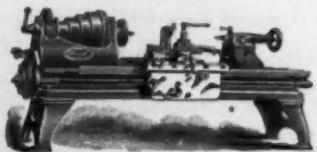
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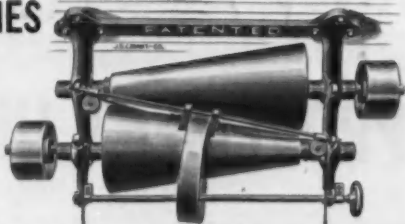
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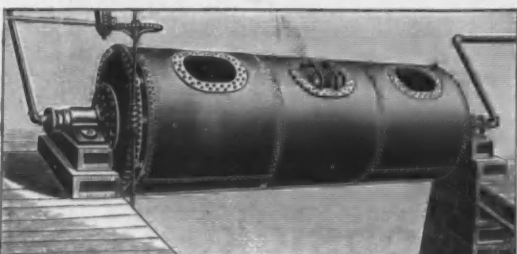
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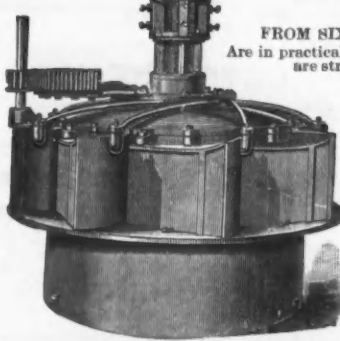
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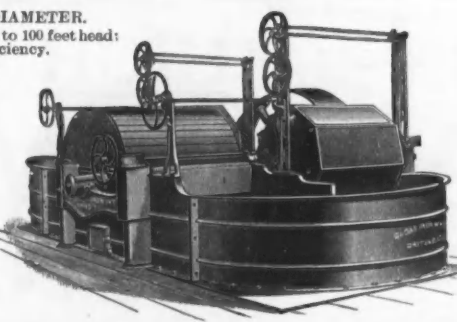
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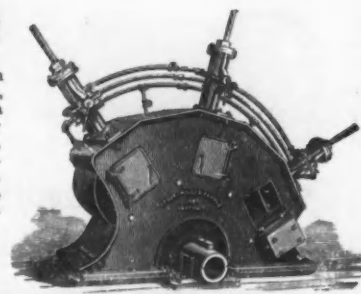
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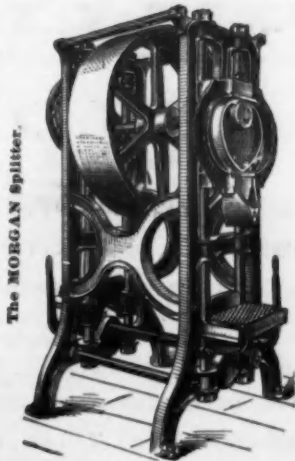


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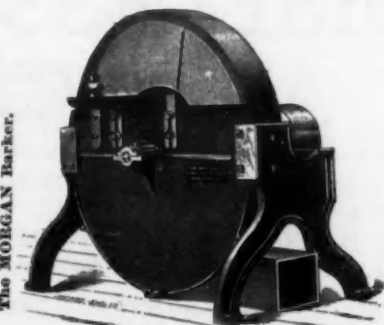
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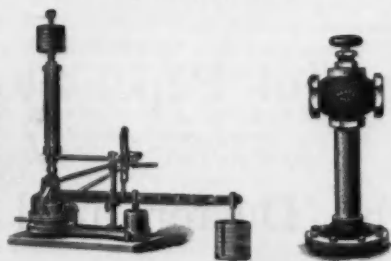
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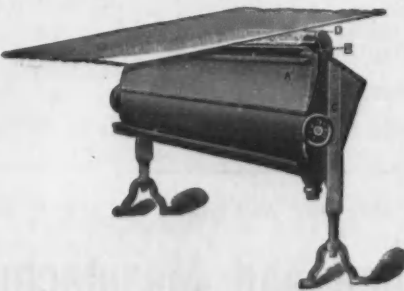
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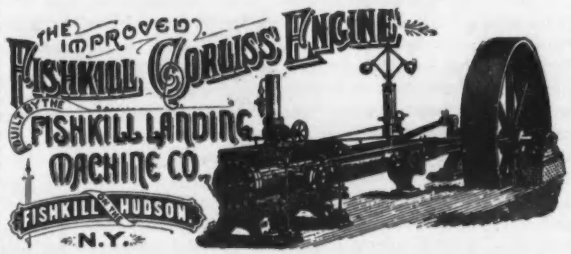
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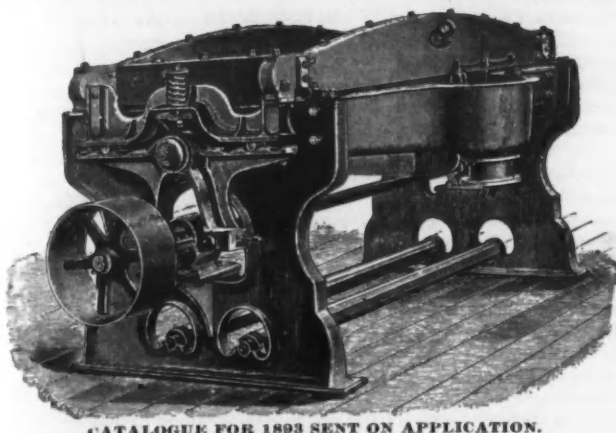


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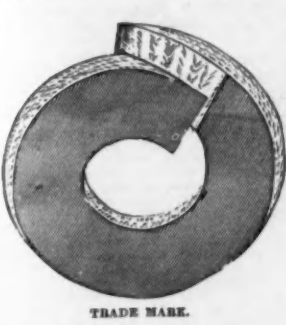


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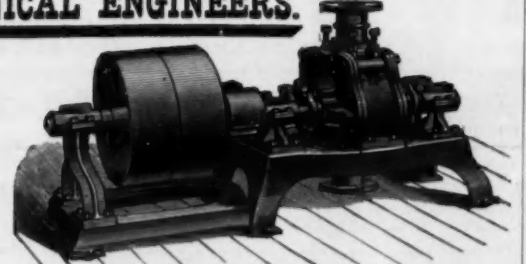
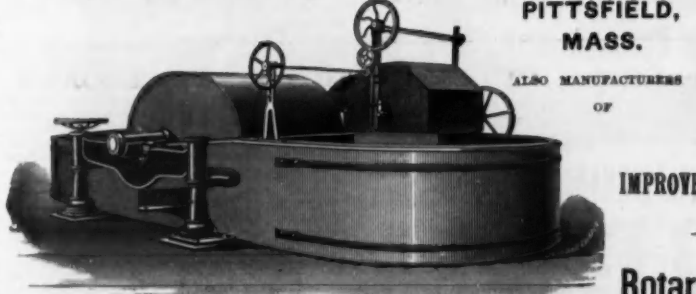
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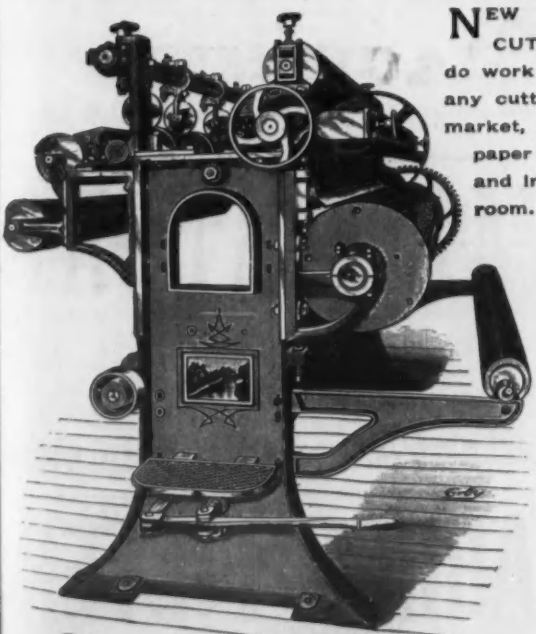
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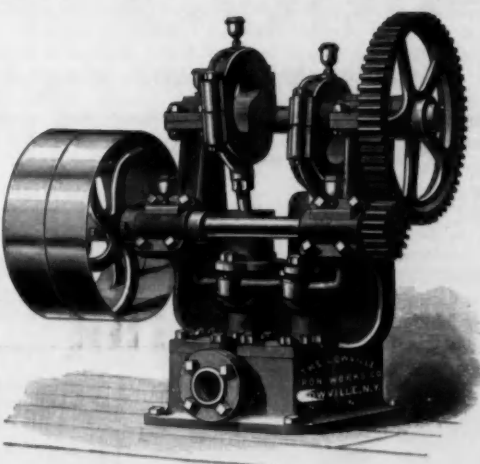
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 Samples and quotations on application. Shipping facilities to any port in the United States.
DUNDEE, SCOTLAND.

The Columbian Exposition.

ALLOTMENT OF SPACE.

Considerable complaint is heard among manufacturers of the management of those having in charge the allotment of space in the department of the Columbian Fair devoted to manufactures. Manufacturers state that they filed their applications for space as early as they were called for, and that since that time they have repeatedly asked for information, but have been unable to get any satisfaction. In order to show how manufacturers in the stationary line are feeling, the following interviews with several are given:

Emil Berolzheimer, president of the Eagle Pencil Company, said: "We put in an early application for space, but up to date we have no information that we are to have that application acted on favorably. We wrote about the matter in the summer, and in reply were told that the allotment would be made in October, I think. It was not made, and in reply to another letter, we were told that it would be made immediately after the opening of the new year, but we are yet in the dark. It is required that goods intended for exhibition shall be on the grounds by April 1, which will give them thirty days to arrange exhibits, as the fair is to be opened May 1. It is now so late that I do not believe we will exhibit. We do not want to make an exhibit unless it is to be in every way creditable. We have not now the time to get up such a display as we would want. It seems very strange that even at this late day manufacturers cannot find out just where they stand in the matter."

Ivan Von Auw, of Liebenroth, Von Auw & Co., said: "We have withdrawn our application for space and shall not exhibit. We had intended to make an elaborate display, had special designs drawn of our cases &c., but it has been utterly impossible for us to find out from the management of the fair whether we were to have any space or not. Some time ago a list of those to whom it was said space had been granted was published. Our name was in the list, and we thereupon wrote for official information. The answer was that no paper had authority to publish the list and that the allotment had not been made. It would take a good deal of time to get our display ready, and as it is now too late we have formally withdrawn our application. I know of one house which intended to spend a great deal of money in getting up its exhibit, but it has had to abandon it, as it cannot ascertain whether it is to have any space at all. Our application was filed as early as it was possible to file it, but we have never received a letter which was in any way satisfactory. It looks to me as if there was an unjust discrimination being made against Eastern manufacturers in favor of Western manufacturers. Well, if they propose to have a fair with the products of Eastern manufacturers omitted, they can go ahead, and we will see what the result will be."

E. E. Huber, of Eberhard Faber, said: "We put in an application for space, but have now withdrawn it and will not exhibit. We should have made a fine exhibit, but the space which we understand was allotted to us was 15 feet against a wall and was of no use to us. Under the circumstances we have declined to use it."

W. C. Horn, of Koch, Sons & Co., said: "We had intended to exhibit, but up to the present time we have had no space allotted to us and, as you know, we have a man in Chicago all the time. We had designed special cases in which to place our display, but it is now too late to have them made. Everybody is in the same position, and when houses are informed what space they have and are ready to build their cases, there will not be showcase factories enough to turn out the goods. As a business venture the display would be of no service to us, but out of pure patriotism we were willing to go to some expense to make our part of it creditable. Of course if others in our line are not going to exhibit we will not,

but we would like to show our goods in competition with those of other houses."

E. W. Williams, of the Ives, Blakeslee & Williams Company, said: "I have just returned from Chicago. I got space for our exhibit, but had to fight for it. For every thousand square feet of space which are available there are applications for 5,000 square feet. The management of the fair has a big contract on its hands. It is an immense task, but they are working hard and doing well."

Eltweed Pomeroy, partner in the house of Pomeroy Brothers, makers of ink, mucilage, sealing wax, &c., and president of the Pomeroy Duplicator Company, Newark, N. J., said: "Over a year ago I made an application on behalf of Pomeroy Brothers, and also in behalf of the Pomeroy Duplicator Company, for space at the world's fair. These applications were among the first that were entered, as our number was between 1,400 and 1,500. The receipt of the application was duly acknowledged and the authorities requested us to forward drawings of what we intended to put in. Elaborate drawings were therefore made for the exhibit of Pomeroy Brothers', with bottles 5 feet high, expensive signs, &c. It was fully explained that the Duplicator Company's exhibit would consist of one or two machines worked by operators on the spot. These drawings were acknowledged as satisfactory. I was in Chicago in July and September and called in at the office of the world's fair and was told each time that the space would be awarded very soon, and the last time it was promised us for not later than the last of September. I wrote about it in September, in October, in November and again in December, but each time was informed that no space had been allotted in my class. The last time I made it very urgent, telling them it would be impossible to get up the exhibit we had planned for Pomeroy Brothers unless we secured the space immediately. According to the rules the exhibits must be on the ground by April 1, and nothing is to be brought in after that date. To get the goods through by the date named would

necessitate shipping them by the middle of March, and this, of course, leaves us barely two months in which to prepare and make ready our exhibits. We had planned to spend about \$1,000 on each exhibit, but of course could not go ahead, get the cases, &c., ready unless we were sure of the space. We have therefore decided to make very simple exhibits, if any at all, as it is impossible to do anything elaborate in the time given. We do not appear, however, to be the only ones having reason to complain of such treatment, for I find that a number of houses are in similar uncertainty. I understand, for example, that Colgate, of the big soap house, has withdrawn his application and that Leroy Fairchild, the pen manufacturer, has almost decided to make no exhibit, and one cannot help feeling that there is an intention on the part of the world's fair management to shut out Eastern manufacturers and give others the preference, or else there is gross carelessness somewhere. I understand that a number of foreign manufacturers were awarded space by representatives of their respective Governments long ago, and this, too, in similar lines to our own. Is not this permitting discrimination against American manufacturers?"

Delivery in Sales of Goods.

[WRITTEN FOR THE JOURNAL.]

Delivery of the goods sold is generally the first thing to be done on the completion of a contract of sale, after the purchaser has performed any conditions precedent incumbent on him, and it is a very important matter in many respects. Of course what is here meant by delivery will be understood to be such an act under a contract of sale as will satisfy the law and exonerate the seller in that regard. It may be actual, symbolical or constructive delivery.

A symbolical delivery occurs in such a case, as where the key to a room or building containing the goods is handed to the purchaser with intent thereby to deliver

the goods themselves. Constructive delivery usually occurs where the nature of the property is such, or it is in such a place, that actual delivery is at the time impossible. Then it is sufficient if such delivery be made as the circumstances will permit. Illustrations are found in very bulky or heavy articles, logs in a boom, or goods at sea.

As a rule the delivery is sufficient and title is vested in the purchaser if the contract of sale is completed and the property sold is set aside, or deposited, or marked as sold, at the request of the purchaser, who may take manual possession thereof at any time when he desires to do so; especially is this true where he has paid the price. In other words, that is a sufficient delivery which puts the goods within the actual reach or power of the buyer, with immediate notice thereof to him.

Unless otherwise specified in the contract of sale, the place where the article is manufactured or offered for sale, as the case may be, is the place of delivery. Where the buyer lives at a distance from the seller, he must send the goods as directed by the buyer, or if no directions are given, then as usage or reasonable care would suggest, taking all customary and proper precaution to prevent loss or injury in transit. In such case delivery to the carrier is delivery to the purchaser in contemplation of law if the goods are consigned to the purchaser, otherwise if consigned to the seller and he retains the bill of lading. But under a contract of sale whereby the seller is to deliver the goods at a particular place the carrier selected by him is his agent to deliver, for whose acts he must be responsible. And when goods are contracted to be sold upon condition that they shall be delivered at a particular place, they are subject to attachment at the suit of the creditors of the seller until they are so delivered.

Where a time is agreed on for the delivery to take place it must be at that time. Until the time for their delivery arrives, goods are subject to the attachment of creditors of the seller. Shipment before

the time specified will not pass title. If no time is mentioned in the contract of sale, a reasonable time will be understood to be meant. And if there are conditions precedent to be performed by the purchaser,

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—BY—

R. B. GRIFFIN and A. D. LITTLE.

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OCTAVO, ABOUT 550 PAGES.

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CONTENTS.

INTRODUCTION.

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General Chemistry.—With a short account of each element and its principal compounds; source, manufacture and properties of such compounds as are used in paper making.

PART II.

CHAPTER I.—Cellulose.—Its chemical and physical properties, chemical relations and reactions.

CHAPTER II.—Fibres. Cellulose in its relation to the plant; the vegetable cell; the cell wall; changes which occur in the cell wall; lignin or incrusting matter; its chemical properties; characteristic markings of the cell wall in different fibres; measurements and characteristics of fibres in different pulps. Classification of fibres: 1. Seed hairs; cotton, chemical and physical character of fibre, dimensions, analyses. 2. Bast fibres, as linen, jute, hemp, manilla, reed, ramie, agave, sisal, abaca, etc.; occurrence in plant, separation of filaments; character, size, distinguishing features of filaments and ultimate fibres, analyses and chemical properties. 3. Fibres and other cells from whole stems and leaves, as straw, sepiaria, bamboo; measurements and characteristics of fibres, yields, analyses; characteristic cells found with fibres. 4. Wood fibres: growth of wood; cambium layer; spring and autumn wood; sap and heart wood; resins; bark and knots; analyses of woods; specific gravities; ash; fuel values; occurrence and character of all woods used for pulp making.

CHAPTER III.—Processes for Isolating Cellulose. Rag boiling; special treatments for various fibres, as jute, straw, sepiaria; review of miscellaneous processes for treating wood; the water process, soda process, etc.; the soda process, history; preparation of liquors, boiling, washing, recovery, sources of loss; analyses of chemicals and liquors; the sulphite process, history; general principles; the different systems; liquor apparatus; preparation and analyses of liquors; digesters; linings; boiling; subsequent treatment of pulp; waste liquors; recovery. The sulphite and sulphate processes.

CHAPTER IV.—Bleaching. General principles; bleaching agents; bleaching powder; deterioration; analyses; preparation of bleach liquors; use in chests, engines, drainers; hot bleaching; acid bleaching; use of alum; chlorination and oxidation of fibre; washing stock, antichlor; loss in bleaching; ozone bleach; hydrogen peroxide; permanganate; sulphuric acid; special processes for various fibres.

CHAPTER V.—Sizing and Loading. Rosin; preparation of size; free alkali; free rosin; alum; analyses of alums; free acid; basic alums; sizing power; rosinate of alumina; moss; casein; wax; starch; animal sizing; preparation and use; drying; loading; analyses of clays, agalite, pearl hardening, &c.; use; retention; ash; combined water; effect of alum and starch.

CHAPTER VI.—Coloring. Mineral colors; vegetable and animal colors; aniline colors; chemical properties; effect of alum and traces of bleach or alkali in different colors; distinguishing tests; effect of different waters.

CHAPTER VII.—Water and Water Supply. Character and analyses of different waters; ground waters; surface waters; river waters; artesian well water; hard and soft waters; boiler scale; effect of waters on size and colors; various systems of filtration; use of alum; softening water; self purification of streams; natural filtration; effect of storage; vegetation in ponds; crenothrix; consumption of bleach by waters.

CHAPTER VIII.—Chemical Analysis. Description of apparatus and methods for testing the purity and strength of all paper making chemicals, colors, &c.; common impurities and adulterants given; full description of methods of analysis for sulphite and soda liquors, bleach solution, alums, &c.

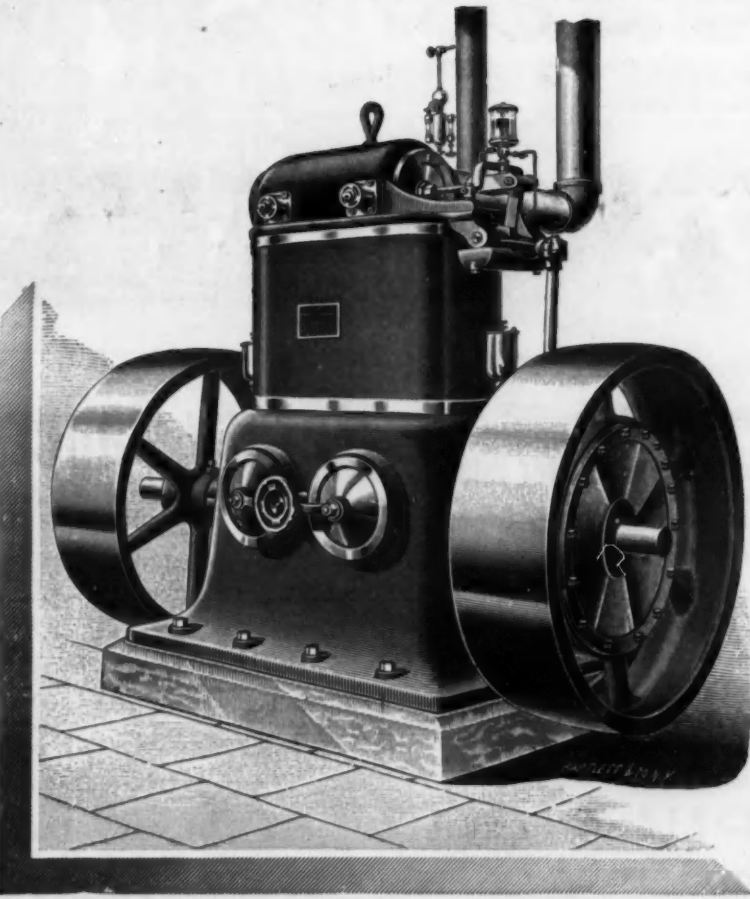
CHAPTER IX.—Paper Testing. Full account of the latest German methods for testing and classifying papers; determination of ash; kind of sizing; amount of sizing; free acid and chlorides; strength; proportion of ground wood; kind and condition of fibres.

CHAPTER X.—Electro-Chemistry, with reference to bleaching, manufacturing of pulp, manufacturing of chlorine and soda.

APPENDIX.—Metric system; tables of specific gravities; strength of solutions; list of sulphite patents, &c.

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they must be performed before the seller will be obliged to make delivery.

Many of the principles underlying this subject are very clearly set forth in the leading case of *Bloxam v. Sanders*, in which it is stated that where goods are sold, and nothing is said as to the time of delivery or the time of payment, and everything the seller has to do with them is complete, the property vests in the buyer, so as to subject him to the risk of any accident which may happen to the goods, and the seller is liable to deliver them whenever they are demanded, upon payment of the price; but the buyer has no right to have possession of the goods till he pays the price. The seller's right in respect to the price is not a mere lien which he will forfeit if he parts with the possession, but grows out of his original ownership and dominion, and payment or a tender of the price is a condition precedent on the buyer's part, and until he makes such payment or tender he has no right to the possession.

If goods are sold upon credit, and nothing is agreed upon as to the time of delivering the goods, the purchaser is immediately entitled to the possession, and the right of possession and the right of property vest at once in him; but his right of possession is not absolute, it is liable to be defeated if he becomes insolvent before he obtains possession. If the seller has dispatched the goods to the purchaser before he has paid for them and insolvency occurs, he has a right, in virtue of his original ownership, to stop them in transitu. Why? Because the property is vested in the buyer, so as to subject him to the risk of any accident; but he has not an indefeasible right to the possession, and his insolvency without payment of the price defeats that right. And if this be the case after the seller has dispatched the

goods, and while they are in transitu, by so much the more is it where he has never parted with the goods and where no transitu has begun.

A failure to deliver goods at the time and place agreed on will justify the purchaser in refusing to accept them at all. Where delivery is in parcels or at different times, but the whole is not delivered, the purchaser may return the part delivered. The seller cannot compel the purchaser to accept a less quantity than his contract calls for, but if he fails to make delivery according to contract, he can recover for what he has delivered, less the damage sustained by the purchaser, unless the latter restores to the seller what has been delivered. So if a greater quantity of goods than the contract specifies are tendered or delivered the purchaser may refuse to receive them, or more than he purchased.

Purchase of goods without delivery thereof leaves the apparent title still in the former owner. Consequently, where a person bought an article, paid for it, and its delivery at another date and place was agreed on, and the former owner on the same day sold it to another person, it was held that there was no such delivery to the first purchaser as to pass title and protect him against an innocent second purchaser.

Judge Lacombe in the United States Circuit Court has denied the motion and vacated the stay in the suit of George P. Rowell against Postmaster Cornelius Van Cott. The stay restrained the defendant from paying over to the United States Treasury \$6,967.56, which the plaintiff alleged he paid in excess of the legal postage on his periodical, *Printers' Ink*. Mr. Rowell's contention is that the paper should be admitted to the mails as second-class matter. Judge Lacombe filed no opinion.

Waste of Coal.

Consider briefly some of the wastes in the use of steam, supposing we have prevented all the waste that we can on the steam boiler. The first waste is due to radiation from the steam pipes. The following shows how much horse power may be lost from uncovered steam pipes:

Two inch pipe, 1 horse power lost for 132 feet long, uncovered, 75 pounds pressure; 4 inch pipe, 1 horse power lost for every 75 feet long, uncovered, 75 pounds pressure; 6 inch pipe, 1 horse power lost for every 46 feet long, uncovered, 75 pounds pressure; 8 inch pipe, 1 horse power lost for every 40 feet long, uncovered, 75 pounds pressure; 12 inch pipe, 1 horse power lost for every 26 feet long, uncovered, 75 pounds pressure. In the steam engine itself the wastes are numerous. First, that due to condensation of the steam as it enters the cylinder. This may cause a waste of anywhere from 10 to 50 per cent., or even more of the whole amount of steam used. Second, is the waste in engines which are overloaded, due to the exhausting of the steam at too high a pressure. Third, the waste in high pressure engines which are not loaded heavily enough, by exhausting the steam below the atmospheric pressure, and requiring the engine itself to do the work of pushing this low pressure steam out against the pressure of the atmosphere. This cause of waste becomes a very serious one in high pressure, non-condensing compound engines. The last two named sources of waste can be prevented as much as is possible only by properly proportioning the engine to the work to be done. If the engine is to be run at a uniform load the expansion of steam should be carried in it to such a point that the steam when exhausted will be at or near the back pressure

in the cylinder. Cylinder condensation has never been entirely prevented, but as we know its causes we can modify them to a great extent. Too short cut-off involves expansion in high pressure engine extending below the atmosphere, but also increased cylinder condensation. We therefore in high pressure engines find that the maximum economy is obtained in single cylinder engines when the cut-off is between one-quarter and one-fifth of the stroke. Earlier cut-offs and later cut-offs both give worse economy. If we wish to economize steam still more than we can do in the single cylinder engine, we must use a compound engine, and to get the maximum economy attainable with present practice we must expand the steam in three cylinders, beginning with steam of about 160 pounds pressure or upward, and expanding from sixteen to twenty times. The range of wastes in the steam engine may be understood from the following table, showing what may be expected to be the water consumed per horse power per hour in different types of engines:

Common direct acting pump, 100 pounds and upward.
Old style, slow speed throttling engine, non-condensing, 45 pounds and upward.
Modern high speed automatic cut-off, 30 pounds and upward.
Compound high speed automatic cut-off 22 pounds and upward.
Corliss single cylinder high pressure, 20 pounds and upward.
Corliss single cylinder high pressure condensing, 18 pounds and upward.
Corliss single cylinder high pressure compound condensing, 14 pounds and upward.
Corliss single cylinder high pressure triple expansion condensing, 12½ pounds and upward.

This shows that the best triple expansion engine will use only one-eighth of the amount of steam used by one of the worst type of engine, and less than half of the steam that is used by what is considered to be a first-class engine in ordinary stationary practice. All the consumption of steam in excess of 12½ pounds per hour per horse power may be considered to be a preventable waste, but as triple expansion and compound engines are very expensive, the interest on their cost and the increased cost of maintenance may in certain conditions and certain localities be more than the saving in fuel. Generally it will pay to put in a triple expansion engine in all cases where the power required is over 500 horse power and the time of maximum service is more than ten hours a day. For smaller horse powers, and for time of maximum load less than ten a day, it will generally pay to use such an expensive engine. If we take the engine which uses only 12½ pounds of water per horse power per hour, and estimate that for every pound of water taken into the boiler there is added to it 1,100 units of heat to convert it into steam of the desired pressure, this gives 13,750 heat units required per indicated horse power per hour.

As a horse power per hour equals 1,980,000 foot pounds of work, and this divided by 772, the mechanical equivalent of heat, gives only 2,569 heat units per hour theoretically required to produce 1 horse power, we have therefore as the efficiency of this engine in relation to the heat in the steam used = $2569 \div 13750 = 18.68$ per cent. If we have a boiler which gives 75 per cent. efficiency, then the combined efficiency of the boiler and engine is $18.68 \times .75 = 14.01$ per cent. So that in the best modern type of engine we obtain only one-

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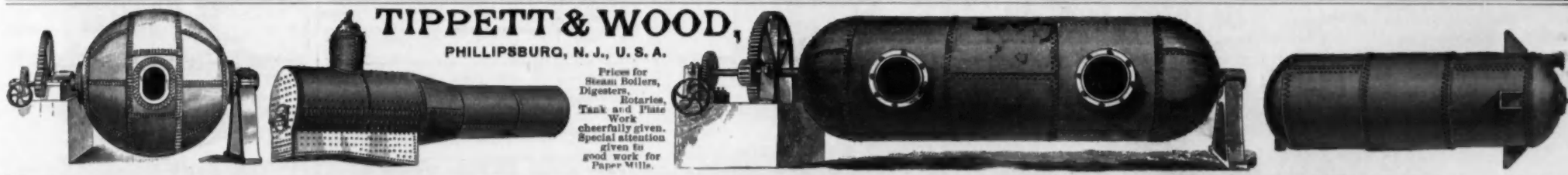
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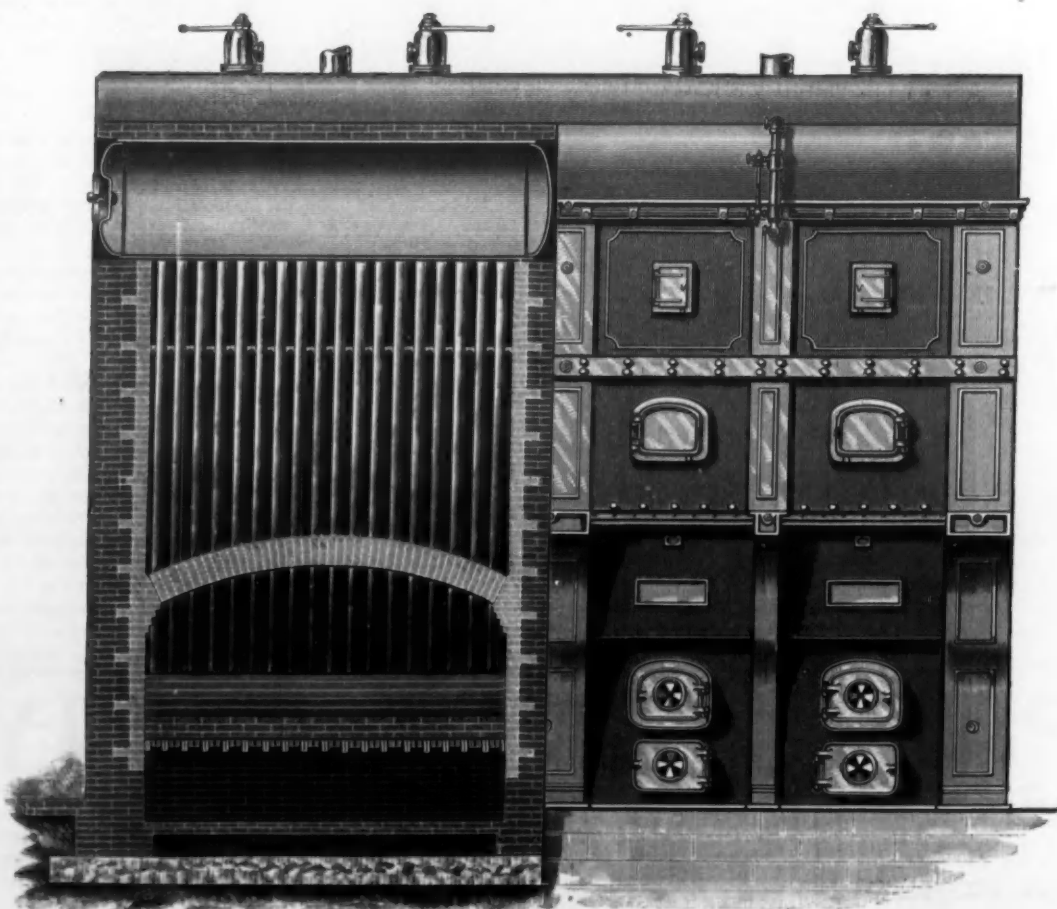
seventh of the heating value of the coal used; the other six-sevenths are absolute waste, but, as far as our present knowledge extends, they are non-preventable. There does not seem to be any possibility of greatly reducing the waste in the steam engine so that its consumption will be less than 12½ pounds per hour. In all steam engines we must throw away either hot steam, as in high pressure engines, or a vast volume of hot water, as in non-condensing engines, and in the latter case there

The Stirling Water Tube Steam Boiler.

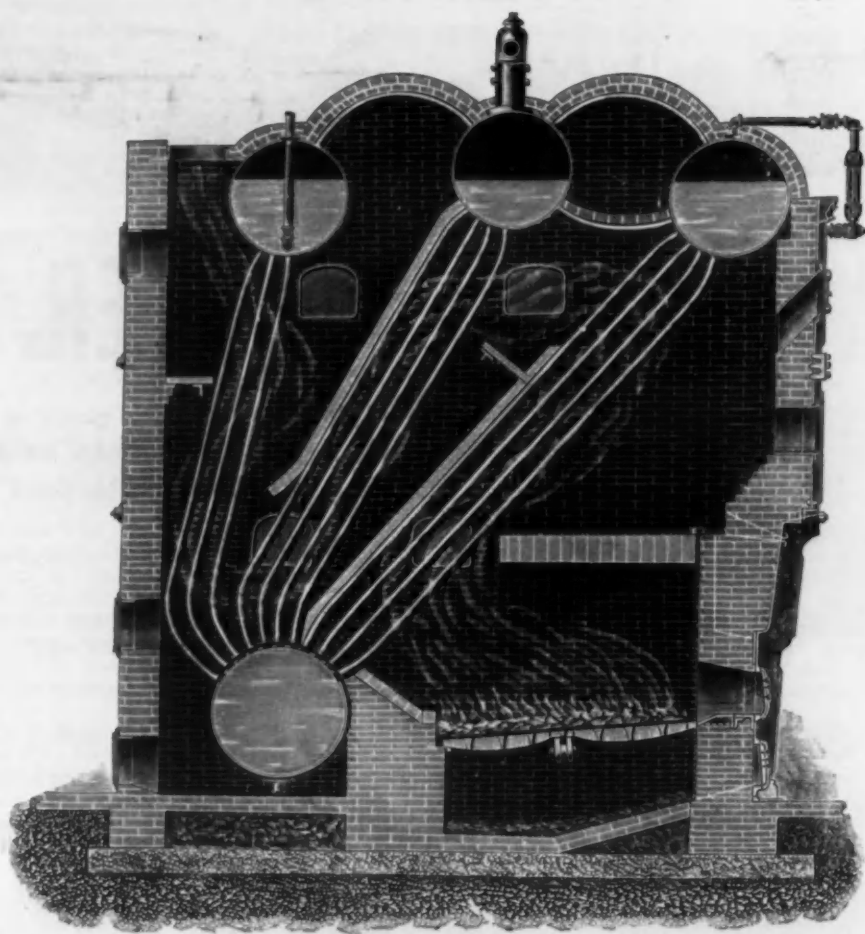
The older forms of fire tube boilers are found in a good many instances to be less efficient and considerably more dangerous than the types of water tube boilers, which are of late coming into such general demand.

On this page of THE PAPER TRADE JOURNAL there is illustrated the Stirling high pressure water tube boiler, which is rapidly com-

person in charge, although it affects the owner, because it requires less time to clean the boiler, and "time is money." Water is fed into the rear upper drum, and in its passage to the mud drum below it comes in contact with the ascending gases and becomes heated to a temperature of over 300 degrees. At this temperature the lime, magnesia and other impurities are separated from the feed water and deposited in the comparatively cool mud drum, where they are blown off. As a result the two front



STIRLING WATER TUBE STEAM BOILER.



STIRLING WATER TUBE STEAM BOILER—SECTIONAL VIEW.

is no known way of recovering the heat from the water that we throw away so as to use it again in the engine. It may be left for the next century to discover some way of obtaining mechanical energy from coal without the intervention of the steam engine, but at present there seems to be no prospect of such an invention.

The preventable wastes, however, are those enormous wastes which are indicated by the difference between a consumption of 12½ pounds of water per hour per horse power, and the 25, 35 or even 100 pounds which are used in the various types of engines, and the still more inexcusable wastes which are indicated by the difference in the figures showing the best practice and the worst in steam boilers.—Abstract of a Lecture by William Kent, M. E.

ing into popular favor. The boiler is getting to be so well known as to require little explanation as to its construction, but a statement of a few of the advantages which it is said to possess, compared with other water tube boilers, may not be out of place.

The construction of this boiler is a radical departure from other types. The three upper steam drums and lower mud drum are connected by mild steel tubes, bent to enter drums at a proper radius and to allow for unequal expansion and contraction. In one end of each drum is a manhole 12x16 inches, which, when removed, gives access to every tube, making the cleaning of the boiler an easy task when compared with the innumerable handhole plates, which must be very carefully replaced to be made steam tight. This feature is appreciated mainly by the

banks of tubes are always practically clean, no matter how bad the water may be. The entire absence of cast metal parts renders the boiler safe from explosion.

The manufacturers are meeting with remarkable success in the sales of this boiler, and the outlook for 1893 is all that could be desired. Sales have been made to the Salina Paper Manufacturing Company, Salina, Kan.; the Hamilton Paper Company, Philadelphia; and such large representative companies as the Otis Steel Company, the Standard Oil Company, Armour's, at Kansas City and Chicago, and to the Minneapolis Street Railway.

O. C. Barber, the well-known manufacturer, is president of the Stirling Company, whose offices are located in the Pullman building, Chicago, with factory at Barber-ton, Ohio. Catalogues and full particulars of the boilers will be cheerfully sent on application.

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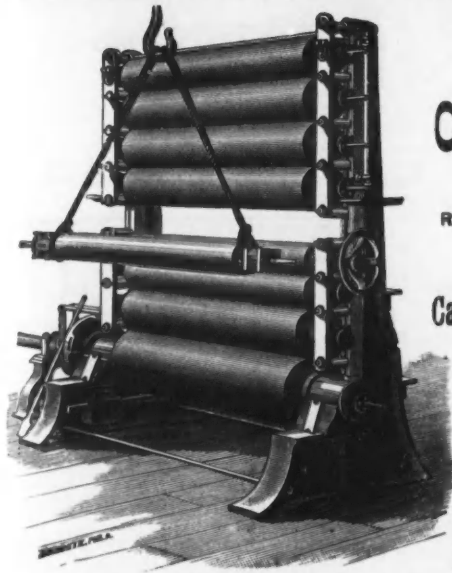
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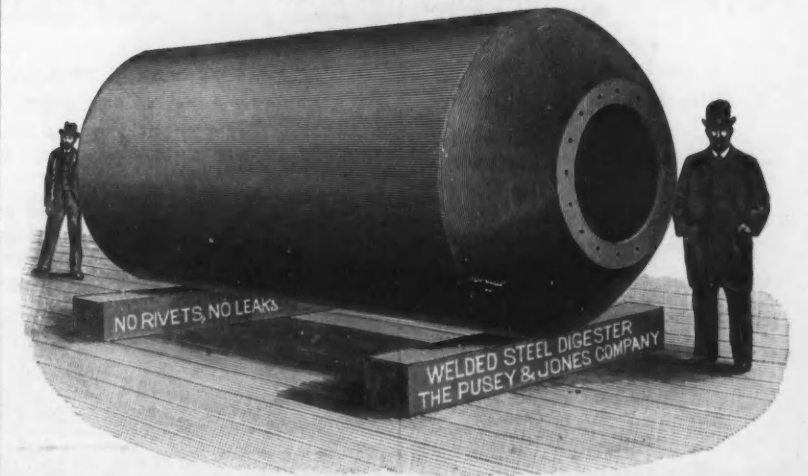
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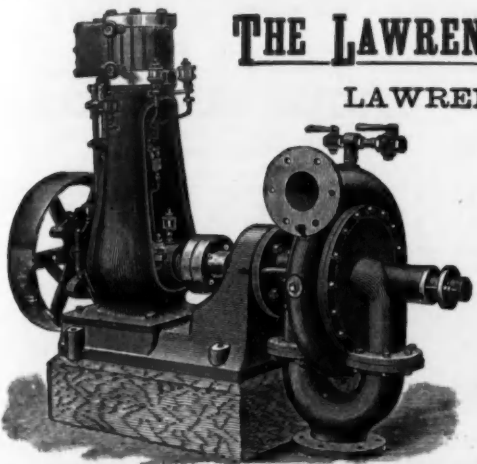
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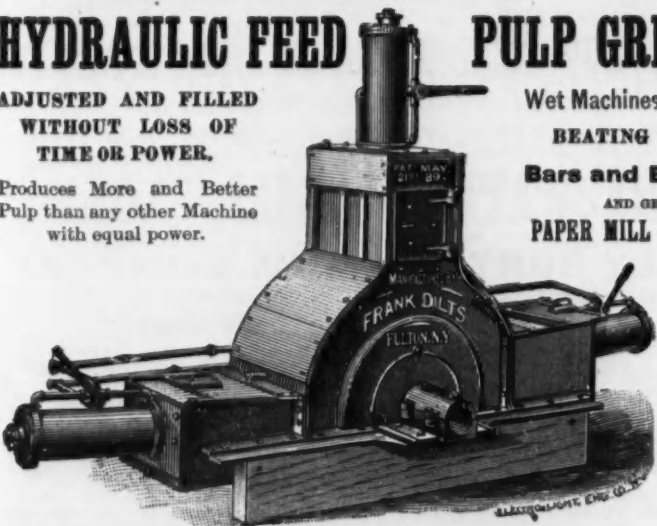
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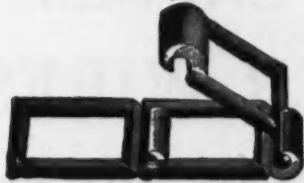


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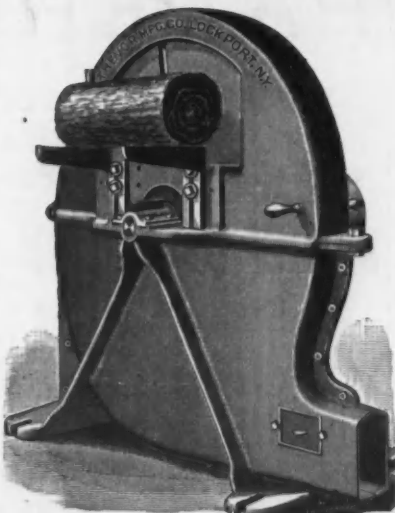
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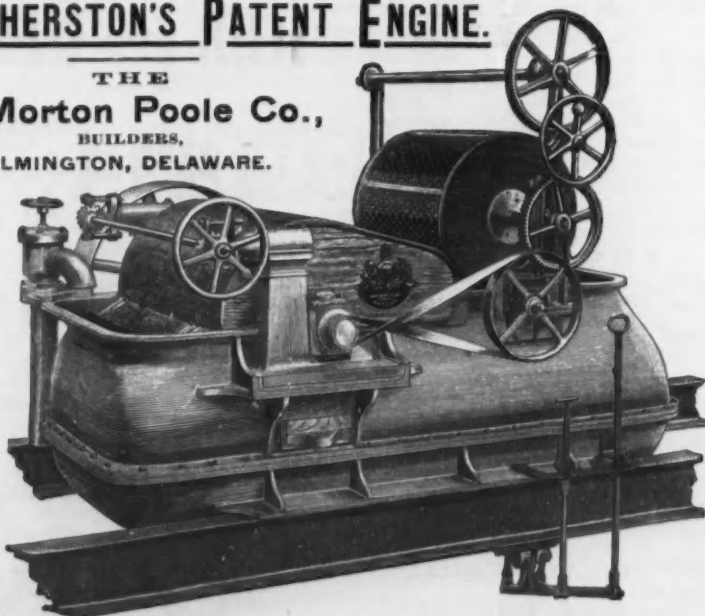
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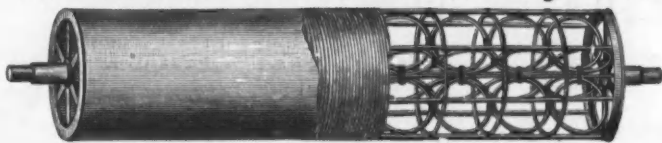
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