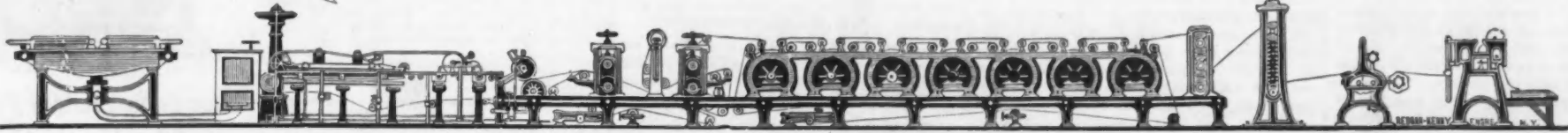


# THE PAPER TRADE JOURNAL.



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

VOLUME VI.--NO. 39.

NEW YORK, SEPTEMBER 29, 1877.

WHOLE NUMBER 178.

## Trade Topics.

### United States Patent Office.

#### HENRY VOELTER.—Extension.

[IN THE MATTER OF THE APPLICATION OF HENRY VOELTER FOR EXTENSION OF LETTERS PATENT OF REISSUE No. 4,418, FOR "IMPROVEMENT IN REDUCING WOOD TO PAPER PULP."—DECIDED AUGUST 22, 1877.]

Reissue of Letters Patent No. 4,418, granted Henry Voelter June 6, 1871, for improvement in reducing wood to paper pulp, declared valid in view of the state of the art with the exception of the third claim.

In an application for extension sufficiency of remuneration is a matter of fact, and not one upon which the judgment of the Commissioner can be informed by expert testimony.

SPEAR, Commissioner.—This case comes before the Commissioner by act of Congress approved March 3, 1877, which authorizes the Commissioner of Patents:

To hear and determine the application of Henry Voelter for the extension for the further term of seven years of the letters patent for "Improvement in reducing wood to paper pulp," granted to him August 10, 1858, antedated August 29, 1856, extended for seven years from August 29, 1870, and reissued upon an amended specification June 6, 1871; the form of such application, and the mode of proceeding under it to be in all respects the same as was provided by the act of Congress approved July 8, 1870, entitled an act to revise, consolidate, and amend the statutes relating to patents and copyrights for the extension of patents granted prior to March 2, 1861; and if upon such hearing the Commissioner shall be satisfied that the said Henry Voelter, without neglect or fault on his part, has failed to obtain from the use or sale of his invention or discovery a reasonable remuneration for the time, ingenuity, and expense bestowed upon it, and the introduction of it into use, and that it is just and proper, having due regard to the public interest, that the term of the patent should be so extended, the Commissioner shall make a certificate upon said reissue patent renewing and extending the same to said Henry Voelter, his executors, administrators, or assigns, for the term of seven years from the 29th of August, 1877, which certificate shall be recorded in the Patent Office, and thereupon the said patent shall have the same effect in law as though it had been originally granted for twenty-eight years.

In accordance with this act, and with other provisions of acts of Congress relating to the extension of patents, application has been made in due form and is now before me, together with the testimony taken on behalf of applicant and of remonstrants.

Upon the question of novelty, so far as relates to the essential points of the invention, there have been repeated adjudications in the Office and one in the Circuit Court. (Miller vs. Androsoggin Pulp Company, 1 Official Gazette, p. 409.)

No question has been raised upon this application for a second extension affecting in any way the validity of the claim in respect to the novelty of the process, or for what may be called the vital principle of the machine.

The examiner criticizes justly, as I think, the third claim, in view of certain patents cited by him in his report, and this claim, as I understand, applicant is willing to disclaim. The other claims for details of the invention are of subordinate importance.

I have examined the cases cited as tending to show lack of novelty in these combinations, and am satisfied that no valid objection has been brought forward against the claims.

I have referred more particularly to the claims for subordinate matters in the patent, because the patent has been reissued since the former extension, and it does not appear that all the references which have been cited upon these subordinate claims were before the court. As to the value and importance of the invention there can be no question. In his decision granting the former extension of this patent the Commissioner states that Voelter was shown, by the evidence before him, to have been "the first to develop a successful machine for the production of paper pulp by the mechanical reduction of wood fibre," and that "the real value of the invention was to be estimated by millions."

There is nothing in the evidence now before me tending to show that the value of the invention was then over estimated. It appears that less than six thousand tons of paper pulp had been manufactured in this country by the Voelter machines prior to 1870; that during the last seven years the capacity of these machines has been increased to correspond to the increased call for that product, and that they have produced seventy-five thousand tons of pulp in the period last stated. It is shown, also, that the daily production is now about sixty tons, which is nearly double the average daily product of the last seven years. This increase in the manufacture is one element of the importance of the invention and one indication of its value. Another element, however, of the value of the invention and of its importance to the public is to be found in the decreased cost of the article produced, for the benefit conferred upon the pub-

lic is in proportion as it lessens the cost of the article of paper. Upon this point the evidence shows that the cost of the wood pulp for paper is reduced to two and one-half or three cents per pound. The price of rag-pulp of corresponding grade is six cents per pound, and that of chemically-made wood pulp seven cents per pound. It appears, then, that the seventy-five thousand tons of Voelter pulp made during the past years at three cents per pound would cost the public \$4,500,000. The seventy-five thousand tons of rag pulp which it has replaced would have cost at six cents per pound \$9,000,000. The saving to the public, then, during the past seven years has been \$4,500,000, and the evidence shows that this saving has not been effected by the use of an inferior paper, but that the wood pulp, as applied in the manufacture of paper and mixed with other pulp, produces paper as good at least, for the purpose for which it is intended, as paper made wholly from the rag-pulp.

It is fair, also, to take into account, considering the question of saving to the public, that a large proportion of the rags used in the manufacture of paper prior to this invention was imported from abroad. It is also shown by the evidence that the effect of the introduction of this invention has been to force down the price of rag-pulp. The price of rag-pulp before the introduction of wood-pulp made by the Voelter process, or about the time of its introduction, was ten cents per pound. How much the reduction from ten cents to six cents per pound is due to the influence of the Voelter process, and how much to the general decline in prices, has not been set forth in the testimony, or in the statement of applicant, and perhaps would be impossible to determine; but the opinion of the witnesses is, that as the demand for paper has been constantly increasing and the supply of rags is, from the nature of the article, limited, the reduction has been wholly, or very largely due to the introduction of the Voelter pulp.

It is represented that the importation of newspaper of such grades as the Voelter pulp is worked into has now entirely ceased. There is also evidence that newspaper formed in part of the Voelter pulp is, in any form, as good as all rag paper, and that for the more recently invented rapid web printing press it is better adapted, by reason of its more readily absorbing the ink.

The novelty of the invention, the value and importance to the public having been established, it remains to consider whether or not the inventor has received reasonable remuneration for his time, labor and expense for perfecting the invention and introducing it into use; and, further, whether the extension of the patent can be granted with due regard to the public interest.

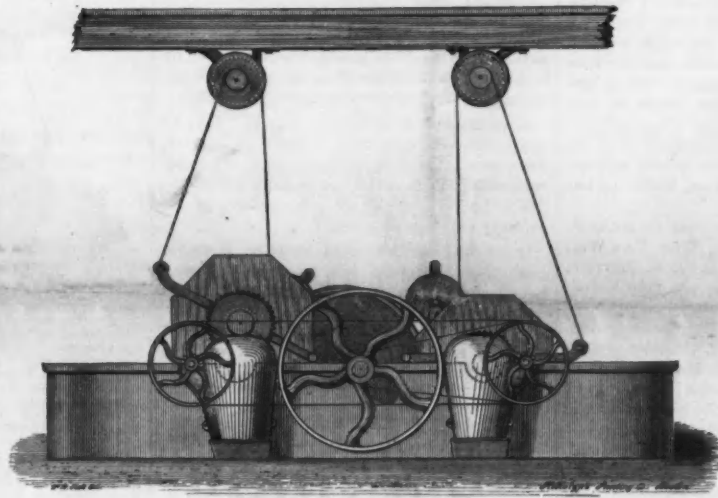
The question of remuneration will be determined partly by reference to the finding of the Commissioner in the former extension. It appeared then that the inventor, so far from receiving any profit by reason of the invention, had incurred very heavy loss. Upon the showing now made a balance is still very largely against him, the amount which he had received during the extended term not having yet remunerated him for the actual amount expended upon the invention. During the last seven years the business of introducing the invention, and supplying the public with the product thereof, has been in the hands of Voelter's assignees. By the terms of the contract Voelter was to receive \$6,000 per year for the invention, the same arrangement continuing for the term at present applied for, and the assignees were to have the whole control and sole responsibility and risk in the prosecution of the manufacture under the patent. Of the \$6,000 per year, Voelter (residing abroad), has paid Prang, his agent, who negotiated for him originally the sale of the invention in this country, a commission of 25 per cent. He also made a deduction of some \$10,000 in favor of the assignees on account of the large outlay which they were compelled to make in establishing the manufactory and bringing the invention into use, and because of the small profit accruing therefrom, so that the total amount received by him during the past seven years has been only about \$20,000. This, as I have before intimated, was not sufficient to balance the account, as is shown in the application for the first extension, and as appears now, so that Voelter appears rather to have lost than gained by

reason of the invention. Whether or not the amount received from the invention could have been increased by any increase of effort or diligence on the part of Voelter is, upon the record before me, very easy to determine.

The question of diligence up to the time of the former extension was settled by the Commissioner at that time. If the question were open I see no reason to change the finding of the Commissioner, and nothing has been introduced since which adds any new element to the problem.

The introduction of the invention required great exertion, familiarity with the business of the country in this particular line, and a very large outlay of capital. It could be carried on only, by organized companies, and by them only at the risk of loss upon the capital invested. It does not appear that Voelter could have made any terms better than those which he did make at that time, and the result has shown that he could not by any personal effort of his own have accomplished more.

One of the witnesses, largely interested in the manufacture of pulp under this patent, testifies that his profits have been only about 5 per cent.



THE PATENT CONE WASHER.

upon capital invested. The distrust on the part of the paper manufacturers of new and untried material—a distrust increased by failures of other experiments—was such that pulp manufacturers, after building pulp mills having the Voelter machines, were compelled to add to those manufactories others for the purpose of working this pulp into paper, thus adding to one distinct business, requiring a very large outlay, another equally distinct requiring another large outlay. So that, even if Voelter stood in relation to this extension exactly in the place of his assignees, or if his assignees were required, as they are not, to give an account of their profit and loss the result would be precisely the same.

The undertaking to introduce into general use such an invention is manifestly very great. It involved, to some extent, the reorganization of a great industry. The invention did not contemplate simply the manufacture of a finished article to be put upon the market ready for sale, disclosing its qualities and its merits to the view of the purchaser, as in most cases. It was rather a manufactory for manufacturers—a manufactory of raw material, so to speak. It was to be offered to manufacturers whose business would not bear experimenting, whose reputation as business men depended very largely upon the reliability of their manufactory; and, added to their natural reluctance to accept new and untried material to be put into their paper, the failure of which in the using might cause serious disaster and embarrassment to the purchasers of it, was the fact, heretofore referred to of former experiment and former failure in attempts to supply cheaper materials for this purpose.

In opposition to the extension of this patent, the remonstrants subjected the witnesses produced on behalf of applicant to cross-examination, produced evidence on their own behalf, and presented arguments at the hearing.

I have carefully read all the evidence in the case, and do not find that the testimony of the witnesses on direct examination is materially weakened by the cross-examination.

The statements made by counsel for Voelter at the hearing were amply sustained by the evidence. The testimony taken on behalf of the remonstrants is confined to that of experts, who testify mainly upon two points: First, against the patentability of the invention of Voelter; and, second, that he has already been sufficiently remunerated. The first of these points has already been sufficiently discussed. The second is not a matter about which the Commissioner's judgment can be informed by expert testimony,

but must be based solely upon facts. The main reliance, at the hearing, in opposition to the extension, apart from some matter already discussed, was the fact of the expiration of foreign patents and the law relating to the limitation of the life of the American patent by the foreign patent first to expire. This does not appear to have been relied upon by the defense in the case of Miller vs. Androsoggin Pulp Co., referred to above, and is not in accordance with the view held by the office. (Appery & Clissold, Com. Dec., 1870, p. 163.)

The relation of the extension of this patent to the public interests of the country is a matter not so easy to determine. The policy of the founders of the Government, and that followed by the law making power since the adoption of the constitution, in relation to new and useful inventions is very simple and plain. It was to encourage and promote the progress of the useful arts. To this end it proposed to reward meritorious inventors, not simply for the making of an invention, but for the making and giving of an invention to the public. It proposed, further, to confer this reward by giving the exclusive use of the invention for a

term of years on condition of full and complete disclosure of it, so that at the expiration of the term full benefit of it would inure to the public. Following that principle the act of 1832, and more fully the act of 1836, provided that where the original term of fourteen years should be insufficient for the purpose, and if in that time, without any fault of his own, the inventor of a valuable invention should have failed to receive reasonable remuneration, he might, on certain just conditions, receive an extension of the time for a further period. In the same spirit, since the repeal of the general act providing for the extension of patents and the substitution of the term of seventeen years for

that of fourteen, special acts of Congress have permitted special extensions, in order to carry out the policy of the Government underlying the whole patent system; and the vital principle which animates the whole is, that he who has conferred a meritorious invention upon the public shall, if possible, be rewarded.

In order that inventors may be really and substantially rewarded, in some measure, in proportion to the benefits conferred, and thus others be stimulated in like efforts, the Government endeavors to keep faith with inventors, and, as far as possible consistent with the public interest, give them a monopoly of such length of time as may be necessary to reap a reward for their labor and expense.

In the original grant of patents the question of public policy does not ordinarily arise. The invention being new the public is in no way embarrassed by the grant of the monopoly, because it can accept or refuse the new invention, according to pleasure. No hardship could occur unless the invention had been allowed to go into public use for a long time prior to the grant of the patent, and for this the law expressly provides. In case of the extension of a patent, there is simply a continuation of a monopoly already granted and sustained for a further period. Those already using the invention under the former term are ordinarily likely to use it under the extended term on the same conditions. The extension cannot operate as any surprise, either to those using or contemplating the use; nor do I see how, under any ordinary circumstances, a continuation of the life of a patent can operate otherwise for another period of seven years than it has operated during the past. In the case under consideration there are no extraordinary circumstances, so far as I can discover, affecting this manufactory and likely to operate in any respect injuriously to the interests of the country.

The result during the past has been for the further introduction of the invention, the better and cheaper supply of a public need. The invention exactly suited the conditions it found in this country, and turned to profitable use an abundant native material, which has taken the place of that formerly imported from abroad.

The policy adopted and pursued by the assignees appears to have been a liberal one, as shown by the licenses and territorial assignments. It does not appear to have been a close monopoly, but a free competition between different licensed manufacturers, resulting, as we have seen, in a very large reduction in the price of paper-pulp. The extension of the patent au-

other term appears likely only to establish on a firm and large basis this useful manufactory, to bring the product, as far as it is applicable, into increased use, and to leave it in the possession of the public at the expiration of the patent, as thoroughly introduced, known, and tested, as the old material which it has supplanted or is now supplanting.

I am satisfied, therefore, that the invention is new and of great utility, and that it is of exceedingly great value and importance to this country, abounding as it does in the material from which the pulp is made, and lacking in that for which the pulp is a substitute.

I am satisfied, further, that the inventor has not been properly remunerated for the time, labor, and expense bestowed upon his invention and the introduction of it; and that this failure has not been through any fault or neglect on his part. Further, I am satisfied that the extension of the patent imposes no other conditions on the public than the original grant, and does not injure the public interests, and that I am carrying out the spirit and intent of the law, liberal alike to citizens and aliens, in extending the patent. The extension will be granted on the filing of a disclaimer to the third claim.

### The Patent Cone Washer.

The illustration on this page shows the Patent Cone Washer, as seen in an engine—one in working position, and the other raised out.

This machine was patented in March, 1877, of which notice was given in the list of patents in this paper. It has since been thoroughly tested in the washing of different kinds of paper stock.

The advantages claimed are in the shape of the bucket and a stationary cone through which the water is discharged in a solid, unbroken stream, into a cast iron spout cast in one piece, made in connection with the boxes for pinion shaft and drip for pinion gear, all of which are bolted to the side of the engine, making a very neat and compact arrangement.

The washer is easily raised from the engine, as shown in the cut, being carried towards the centre, and out of the way in emptying.

For washing rags but one to an engine is required, as it is said to discharge three times the amount of the "Phelps," so long in use, and twice the quantity on papers, doing the work better, as the ink is not ground into the stock.

The fast washing of stock, when first furnished, is very important in obtaining a good result as well as in saving time, which is now as fully demonstrated as it was the day the trade graduated from the old curb to the cylinder washers. The patentee is J. T. Emerson, of Claremont, N. H. His advertisement is elsewhere.

The ingenuity of chemists has extended analysis of late years to the discovery of the proximate principles of concentrated alkalies of most of the powerful products of the vegetable world, and the results are important and interesting. They display most of the usual properties of potash and soda, and possess the powers of the substance whence they are derived in a tenth, twentieth or fortieth of the original bulk. In their medical use they arrive at once at the operative principle, to get and recombine as we think proper. We thus get morphine from opium, quinine from yellow bark, cinchona from red bark, strychnia from nux vomica, prussic acid from bitter almond rinds, veratria from hellebore and colchicum, gentia from gentian root, cathartine from senna, emilia from ipecacuanha, piperina from black pepper, atropia from belladonna, nicotin from tobacco, solana from the solanum nigrum, hyoscyamine from henbane.

Walter Weldon, the inventor of a well-known and successful process for the manufacture of bleaching powder, is the recipient of the Lavoisier Medal of the Société d'Encouragement pour l'Industrie Nationale. In presenting it M. Dumas, the celebrated French chemist, congratulated Mr. Weldon upon having cheapened every sheet of paper and every yard of calico made in the world; and at the meeting at which the presentation took place Professor Lamy stated that whereas at the date of the introduction of Mr. Weldon's invention, seven or eight years ago, the total world's production of chloride of lime was only about 55,000 tons per annum, it was now over 150,000 tons per annum; and that of this vast quantity fully 90 per cent. is made by the Weldon process.

Paper mills are objects of great curiosity in Japan. The Emperor and Empress of Japan lately visited the paper mills at Umedsu, near Kiyoto. The five mills are making exclusively paper for the Government, for bonds, &c. A European half-stuff mill has stopped running. The machines came from America, and Sir Rutherford Alcock, of London, was at the head of the enterprise.



Correspondence.

British Notes.

[FROM OUR REGULAR CORRESPONDENT.]

15A PATERNOSTER ROW, LONDON, E. C. 4.  
Sept. 10, 1877.

Trade is in no way improved. There is a little business doing, but it is at such low figures that I can't help thinking that no business at all is better than selling at what appear to be losing prices. A traveler and a particularly smart man in our trade completed a journey last week, and from his account of his experience I gather the following information: Trade is very slow all over the country. There is an amount of apathy among buyers that is quite unprecedented. And as for prices I am myself quite astonished at the figures he named to me. It appears that good fair news, fit for provincial journals, is selling at 2½d., less 7½ per cent. discount. This is much below anything I ever heard of here in town. Printings are offered of a decent quality at 3d., less 10 per cent. One firm was offering printings of a good white color and of very good quality (I saw a sheet) at 3½d., less 5 per cent.—quite equal to 5d. papers. I am sure that the paper cannot be made for the money. I think that all this paper is made in Northern mills, where the low prices of coals and chemicals are fully made use of by the manufacturers on the spot. In writings and good class papers there is not so much contrast, as the price and supply of rags are not affected as the coarser and commoner kinds of fibre. Also in rag papers not nearly so many chemicals are used, and this makes all the difference. Further, the produce of these papers is not so large as the turn-out of the lower classes of paper. I hear that an Austrian agent in London is cutting out all the medium trade of this country by selling good writings equal to No. 60 mill (A. Cowan & Co.) at 6d. This is the way our trade is being cut up. How they do it nobody seems to know. English makers tell me that they can't make the paper at the money, yet there is no doubt about the sales taking place. If the question of this underselling is a question of price and cost of manufacture it seems to me waste of time to talk about over-production, &c. The thing is this: How is it that foreigners can introduce and sell paper in our markets which our own makers are unable to produce at the same price? On all foreign goods there are carriage and brokers' charges, and yet with these to boot our makers seem unable to grapple with their foreign competitors.

Everything is very quiet and everybody is grumbling. I suppose it is the war. Everybody blames the war. I do not exactly see why the war should have the effect of prolonging this dreadful state of trade. If we were not in a state of turmoil, fear and apprehension respecting the future, I do not think we could recover from the low ebb at which our trade has now found itself. Raw materials, so far as the most expensive agents go, are dirt cheap.

Fibres are rather scarce, but not proportionately expensive. Labor is much as usual. Then, why this depressed condition of things? Our home markets show no improvement. A short time ago chemicals had a spurt, now they are in *status quo* with a downward tendency. Fibres are being bought hand-to-mouth, and yet the price of paper is steadily falling. I met a paper-maker on the Thames this morning, who says "trade is worse than ever." He has shut down and "shut up," too, *pro tem*, and we are going to indulge in a little piscatorial speculation this week instead of paper-making. He told me that he knew positively of some ordinary news offering in Liverpool at 2½d. less 12 per cent., or 2s. 6d. per cwt. This is even lower than any other report from the traveler, and shows well how things are here. Small hands, boards, &c., are wonderfully dull, and so are browns, groceries and the roughest class of paper.

Mill news is scarce this week. I heard from a friend that Chadwick Bros. have started at Cookham. They make boards. I hope they will get on.

As an instance of good enterprise I may mention the case of Horton Kirby Mills, belonging to Messrs. Spalding & Cudlip. These mills are situated in a beautiful part of Kent, near the Farningham Road station of the London, Chatham and Dover Railway. The present proprietors have been in possession of the premises for three years, during which period they have entirely renovated the place, without even once stopping or shutting down their machines. They have replaced the old motive power by five or six entirely new horizontal engines, and have increased the number of steam boilers from three to seven. A fine tall new shaft has been erected, and new buildings have replaced the old dilapidated premises of former days. There is a salle or finishing room here which might justly be called the finest in this country. It is built of iron. The roof and windows are all of light frame work, which is graceful, strong and very convenient. No ugly-looking wooden timbers are seen. All is iron, and as the north side is entirely composed of this frame ironwork the essential feature of a good light is well provided. The roof is also of iron, all entirely new. There are four machines, making the best plate and book paper. These alterations are nothing in themselves, except it be well remembered that everything has been completed during active work in the mill. No stoppages have occurred. Everything has gone on as usual. The greatest credit is due to J. S. Cudlip, under whose personal superintendence the whole of these alterations have been effectually completed.

There is published at 38 Upper Thames street, E. C., a paper called *The British and Foreign Paper Trades Review*, a paper which I don't see, but which, I expect, is a periodical treatise on our trade. It is published by a Mr. Lumsden. Now, I ask, who is Mr. Lumsden? If you or any subscriber or reader can answer me this question, I shall be very glad to satisfy some very

affectionate inquiries which several paper-making friends have made of me lately. Perhaps his "reference" will oblige! W. F. C.

Philadelphia Notes.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, Sept. 27, 1877.

The Gavit Paper Machine Works, established over forty years since by the late Nelson Gavit and now carried on by A. Furman Blair, is so well known to the trade that it is only necessary to refer to it as one of the institutions of our great manufacturing city, and it is worthy of note that, notwithstanding the present inactivity among paper mills, it now employs 165 hands and they are busy with orders for months ahead and now manufacture more paper machinery than all the other machine shops in America combined. They keep up with the progress of the times and make every machine better than the one preceding it. In addition to supplying mills in all or nearly all the States in the Union they have frequent orders from foreign countries. Mr. Blair has in his possession an autograph letter from Prince Bismarck, to whom he supplied \$40,000 worth of machinery, in which that great statesman says that he in this country are far in advance of European manufacturers in the making of paper-making machinery.

They are now shipping a 62-inch Fourdrinier machine to Bath, N. C., and have a 66-inch nearly ready for Morrison, Bare & Co., Roaring Springs, Pa.

The complications in the management of the Market Street Passenger Railway Co., involving the President and other officers, as well as one of our largest blank book manufacturers, is creating considerable distrust and uneasiness in business circles generally, and while there is no reason why it should affect the paper trade, it nevertheless does.

The meeting of the creditors of J. R. Nagle & Co., held yesterday, adjourned until Saturday, when further developments may be expected.

There has been little change in prices of papers or paper stock since my last report. The demand for book papers is increasing, but without any material change in prices.

Samuel Nevins, importer of chemical clays and colors will remove his establishment on October 1 to 110 South Front street, nearly opposite his present location, and will have largely increased facilities to supply the trade as well as to display their goods. The 600 casks of china clay reported in your last issue to Phil. J. Justice, should have been in the name of this firm.

M. S. Buckley, the senior member of J. G. Ditman & Co. is expected to return in a few days from an extended trip West, where he has been for his health.

Among others in town this week we notice J. Allison Eysten, of Hallowtown, West Va.; Wm. & R. Tiddy, of Charlotte, N. C.; L. L. Murphy, Trenton, N. J.; P. H. Glatfelter, Spring Forge; Charles H. Mullin, Mount Holly, T. A. Mole, of L. L. Brown Paper Company, H. Garfield, Lee, M. Crane, Dalton, Mass.; Mr. Scheffer, Pottsville, Pa.; D. Lothrop, Boston, Mass.

The Glass and Manufacturing Company of Millville, N. J., will hereafter be adapted to the manufacture of paper from jute and salt hay.

It is my intention at an early date to prepare a careful summary of the speciality of every paper mill in and around Philadelphia, and to this end will esteem it a favor if they will report the same to the Philadelphia office; also state capacity, prospects and other items of interest to the trade.

The outlook of the paper trade at present is exceedingly favorable, and there is no good cause for the present inactivity, as our book printers are all busy, and newspaper and job offices are doing more than an average business. I append the following report as to the market:

Chemicals.—The week just passed seems to have been one of the quietest weeks in the trade; some transactions of importance have transpired but on private terms. Bleaching Powder continues in light demand, with prices ranging 1½c. to 1¾c. currency per lb. Caustic Soda Ash firm at 2c. gold per lb, but transactions in it mostly small. Carbonated Soda Ash in fair demand at \$1.85 to \$1.90 gold; choice brands being held from 2c. gold per lb. for 48 per cent. Sal Soda firm at 1½c. per lb, owing to scarcity. China Clay continues in active sale, at prices of last week, \$16.50 to \$22 gold per ton; 500 casks S. C. Clay sold at \$12.62½. This was a choice quality of white clay. Caustic Soda continues in good demand at 4½c. to 4¾c. currency per lb. for 60 per cent. Yellow Prussiate felt some of the excitement recently shown in Cochineal and Indigo, and jumped temporarily to 25c. Alums continue in good sale, at unchanged prices. Aluminous Cake sells slowly, with decline in prices.

Rosins—Maintain prices well, and fine grades especially are sought for, being mostly taken for winter stock. Common Strained, \$1.80; Strained, \$1.95 to \$2; No. 2, \$2.25 to \$2.50; No. 1, \$2.50 to \$3; Pale, \$3 to \$4.50; Extra Pale, \$4.50 to \$5. CHALLENGE.

Among men of the world comfort merely signifies a great consideration for themselves, and a perfect indifference about others.

Women are all alike. When they're maids, they're mild as milk; once make 'em wives, and they lean their backs against their marriage certificates, and defy you.

There are some people who, though very amiable in the main, and obliging in their offices to others have yet that most unhappy propensity of being gloomy over everything.

It seems to be the business of life to lay by fresh cause for anxiety and discontent by increasing our estate; whereas we should rather know how to lose it all, and yet be contented.

There is more virtue in obscurity than is commonly supposed; and perhaps there have been nobler specimens of magnanimity in low life than even the page of history can boast.

Manufacturing News.

EASTERN STATES.

It is reported that some Boston parties propose building a paper mill at St. Johnsbury, Vt.

It is reported that the Valley Paper Co.'s mill at Holyoke, Mass., is about to be enlarged.

The Lyndon Pulp Mill, at Lyndon, Vt., is said to be doing very well, with an ample supply of raw material at hand.

Crocker, Burbank & Co., Fitchburg, Mass., have commenced to reset the boilers in all their mills with the Jarvis patent furnace.

The Merrimac Mill, at Lawrence, Mass., has been sold to the Russell Paper Co. for \$43,250. Other real estate near the mill was purchased by William A. Russell.

The Adams Paper Co., at South Adams, Mass., has not had wash-water enough to run its mill the past month. It uses steam-power for the machinery, but requires a supply of about 100 gallons a minute of water to wash with. This has always been furnished by a small stream from the adjacent hills, but that is lower than it has ever been before, and the company is digging wells. One is already finished, and with a rotary pump gives some 30 gallons a minute.

The Highland Paper Mills, James A. Townsend & Co., Moodna, Orange County, N. Y., will be started up on Monday next.

MIDDLE STATES.

The Cleveland (Ohio) Paper Co. is favored with abundant orders. It is running two 62-inch Fourdriniers at the lower mill, and one 72 inch Fourdrinier at the upper mill.

WESTERN STATES.

The paper mill at Inst. Tyrol, is to be repaired by the creditors, and will be started up soon.

The boilers of the Villagordo Paper Mill, Spain, will be reset with the Jarvis patent setting.

FOREIGN.

He is rich who saves a penny a year; and he is poor who runs behind a penny a year.

The world is as a coconut; there is the vulgar outside shell good for beer cups and the white delicate kernel, the real worth, food for the gods.

Decit has the effect of impoverishing as well as enriching men; the prodigal becomes poor by pretending to be richer than he really is, while seeming poverty is the very making of a miser.

Aristotle laid it down as a maxim "that all inquiry should begin with doubt." Whenever, then, we meet with mysteries beyond our feeble comprehension, would it not be more rational to doubt the very faculty we are employing—the capacity of our reason itself!

Common sense is looked upon as a vulgar quality, but nevertheless it is the only talisman to conduct us properly through the world. The man of refined sense has been compared to one who carries about with him nothing but gold, when he may be every moment in want of smaller change.

Manufacturing News.

JARVIS' PATENT FURNACE

For the Setting of Steam Boilers

Will save twenty-five per cent. in fuel, and make an increase of twenty-five per cent. in Steam Power. We guarantee fifteen per cent. increase in evaporation and capacity where we can have evaporative test before and after setting. Boilers set this way can be seen at

RUSSELL PAPER CO., LAWRENCE, MASS.  
W. W. HARDING'S PAPER MILL, PHILADELPHIA, PA.  
HOWLAND & CO., SANDY HILL, N. Y.  
MONTAGUE PAPER CO., TURNERS FALLS, MASS.  
OTSEGO PAPER CO., COOPERSTOWN, N. Y.  
PARSONS' PAPER CO., HOLYOKE, MASS.  
HOLYOKE PAPER CO., HOLYOKE, MASS.  
HUTCHINSON PAPER CO., SOUTH LEE, MASS.  
C. P. MARBLE & SONS, PITTSBURG, PA.  
F. R. WALKER PAPER MILL, MONTGOMERY, N. Y.  
GEO. WEST & SON, BALLSTON SPA, N. Y.  
HILL'S PAPER CO., DELAWARE, OHIO.

TESTIMONIAL.

Letter From Otsego Paper Works.

OFFICE OF OTSEGO PAPER WORKS,  
COOPERSTOWN, N. Y., Sept. 14, 1877.

A. F. UPTON, Esq.:

DEAR SIR—I must tell you what the "Jarvis Setting" is doing for us. We got out of coal a month ago and could get no more from any source, on account of the miners' strike. Nor was wood easily obtainable, except by paying more than its worth, so we tried saw-dust and saw-mill scrapings, i. e., pieces of bark and refuse generally. Well, it is a complete success. One load of saw-dust or one load of refuse will run our boiler fifteen hours, and give us plenty of steam, excepting when boiling bleach, then we put on occasional "jags" of hard wood or a little coal. Of course the fire has to be watched a little closer and renewed oftener, but witness the saving, the coal to run fifteen hours costs, say \$1; the saw-dust costs only the drawing, say \$1. Of course saw-dust or other chips cannot be obtained in sufficient quantity to run us all the time, but when we can get it you can see the saving we make. I should think all paper mills would be likely to reset their boilers if you would show them the advantages.

Yours truly,  
JOHN WORTHINGTON.

A. F. UPTON,  
GENERAL AGENT,  
No. 239 CONGRESS STREET, BOSTON, MASS.

CONGREVE & SANDERS,

IMPORTERS OF

Carbonated and Caustic Soda Ash,  
Bleaching Powder, Sal Soda,  
Bicarbonate of Soda.

104 JOHN STREET, N. Y.

THE PATENT CONE WASHER

So far exceeds anything in its line that has ever been made, that if you are interested in the washing of paper stock, you cannot afford to pass it by without giving it your attention. The improvements consist in the shape of the bucket and a stationary cone through which the water is discharged, in a solid, unbroken stream, into a cast-iron spout cast in one piece, made in connection with the bucket for pinion shaft and drip for pinion gear, all of which are bolted to the side of the Engine, making a very neat and compact arrangement. The washer is easily raised from the Engine, as shown in the cut, being carried towards the centre and out of the way in emptying. For washing rags, but one to an Engine is required as it will discharge three times the amount of the "Phelps," so long in use, and twice the quantity on papers, doing the work much better, as the ink is not ground into the stock. The fast washing of stock, when first furnished, is very important in obtaining a good result as well as in saving time, which is now as fully demonstrated as it was the day we graduated from the old curb to the cylinder washers. Thirty years or more experience has at last taught us that we have not discharged the water, that went so easily through the wires. The washer is made in the most substantial manner, and warranted to do all that is claimed for it or no sale.

MANUFACTURED BY

J. T. EMERSON, Claremont, N. H.

PIQUA FELTS.

Paper-Makers' FOURDRINIER FELTS.

Coarse and Fine CYLINDER WET FELTS.

Press Felts & Jacketing.

F. GRAY, O'FERRALL & CO.,  
Piqua, Ohio.

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

SATISFACTION GUARANTEED.

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

[From The Paper Trade Journal of March 4, 1876.]

MIDDLETOWN, O., February 23, 1876.

To the Editor of The Journal:

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

J. W. B.

IRA L. BEEBE,  
NEW YORK AGENT.

AMOS H. HALL'S

CEDAR VAT & TANK FACTORY,

1143, 43 & 47 N. Front St., Philadelphia, Pa.

\$55 to \$77 a week to Agents \$10 Outfit FREE.  
P. O. VICKERY, Augusta, Maine.

For sale by the TRADE. Specimen Hooks and United Belt Ends mailed when requested.

Address, CHAMPION BELT HOOK CO.,  
87 Liberty street, New York.

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

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

CHAMPION BELT HOOK CO.

87 Liberty street, New York.

AMOS H. HALL'S

CEDAR VAT & TANK FACTORY,

1143, 43 & 47 N. Front St., Philadelphia, Pa.

\$55 to \$77 a week to Agents \$10 Outfit FREE.  
P. O. VICKERY, Augusta, Maine.

For sale by the TRADE. Specimen Hooks and United Belt Ends mailed when requested.

Address, CHAMPION BELT HOOK CO.,  
87 Liberty street, New York.

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

CHAMPION BELT HOOK CO.

87 Liberty street, New York.

AMOS H. HALL'S

CEDAR VAT & TANK FACTORY,

1143, 43 & 47 N. Front St., Philadelphia, Pa.

\$55 to \$77 a week to Agents \$10 Outfit FREE.  
P. O. VICKERY, Augusta, Maine.

For sale by the TRADE. Specimen Hooks and United Belt Ends mailed when requested.

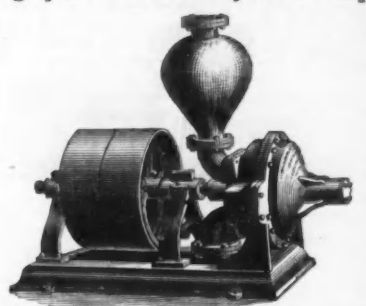
Address, CHAMPION BELT HOOK CO.,  
87 Liberty street, New York.

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

CHAMPION BELT HOOK CO.

87 Liberty street, New York.

Bagley & Sewall's Rotary Force Pump



Most Perfect Rotary Pump Ever Offered to the Public.

SPECIALLY ADAPTED FOR WORK IN PAPER MILLS.

The following are among the leading advantages of this pump: Its few Parts, Simplicity of Construction and small space occupied. Its small cost compared with other pumps. The comparatively small Power required (using from 30 to 75 per cent. less power than any Rotary Pump now in use.) Its Action is Positive, given an Even and Continuous Stream, being perfectly balanced in the water. Its Self-Packing Match Joints, requiring no Packing or Stuffing Boxes. Its Ready Accessibility of Parts, without breaking joints on pipes in taking apart. All Parts are made to an Exact Gauge, corresponding in parts being interchangeable. The Speed can be adapted to Quantity of Water desired, the amount of water delivered being in proportion to speed and water applied.

TESTIMONIALS.

OFFICE OF THE WATERTOWN PAPER CO.,  
WATERTOWN, March 22, 1875.  
Its action is positive, discharging all the water taken in, and consequently no power is wasted. In short, we give it our UNRESERVED ENDORSEMENT.  
Yours, &c., HIRAM REMINGTON, President.

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

OFFICE OF THE REMINGTON PAPER CO.,  
WATERTOWN, March 23, 1875.  
We have used two 2-inch Pumps for the past ten months, as Suction or Vacuum Pumps, on our two 84-inch Fourdrinier Machines with entire satisfaction. For this purpose, or for raising and forcing water for general purposes, we regard the Green Pump as vastly superior to anything we have ever seen, and we have made the subject of Pumps one of special study and investigation.  
A. D. REMINGTON, President.

OFFICE OF THE CANADA PAPER CO.,  
MONTREAL, December 11, 1876.  
DEAR SIR—The Bagley & Sewall Pump we are now using for pumping strong Caustic Alkali Liquors. We find it the best pump for that purpose that we have ever used, the metal packing being particularly valuable. The No. 3 Pump of your make, which we are using as a Fire Pump, we find to be very effective and easily managed.  
Yours truly,  
CANADA PAPER CO.,  
W. ANOUS, President.

PATERSON, N. J., October 11, 1875.  
Sirs—The little Rotary Fire Pump (No. 3) is entirely satisfactory. I have it connected with a system of sprinklers on each floor, and a set of hose front and rear, 1¼ inch nozzle, from which I am able to throw TWO STREAMS AT ONCE, EACH 125 feet.  
J. SWINBURNE.

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

BALTIMORE, October 12, 1876.  
DEAR SIR—It works smoothly and rapidly without a jar, and does all its makers claim it will do. We know of no pump that is its equal for the purpose it is used for.  
JOHN A. DUSHANE & CO. Manufacturers.

WINCHESTER PAPER COMPANY  
WINCHESTER, Va., September 14, 1875.  
We have it in use on our Straw Board Machine (60-inch Fourdrinier) as a Vacuum Pump, connected to an 18-inch box, which is a severe test. We consider it the best pump for that use that we have ever seen used.  
Yours truly,  
CHAS. L. CRUM, Sec'y.

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

Liberal Terms made to First-class Parties.

SEND FOR PRICE LIST OF THE

CHEAPEST PUMP IN THE MARKET.

Address EDWARD CONLEY,

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

J. HENRY BLANCHARD

Chemical Broker,

NO. 42 BATTERY MARCH ST.,  
BOSTON, MASS.

P. O. Box 811.

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

AGENT

McNamee's "Excelsior" South Carolina Clay,  
"Elephant" Aluminous Cake,  
and "Crescent Felts,"  
and for the

Androscoggin Pulp Company,  
MANUFACTURERS OF

WOOD PULP.

PETER HERDER,

Paper Warehouse.

Fine Manillas, Pure Rope, Bag

and Tag, Book and News

Paper, Mailing Paper.

ALL KINDS OF PAPER MADE TO ORDER, AT SHORT NOTICE.

No. 75 JOHN STREET, NEW YORK.



DIRECTORY.

Cards under this heading will be charged for at rate of \$10 per annum for each card.

NEW YORK HOUSES.

Paper and Paper-Makers' Supplies.

Table listing New York houses and their addresses, including Anderson, J. F., Jr., & Co., Barrett, Thomas, Beebe, Ira L., etc.

Rags and Paper Stock.

Table listing Rags and Paper Stock suppliers, including Atterbury Bros., Briggs & Taylor, Butterworth & Smalley, etc.

Oils.

Table listing Oil suppliers, including Binns & Lea.

Paper-Makers' Chemicals and Colors.

Table listing Paper-Makers' Chemicals and Colors suppliers, including Gantz, Jones & Co., Pennsylvania Salt Mfg. Co., etc.

Paper-Makers.

Table listing Paper-Makers, including Orrs & Co., Printing and Hanging Mills at Troy.

Straw Boards.

Table listing Straw Board suppliers, including Butterfield, H. A., Hayes, James E. & Co., etc.

Paper-Making Machinery.

Table listing Paper-Making Machinery suppliers, including Allen Iron Works, Currier, Cyrus, Daniels Machine Co., etc.

Wire Cloth.

Table listing Wire Cloth suppliers, including Cable Manufacturing Co., The Sellers Mfg. Co., etc.

Felts and Felting.

Table listing Felts and Felting suppliers, including Bulkeley, Dunton & Co., Gray, F. O'Ferral & Co., etc.

Belt Hooks.

Table listing Belt Hook suppliers, including Wilson, Greenleaf.

BOSTON HOUSES.

Table listing Boston houses, including Blanchard, J. Henry, Butler, Thomas, etc.

CHICAGO HOUSES.

Table listing Chicago houses, including Clarke, Friend, Fox & Co., Gilbert, Wm. & Co., etc.

CINCINNATI HOUSES.

Table listing Cincinnati houses, including Block & Pollak, Sniders, Louis' Sons, etc.

PITTSBURG HOUSES.

Table listing Pittsburgh houses, including Bakewell, Allan C. & Co., Harrison, James, etc.

PHILADELPHIA HOUSES.

Table listing Philadelphia houses, including Barber, J. & J. S., Ditman, J. G. & Co., etc.

ST. LOUIS HOUSES.

Table listing St. Louis houses, including Graham & Bro., Mayer, A. B., etc.

LONDON HOUSES.

Table listing London houses, including The Gothenburg Commercial Co., etc.

MANUFACTURERS.

Table listing Manufacturers, including Claremont Manuf'g Co.

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

IMPORTS of Paper and Paper Materials, Books, &c., at the Port of New York, for the week ended Sept. 21, 1877.

Table showing importations of paper stock, paper, books, chemicals, etc. with columns for item, quantity, and value.

Table showing total imports of general merchandise, paper, books, chemicals, etc. for various periods.

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

Table showing imports of rags and paper stock from various ports like Alexandria, Antwerp, Beyrout, Bremen, etc.

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports, for the week ended Sept. 25, 1877, with Aggregates and Values.

Table showing exports of paper, books, etc. to various foreign ports like Japan, London, Hamburg, etc.

TOTAL EXPORTS. General Merchandise, for the week ending September 25, 1877.

NEW YORK IMPORTS. FROM SEPTEMBER 20 TO SEPTEMBER 27, INCLUSIVE.

Hide Cuttings. J. Lee Smith, Hindoo, Hull, 180 bs.

Rags, &c. Jos. Libmann, Neckar, Bremen, 8 bs. paper waste. Lewy Bros., Hindoo, Hull, 122 bs. rags. F. A. Gross, by same, 100 bs. rags. Hugo Fett, by same, 102 bs. rags. John W. Mason & Co., by same, 152 bs. rags; 75 bs. manilla stock. Hagemeyer & Brunn, by same, 60 bs. rags. Briggs & Taylor, Holland, London, 186 bs. manilla stock. Recknagel & Co., by same, 61 bs. paper waste. Briggs & Taylor, State of Indiana, Glasgow, 134 bs. manilla stock. Jonas Phillips, Mary Hogarth, Leghorn, 65 bs. rags. N. Semoni, by same, 210 bs. rags. W. H. Parsons & Co., by same, 70 bs. rags. John W. Mason & Co., N. Galatola, Liverpool, 16 bs. rope junk; 127 bs. rags. Jas. Duncan & Co., Casilda, Liverpool, 12 bs. rags. Briggs & Taylor, State of Georgia, Glasgow, 78 bs. rags; 257 bs. manilla. O. Keenan & Son, by same, 369 bs. rags; 69 coils old rope. W. H. Parsons & Co., by same, 72 bs. paper stock. John J. Murphy, Acapulco, San Francisco, 70 bs. rags. Order, by same, 68 bs. rags.

Paper. L. de Jonge & Co., City of Montreal, Liverpool, 12 cs. B. Illfelder, by same, 2 cs. Heidsieck, M. & Co., Italy, Liverpool, 3 cs. H. Bainbridge & Co., by same, 15 bs. E. & H. T. Anthony & Co., Neckar, Bremen, 2 cs. C. Moller & Co., by same, 1 cs. B. Illfelder, by same, 13 cs. Chas. Beck, by same, 1 cs. P. Fannely, by same, 2 cs. Chas. Lichtenberg, by same, 1 cs. G. J. Kraft, by same, 1 cs. P. Gledhill, Britannic, Liverpool, 1 cs. hangings. Hester Bros., by same, 1 cs. hangings. A. & C. Kaufmann, Herder, Hamburg, 1 cs. L. de Jonge & Co., by same, 4 cs. G. Gemaert, by same, 5 cs. Chamberlin & Whitmore, Russia, Liverpool, 4 cs. Pottier & Stymsus, St. Laurent, Havre, 3 cs. hangings. S. W. Morris, by same, 1 cs. hangings.

PHILADELPHIA IMPORTS. Rosin. Loper, Bros. & Co., per Virginia, 408 bbls. E. H. Rowley, by same, 385 bbls. W. H. Mitchell, by same, 608 bbls. Loper, Bros. & Co., per Wyoming, 606 bbls. E. H. Rowley, by same, 1,174 bbls. W. H. Mitchell, by same, 891 bbls. S. Nevins, by same, 225 bbls. China Clay. W. H. Mitchell, per Virginia, 52 cs. W. H. Mitchell, per Wyoming, 28 cs. Hoevel & May, per Otus, 94 cs. Order, by same, 56 cs. Soda Ash. W. H. Mitchell, per Roman, 35 cs. Bleaching Powder. W. H. Mitchell, per Roman, 56 cs.

BOSTON IMPORTS. IMPORTATIONS of Paper Stock, Chemicals, &c., at Port of Boston, from September 21, 1877, to September 27, 1877, inclusive. Books. A. A. Brown, Massachusetts, Liverpool, 1 cs. Shreve, Crump & Low, by same, 1 cs. A. Williams & Co., Parthia, Liverpool, 1 cs. Estes & Lauriat, by same, 5 cs. Dartmouth College, by same, 1 cs. Boston Athenaeum, by same, 2 cs. Schoenhof & Moeller, Illyrian, Liverpool, 1 cs. H. Partridge & Co., by same, 5 cs. E. A. Snow, by same 3 cs. Paper. Wadsworth Bros. & Howland, Parthia, Liverpool, 1 cs. drawing. G. C. Whitney, by same, 1 cs. Camille Ried, by same, 3 cs. Frost & Adams, Batavia, Liverpool, 3 cs. O. Ditson, Parthia, Liverpool, 30 cs. printed music. J. H. Robinson, by same, 9 cs. paper hangings.

Paper Stock. Boston Igewood & Chemical Company, Hamilton, Calcutta, 108 bs. white rags. Howe, Goodwin & Cole, by same, 113 bs. gunny bags. C. C. Herald, Martha Davis, Calcutta, 250 bs. rags. Woodford & Farlow, by same 59 bs. paper stock; 1 ton rope. S. D. Warren & Co., Casseopia, Leghorn, 200 bs. rags. W. Tucker, Aristas, Surinam, 1 bs. rags. J. T. Lodge & Co., Hindoo, Hull, 33 bs. paper stock. David Decoste, Elizabeth Ann, Aut. Boreche, 1,500 pounds junk. Pickering, Winslow & Co., Illyrian, Liverpool, 10 tons junk. C. C. Herald, by same, 117 bs. rags. S. D. Warren & Co., by same, 500 bs. rags. T. Umbly & Co., by same, 118 bs. paper stock. Knucwies & Appleton, Parthia, Liverpool, 222 bs. paper stock. Jute Butts. I. G. Whitney & Co., Hamilton, Calcutta, 1,500 bs. Howe, Goodwin & Cole, by same, 100 bs. Nevins & Co., by same, 653 bs. rejections. Bleaching Powder. S. D. Warren & Co., Illyrian, Liverpool, 61 cs. S. D. Austin, by same, 119 cs. W. F. & F. C. Sayles, by same, 45 cs. T. K. Cummings & Co., by same, 54 cs. Warren & Co., Java, Liverpool, 27 cs. Soda Ash. Wing & Evans, Parthia, Liverpool, 18 cs. Linder & Meyer, Illyrian, Liverpool, 66 cs. J. L. & D. S. Riker, by same, 36 cs. Caustic Soda. Linder & Meyer, Illyrian, Liverpool, 50 drums. E. Hill, by same, 50 drums. Alum. James Lee & Co., Hindoo, Hull, 50 bbls. E. & F. King & Co., by same, 50 bbls. Ultramarine. T. Leyland & Co., Illyrian, Liverpool, 4 cs. China Clay. J. Henry Blanchard, from South Carolina, 12 cs.

QUOTATIONS FOR STRAW PULP WANT- ed for quantities of 80 tons or more per month; price must be low; the pulp can contain maize, wood, or other fibrous material that would add to the cheapness. Offers and samples to be sent to the publisher of this paper, addressed STRAW BOARD, Office P. T. Journal.

JOHN H. EASTWOOD. WM. BUCHANAN. CHAS. SMITH.

Standard Wire Works,

BELLEVILLE, N. J.

Eastwood, Buchanan & Smith,

MANUFACTURERS OF

BRASS, COPPER AND IRON WIRE CLOTH

Of Every Description.

FOURDRINIER WIRES,

DANDY ROLLS AND CYLINDERS Made, Covered and Repaired BRASS AND COPPER WIRE, WIRE WINDOW SCREENS AND GUARDS.

SMITH, WINCHESTER & CO.,

South Windham, Conn.,

MANUFACTURERS OF

PAPER MACHINERY

CONSISTING OF

FOURDRINIER AND CYLINDER MACHINES,

Washing and Beating Engines.

AIR - DRYING MACHINERY

FOR DRYING SIZED PAPERS.

Sole Manufacturers of the

JORDAN PATENT BEATING ENGINE,

Which has no rival for clearing the stock for fine papers.

CHILLED IRON & PAPER ROLL

SUPER CALENDERS.

Plate Calenders

Chilled Stack Calenders, Rag Cutters, Hand and Power Cutting Presses, Stop Cutters.

THE HATCH PATENT

Stop Cutter,

The only Cutter that can be regulated to cut between water marks of writing papers.

SCREENS,

BRASS AND NICKEL PLATED.

The latter warranted to wear twice as long as brass, BED PLATES, ROLL BARS, FAN AND PLUNGER PUMPS.

Also,

Gun Metal Covered Rolls.

FOR SIZE AND PRESS ROLLS.

STEVENSON

WATER WHEELS.

Shafting and Mill Gearing Generally.

NATRONA POROUS ALUM,

FOR

PAPER MAKERS' USE.

FREE FROM IRON AND FROM EXCESS OF ACID.

Two pounds of it will size as much paper as three pounds of Potash or Ammonia Alum.

Pennsylvania Salt Mfg. Co.

140 South Delaware Ave., Philadelphia. 59 Maiden Lane, New York. 212 Washington Ave., St. Louis, Mo.

AGENTS.

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

Wood Pulp, WET or DRY,

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

IRA L. BEEBE,

60 Duane Cor. Elm St., N. Y.

ARE YOUR MILLS Fully Insured In SOUND Companies?

A prominent paper-maker writes: "As stated before, we want to get out of the hands of our local agents, who omit no opportunity to make us feel that we are paper manufacturers, and that paper mills are burning up at the rate of one a minute."

We can refer to some of the leading Paper Mills, for whom we are SOLE AGENTS.

We can Save you Money.

Blank surveys sent by mail upon application.

ADDRESS,

ANDERSON & STANTON,

Insurance Brokers.

152 BROADWAY.

ESTABLISHED 1840.

OWEN KEENAN'S SON,

Wholesale Dealer, Packer and Importer of all kinds of

Rags and Paper Stock

395 PEARL STREET,

JAMES T. KEENAN. NEW YORK.



The Paper Trade Journal.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF

The American Paper Trade.

Weekly, \$4.00 per annum.

Single Copies, 10 Cents

NEW YORK: SATURDAY, SEPT. 29, 1877.

Advertisements cannot be received for insertion in the current week later than 9 A. M. on Friday...

THE JOURNAL contains the latest and fullest information relative to the paper trade in all parts of the world...

Subscription and postage for Great Britain, per annum, \$1

Subscription and postage for France, per annum, 25 francs

Subscription and postage for Germany, per annum, 8 thalers

Foreign subscribers may address our New York office.

Communications on matters of interest to the trade are earnestly solicited from all quarters...

HOWARD LOCKWOOD,

Publisher and Proprietor,

No. 74 Duane street, N. Y.

Philadelphia Office: No. 900 Chestnut st.

TO CORRESPONDENTS.

As THE PAPER TRADE JOURNAL is the recognized vehicle of communication in matters of trade interest, we will be glad to receive correspondence from all parts of the country.

WATER is in great demand in this part of the country.

SOME of our correspondents leave a great deal of room at the foot of their letter sheets and very little at the top.

The mills in Eastern Massachusetts and New York are seriously inconvenienced for power.

A REGULAR and steady movement is noticeable in all branches of the paper trade and fairly bears out the prognostications of firm prices and improved trade.

WE recur with pride to the fact that there are constant proofs that this paper is the best, in fact only, medium for the paper trade and those who want to reach it.

A VERY interesting and useful pamphlet entitled "Fifteen Cent Dinners for Workingmen's Families," has been prepared by Juliet Corson, the head of the New York Cooking School.

THE manufacturers of wood pulp, at the meeting held in Boston on September 21, fixed the price of pulp at 3 1/2 cents a pound, delivered at the station nearest to the mill of the purchaser.

ruling lower of late, it is not considered that the price has been raised, but simply fixed at a uniform figure.

ABOUT the first of this year we called the attention of paper-makers to the card of E. Braff, Paris, France, who through our columns offered his services to American paper-makers to represent them at the Exposition of 1878.

THE committee of Frank Leslie's creditors appointed to investigate his affairs do not find the work so easy as anticipated, nor are the accounts in such a simple state as to be readily understood.

Low water in the streams supplying the inland mills in this State which manufacture straw wrappings has kept the price of that article firm in spite of the fair supply of water with which the Western manufacturers have been favored.

A LEADING insurance company recently issued a circular, saying that it has lost money on paper-mill risks, and has decided to refuse to write on paper mills any longer.

The Boston Herald of the 23d inst. says: The Secret Service agents to-day examined minutely the alleged counterfeit \$50 legal tender note which came from Chicago.

of ignorance, and it is perfectly possible to secure risks that are as reasonably safe as any others. While on this subject we want to add a caution to the owners of mills as to their management.

ESPARTO.

A correspondent writes to us, saying: "We have some desire to know why esparto grass cannot be, or is not, used in this country."

Answering these questions, we reply that esparto was tried in this country at least ten years ago, and proved that it could not be profitably used as a paper stock.

The stock is used in England in the same classes of papers into which chemically prepared wood pulp enters here.

Correspondence.

[Communications are solicited from everyone who has anything of value or interest to impart. Items of news, trade gossip, and personal information will be gladly received.]

Uneven Felts.

One great source of complaint with wet felts on cylinder machines nowadays is that the edges are unevenly woven; that is, the selvage is not straight.

Fibre Paper.

The Boston Herald of the 23d inst. says: The Secret Service agents to-day examined minutely the alleged counterfeit \$50 legal tender note which came from Chicago.

that the same "fibre paper" can be counterfeited almost as easily as any other? They ought to take a few simple lessons in paper-making.

Suitching the Machine.

It is a general complaint with most machine-tenders that wires have tight and loose sides. While I believe to a certain extent that some wires are made that way, I am constrained to the opinion that the fault is more frequently in the machine than in the wire.

Inventing and Inventors.

Our green friend "John" must have found a mare's nest. It is no use trying to dispute the validity of a patent so authentic as "Dunn & McAlpin's Atmospheric Felt Cleanser."

Sunday Fixing.

Your correspondent, "Paul," in his remarks on Sunday fixing, seems to imagine that men are made of wood or stone and must be moved in the direction of those who have the control of moving them from one place to another.

Failures.

Geo. W. Mildeberger, stationer in this city, has been sold out by the Sheriff. A meeting of the creditors of John R. Nagle & Co., Philadelphia, has been called, and it is reported that a disposition is shown to force the firm into bankruptcy.

Changes, Removals, and New Firms.

C. P. Houser & Co., booksellers, Auburn, Ind., have sold out their business. Searz, Minton & Bro., stationers, Paterson, N. J., are selling out at auction.

Chattel Mortgages.

Mortgage. Amount. M. Fonenbach, 327 Broadway, J. E. Brainsdorf, \$350 James Hanlon, 213 Sackett st.,

BROOKLYN.

Louis C. Lomer, 81 & 83 Court st., John J. Millin, 14 James & Thos. A. Raisbeck, 63 Duane st., R. Hoe & Co., 183

EASTERN STATES.

H. L. Crosby, Boston, Mass., P. Campbell, 2,585-Jas. Dammers, Boston, Mass., Sullivan & McDonald, 57

WESTERN STATES.

Ignatz Wenzelski, Chicago, Ill., 471 I. Van Meter & Co., Cedar Falls, Iowa, 700 Henry Gibson, Omaha, Neb., 1,000 S. W. Williams, Dayton, Ill., Real, 1,500

Fires.

A fire which occurred on last Thursday night, in Providence, R. I., destroyed, among other business establishments, the paper-box manufactory of Jencks Brothers, on Weybossett street.

A fire occurred in the Patent Office at Washington on Monday last, and after laborious effort it was overcome, but not until much loss had been incurred. The models of the following inventions, exhibited in the North Hall, were entirely destroyed: Wood-working (4 classes), wood screws, wire-working, water wheels, water distribution, tubing and wire, stabling, sheet metal, seeders and planters, saws, railways (4 classes), pumps, pneumatics, plows, ores, needles and pins, nails, mills, metal-working (7 classes), metallurgy, horseshoes, harvesters, harrows, hardware manufacture, grinding and polishing, garden and orchard, files, dairy, casting, brakes and gins, nuts and rivets, bolts, bee-hives, baths and closets, aeration and bottling. Aggregate number of models destroyed in this hall, 57,000; valued at \$885,000.

L. Prang & Co.'s large chromo establishment, in Highland District, Boston, was discovered to be on fire Thursday. The building was filled with valuable plates, chromos, &c. The loss will probably exceed \$50,000.

Accident.

John Kelley, an employee in Wardlow, Thomas & Co.'s Niagara Paper Mill, at Middletown, Ohio, was seriously injured one night last week while changing a belt.

Newspaper Intelligence.

Table listing various newspapers and their circulation figures, including titles like 'Quid Nunc', 'Commercial', 'Georgia Register', etc.



Silver Creek (N. Y.) Local, 24 x 36
Oxford (N. C.) Free Lance, 22 x 30
Kennett Square (Pa.) Kennett Advance, 24 x 36
Orange (Texas) Tribune, 34 x 34
Forest (Ont.) Adviser, 27 x 40

MONTHLY.
Leavenworth (Kansas) Central Record, 22 x 30
RESUMPTION.
Benton (Ill.) Baptist Banner, 24 x 36

CHANGES.
The Messenger, Elystan, Minn., has moved to Morristown, in the same State.
The Item, North Vineland, N. J., has moved to Newfield.

The Nord Sjfernan, New York, N. Y., has moved to 43 Chatham street.
The Appeal, Bryan, Texas, has merged into the Brazos Pilot.

The Temperance Union and Canadian Prohibitionist, Belleville, Ont., has moved to Ottawa.
CONSOLIDATIONS.
The Free Press and the Courier, Paw Paw, Mich., have been consolidated under the title of the Free Press and Courier.

The Knickerbocker, Albany, N. Y., has been consolidated with the Press.
SUSPENSIONS NOT PREVIOUSLY ANNOUNCED.
The Journal, West Haven, Conn.; Meriden Herald, West Meriden, Conn.; Review, Cambridge City, Ind.; Gazette, West Lebanon, Ind.; Sunday News, Albany, N. Y.; Daily Witness, New York, N. Y.; Day Book, New York, N. Y.; Hill Co. Record, Peoria, Texas.

Personal.

John Sanders, of the firm of Congreve & Sanders, dealers in chemicals, died on Tuesday last, and was buried on yesterday at Summit, N. J.

In Town.

S. A. Parks, Glen Falls, N. Y.; I. H. Appleton, Holyoke, Mass.; J. De Witt Walsh, Newburg, N. Y.

SPECIAL NOTICES.

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

CONLEY'S Mill and Machinery Agency.

FOR THE PURCHASE, SALE, OR EXCHANGE OF PAPER, COTTON, WOOLLEN, GRIST AND OTHER MILLS; ALSO, MACHINERY, MILL SITES AND PRIVILEGES.

Estimates given for New Machinery at very much lower prices than can be obtained elsewhere.

Parties having any kind of Machinery or Mill Property which they desire to sell, will please send a list and description of the same to the undersigned, who offers for sale a large line of Paper-Making Machinery, including the following:

- One 76-in., one 72-in., one 68-in., one 42-in., and one 36-in. Fourdrinier Machine.
One 54-in., two 62-in., one 68-in., one 72-in. Cylinder Machines.
One hundred and twenty-seven Skeleton Dryers, 36 in. by 80 in., with pulleys, gears, &c., all complete and nearly new, used in drying animal-sized writing papers.
Three Press Rolls, 12 in. by 62 in., covered with gun-metal.
Three Couch Rolls, one rubber and two copper, 12 in. by 68 in. wide.
One Breast Roll, 12 in. by 68 in.
One stack of seven Super Calenders, 30-in. face.
One stack of six Super Calenders, 31-in. face.
Four stacks of Straw Board Calenders, from 30-in. to 40-in. face.
Four Daniels Rag Cutters, one Rope Cutter, one Cane Cutter, two Straw Cutters, one Wood Chopping Machine.
Eight Iron Dryers, 14 in. by 36 in., in good order. Price \$150 each.
Twenty Steam Engines, from 10 to 300 H. P., including one 150 H. P. and one 90 H. P. Corliss Engines, and one 80 H. P. Putnam Machine Co. make.
Four Double Fine Steam Boilers and one large Locomotive Boiler.
One large Steam Pump.
Two Rag Dusters, one Rag Thrasher, two Devil Dusters.
Two 48-in., one 54-in., one 62-in., and one 84-in. Paper Cutters, one 62-in. Hatch Cutter.
One Gould Patent Engine.
Two Kingsland Patent Engines.
One Standing Press, with gun-metal screw, plate 34 in. by 48 in.
Twelve Cutting Presses, from 27 in. to 45 in. wide.
Six Making Cylinders, of different sizes.
Ten Water Wheels, different sizes.
One Snow's Water-Wheel Governor.
One 40-in. Luff Water Wheel Case.
One Twisting Machine.
One 80-in. Winder, with ninety-five Iron Spools, 2 in. by 28 in.; also, forty Wooden Spools, 7 in. by 28 in.
One set of three Reels, 62-in. face; one set of six Revolving Reels, 76-in. face; one set of six Reels, 80 in. face; one Sizer for a 62-in. machine; one Winding Machine, one Size Washer, together with an extensive list of Miscellaneous Machinery, including fifteen Rag Engines, including five 36-in. rolls, one 38-in. roll and one 42-in. roll, four Rotary Rag Rollers, 52 1/2 in.
One Rotary Boiler, 6 1/2 feet by 24 feet.
One large Rotary Globe Boiler 14 feet in diameter, will stand 130 lbs. steam pressure, and well adapted for boiling wood or straw.
Three Wood or Straw Digesters.
One set of Artesian Well Tools.
No. 8 Sturtevant Blower, with 300 feet of Galvanized Iron Pipe.
One No. 8 Armstrong Heater.

PAPER MILLS.

Twenty Paper Mills in Massachusetts, New York, Connecticut, Pennsylvania, Ohio, Michigan, Kentucky, Virginia, Georgia and Illinois, containing the following size machines: One mill with two 72-in. machines, one with one 84-in., one with one 72-in. and one with one 72-in. and one 62-in., one with one 72-in. and one 72-in. and one 36 in., two with one 56-in. each, one with one 32-in., and one with one 48-in. Cylinder Machines.

The undersigned is also agent for the following specialties:

The Risdon Improved Turbine Water Wheel, which produces more power for the water used than any other water wheel in the world. Catalogue and price-list sent on application.
The Bagley & Sewall Rotary Force Pump, adapted especially to Paper Mills (see advertisement in another column).

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

EDWARD CONLEY, No. 74 Duane Street, N. Y.

Third Edition---Now Ready.

LOCKWOOD'S DIRECTORY

Paper Trade.

1877.

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

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

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

PRICE, - - - - \$2.00.

HOWARD LOCKWOOD, Publisher.

74 DUANE STREET, N. Y.

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY EVENING, September 28, 1877.

THE MONEY MARKET.—Money was less active and easier to-day and the more common rate on call outside of bank was five per cent. on all classes of collateral. Discount continues dull and mercantile paper is scaled for 60 days from 6 per cent. to 7 per cent. and for 4 months from 6 per cent. to 8 per cent. Banks and trust companies are doing nothing below 5 per cent. Short indorsed bills receivable are sold at 6 per cent. to 6 1/2 per cent.

In Government bonds there is a free inquiry and sales have occurred at former rates. Gold is easier but very dull at 103 1/2 to 103, and is devoid of interest. The quotations for the week are:

Table with columns: Opening, Highest, Lowest, Closing. Rows for Sept. 22, 23, 24, 25, 26, 27, 28.

The posted rates for bankers' sterling remain unchanged at \$4.83 for 60-day and \$4.86 1/2 for sight, and the market is weak. The rates to-day are: Sterling, 60 days, \$4.81 1/2 to \$4.82 1/2; sterling, sight, \$4.85 1/2 to \$4.86; cable transfers, \$4.87 to \$4.88; commercial sterling, prime long, \$4.81 to \$4.81 1/2; commercial sterling, good long, \$4.80 to \$4.81; Paris, bankers', 60 days, 5.20 to 5.18 1/2; do, sight, 5.17 1/2 to 5.16 1/2; Antwerp, bankers', 60 days, 5.20 to 5.18 1/2; do, sight, 5.17 1/2 to 5.16 1/2; Swiss, bankers', 60 days, 5.18 1/2 to 5.17 1/2; do, sight, 5.16 1/2 to 5.15; Reichmarks (4), bankers', 60 days, 94 1/2 to 94 1/2; do, sight, 95 1/2 to 95 1/2; Guilders, bankers', 60 days, 40 to 40 1/2; do, sight, 40 1/2 to 40 1/2.

THE PAPER TRADE.—There is a trifle more movement and purchases are steady and regular day after day, with no spasmodic increase, but a fair and moderate business. The sympathetic activity from branches of trade which are feeling the impulse of a strong revival affects the paper trade regularly and in a healthful way. Fine Papers continue to be called for in somewhat larger lots than last week to meet the increasing demands of retailers' temporary wants only, as the latter are still indisposed to purchase ahead, and exhibit a trepidation which in the light of further calls is somewhat surprising to the large dealers, who are urging future contracts and increased purchases. Out-of-town buyers exhibit more confidence, and still furnish the bulk of trade. The search for Book Papers is more active and the near approach of holiday times stimulates the publishers, who are more in the market. A slight improvement is also noticeable in News, which moves along with more activity, while prices remain about the same. Straw Boards are selling in a steady, regular way, and the call is fair, although not up to the point of brisk trade or great activity. The market for Straw Wrappings during the past fortnight has been characterized by more than the usual demand, at firm prices. The Columbia County mills and other State manufacturers of these goods have entirely stopped on account of the scarcity of water, and the supply has been entirely from the West, where the mills have had the good fortune to have a better motive power, the rains having been sufficiently abundant to keep them going pretty steadily. Thus there has been a fair, but not an extra, supply in the market, which has kept prices firm. The bulk of the trade, however, has been in the good export demand, which has regulated the demand and supply to paying figures and in proper relations. If the delayed equinoctial storms shall yet prevail abundantly the price will undoubtedly fall, as the idle mills have large stocks of Straw on hand, which only need a rise in the streams to be converted into paper and be speedily put upon the market in large quantities. Binders' Boards are brisker. Sales have been quite numerous. Binders are purchasing more freely and are affected by the approach of the holidays. Prices rule firm at previously mentioned figures.

JUTE BUTTS.—There has only been one arrival during the past week, viz., the Perthshire, at this port with 2,000 bales. Orders from manufacturers have ruled rather light, and sales have embraced about 1,200 bales. The quoted prices make at the close are from 3 1/2-16c. to 3 5/8-16c., cash and time.

FOREIGN RAGS AND PAPER STOCK.—The market may still be called steady so far as a limited business and moderate sales well sustained can justify the designation. The increased movement in Linen Rags continues and purchasers are buying in small lots at rates which have remained unchanged since last week's report. There are still small importations of Baggings, which are in good call and sold—to fill orders and to meet new sales—about as fast as they come into market. Prices still remain the same, but a weakness in the price of Jute Butts causes an unsteadiness in the rates, which indicate a possible fall in the course of a week if Butts shall continue to be depressed. The arrivals of the week foot up 1,605 bales Rags; 250 bales Old Papers, and 628 bales Manillas.

DOMESTIC RAGS.—The activity noticed in our last issue has been fairly maintained during the past week in some qualities, while in others about the same business was transacted at slightly advanced prices. The call for Foreign Rags is still limited, and Domestic rule correspondingly firmer and in better demand. Good Packings are in very fair demand and move regularly at advanced rates. Poor Packings are in great abundance in the market and are offered at all sorts of prices, and this has in a measure a bad effect upon the market and reduces the call for better qualities, which are still in good demand, but would otherwise be ruling much higher. There is a trifle more call for White Rags and manufacturers are now purchasing more largely of City than of Country stock. Sales include 150 bales Good City Seconds at 3 1/2c.; 65 bales Common City Seconds at 2 1/2c.; and 20 tons No. 2 City Whites at 3 1/2c.

OLD PAPERS.—The same movement continues in Old Papers noticed in our last issue. They are disposed of with freedom, while prices are unchanged but are firm at last week's quotations. The sales include 20 tons Heavy Book stock at 4 1/2c., and 40 tons do. at 4 1/2c.; 20 tons Light Book stock at 2 1/2c., and 5 tons Manilla Clippings at 4c.

BAGGINGS.—The call for Baggings continues good, and the earnest request for finer qualities increases the hopeful feeling. Prices have advanced abroad and although the depression in Jute Butts tends to abate values they are held very firm at last week's quotations. Among the sales are 300 tons in lots No. 1 Gunny Bagging at 3c.; 100 tons in separate lots No. 2 Gunny Baggings at 2 1/2c., and 40 tons in two lots No. 1 Burlaps at 3 1/2c. The mills are now running on full time and the supply of Rope is more sought for, while there has been a slight advance in price. The steady increase and continued firmness in Rope have brought purchasers and sellers together, and there is more agreement than noticed in our last issue. Sales have occurred of lots of 50 tons and 70 tons at 3 1/2c. and 3 3/4c. respectively. Hemp stock is in about the same demand, and is sought for with a fair degree of earnestness. A small stock in the market stimulates buyers, and makes prices firm.

WOOD PULP.—The action of the manufacturers of this article who met in convention last week at Boston in fixing the price at 3 1/2c., has caused hardly any transactions this week. Most persons anticipated the action of the convention, and thus unusual activity prevailed in the market for three weeks previous to the meeting. Large stocks have consequently been secured, and there is only little doing now, and the same state of affairs is predicted for the next fortnight, until an urgent demand shall be stimulated by the exhausted supply. Sales are recorded this week of only 30 tons at 3 1/2c., the new standard price.

STRAW.—The market is steady, and prices remain unchanged. We quote 55c. to 60c. for Long Rye; 45c. for Short Rye, and 45c. to 50c. for Oat.

ROSINS.—Are quiet, but there is no change in prices. The following are the quotations: Good Strained at \$1.80; Common do. at \$1.70; E. at \$1.90; F. at \$2.00; G. at \$2.12 1/2; H. at \$2.25; I. at \$2.30 to \$2.35; K. at \$2.50 to \$2.87 1/2; M. at \$3 to \$3.37 1/2; N. at \$3.75 to \$3.87 1/2; W. at \$4.25 to \$5.

CHEMICALS.—The market remains in about the same state of moderate activity, nothing to boast of, but just removed beyond the condition of matters designated as "dull." Prices generally remain the same, except in Bleaching Powders, which have fallen off a trifle. Purchasers have lots in small and moderate-sized quantities. Carbonated Soda Ash is somewhat weaker, although prices are not fairly given way. Sal Soda is firm. Oxalic Acid and China Clay remain about the same. Ten tons of the latter sold for \$13 per ton. Sales include 250 casks Bleaching Powders at 1.52 1/2c. currency; 50 tons Caustic Soda Ash, 56 per cent., at 1.90c. gold; 50 drums 60 per cent. Caustic Soda at 4.30c. gold; 50 tons Sal Soda 1.30c. gold; 200 barrels Lump Alum at 2 1/2c. currency; 100 barrels Ground Alum at 3 1/2c. currency; 100 barrels Soft Alum at 2 1/2c. currency; 50 barrels Concentrated Alum at 2 1/2c. currency; 100 barrels Natrona Porous Alum at 3 1/2c. currency; 25 tons Aluminous Cake at 2 1/2c. currency; 20 casks Yellow Prussiate at 2 1/2c. currency; 10 casks Bichromate at 12 1/2c. currency.

COAL.—Although Anthracite is being marketed in large quantities, trade has fallen off since our last issue. Dealers buy only to meet immediate wants, and the market is weaker than at any time since the suspension begun. The offset to its continuance exists in the fact that only two months remain in which to put in the winter's supply. There is no change to note in the price of Cumberland. The market is quiet, and tonnage is somewhat off as compared with the previous week. The Wyoming district is not shipping anything yet. Seward's Coal Trade Journal says: "The business in

Lehigh is not reported so active as last week, sales are not as large and prices are weaker. In fact, it is very difficult to find a quotation that represents the market. One party with a good quality insists upon a high range of prices, while the next, with an equally good coal, quotes the prices at much lower figures; this state of affairs may be credited to the general activity that prevails throughout the region, and large shipments. We quote, f. o. b. at shipping points: Lump, \$3.75; Broken, \$3.50 to \$3.65; Egg, \$3.55 to \$3.65; Stove, \$3.60 to \$3.75; Chestnut, \$3.30 to \$3.50; Pea, \$2.25.

NEW YORK MARKET.

PRICES CURRENT.

Paper Market.

Table of Paper Market prices including Flat Caps and Ledger, Blotting, Book, extra machine finished, etc.

Woolen Rags.

Table of Woolen Rags prices including Comforter Stock, White Woollens, Blue Flannels, etc.

Rags, Hops and Bagging.

Table of Rags, Hops and Bagging prices including White Shirt Cuttings, White Shirt Cuttings, No. 1, etc.

Shavings and Old Paper.

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

English Rags, &c.

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

Table of Mixed Bagging, Burlaps Bagging, Rope, Manila, tarred, etc.

Hamburg Rags, &c.

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

COTTONS.

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

Rope.

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

Old Papers.

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

Leghorn and Genoa Rags.

Table of Leghorn and Genoa Rags prices including S S, No. 2 Linens, T T, No. 3 Linens, etc.

Alexandria Rags.

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

Memel Rags.

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

Konigsberg Rags.

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

Japanese Rags.

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

Chemicals, Coloring Materials, &c.

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

BOSTON MARKET.

Market without much change. Paper and Stock quiet. Chemicals fairly active. Sal scarce on spot. Rosins firm but quiet.

Paper Stock.

Table of Boston Paper Stock prices including Mill Assorted Whites, Cotton Canvas, Cotton Canvas, No. 2, etc.



ALEXANDRIA RAGS.	
Whites	3 3/4
Blues	3 1/4
Colors	2 1/4

SMYRNA RAGS.	
Whites	3 1/4
Blues	3 1/4
Reds	2 1/4
Mixed	2 1/4
Canvas, No. 1	4 1/2
Canvas, Good	4 1/2
Tarred	2 1/4
Rope	2 1/4

CONSTANTINOPLE RAGS.	
Whites	3 1/4
Blues	3 1/4
Reds	2 1/4
Mixed	2 1/4

NEW PAPERS.	
Superfine Book	19 30
Fine Book	12 15
Rags News, No. 1	10 15
Ordinary Rag News	10 15
Straw News	10 15
Manilla, Cream, No. 1	12 13
Ordinary Wrapping Manilla	8 9
Manilla, No. 2	8 9
Bogus	5 6
Straw Wrapping	2 1/2
Hardware, No. 1	8 9
Hardware, No. 2	8 9
Hardware, glazed	8 9
Straw Boards, air-dried, 7/8 ton	60.00 70.00
Straw Boards, steam-dried, 7/8 ton	65.00 80.00
Binders' Boards, 7/8 ton	70.00 90.00
Leather Board, counter	11 12
Leather Board, No. 2	8 9
Leather Board, No. 3	5 6

BOSTON CHEMICALS.	
Aluminous Cake, gold	2 1/4
Alum, English lump, 7/8 D	2 1/4
Alum, English ground	2 1/4
Alum, American ground	2 1/4
Alum, American lump	2 1/4
Alum, American Potash	3 1/4
Alum, ground, Concentrated	3 1/4
Anti-Chlorine	3 1/4
Bi-Chromate Potash, Scotch, cur'y	1 1/2
Bi-Chromate Potash, American, cur'y	1 1/2
Bleaching Powders, gold	1 1/2
Blackley Blue, gold	4 1/2
Caustic Soda, 60 cent, gold	4 1/2
Caustic Soda, 70 cent, gold (for 60 cent)	4 1/2
Clay, English, 7/8 ton, gold	18.00 15.00
Clay, American, 7/8 ton	15.00 17.00
Coppers, American, 7/8 D	1 1/2
Extract Logwood	1 1/2
Lime, common, 7/8 bbl	1.30 1.40
Prussian Blue, 7/8 D	62 65
Prussiate Potash, American	2 1/2
Rosin, common strained, 7/8 bbl	2 1/2
Rosin, No. 1	2 1/2
Rosin, pale	3 1/2
Rosin, extra pale	4.00 4.50
Sal Soda, N. U., 7/8 D, gold	1.35 1.45
Sal Soda, American, currency	1 1/2
Soda Ash, gold	1 1/2
Soluble Blue	1 1/2
Sugar Lead, White	19 90
Sugar Lead, Brown	18 85
Sulphuric Acid, 66 degrees	1 1/2
Terra Alba, 7/8 ton	30.00 30.00
Ultramarine, 7/8 D, gold	25 30
Venetian Red, 7/8 D	1 1/2
Vitriol Blue	1 1/2
Yellow Ochre	1 1/2

CINCINNATI MARKET.

Paper Stock.	
City, No. 1 Whites	5 1/2
Mill Assorted Whites	5 1/2
White Cotton Canvas	5 1/2
No. 1	6
White Shirt Cuttings	6
Country Whites, No. 1	5 1/2
Country Whites, No. 2	4 1/2
Country Whites, No. 3	3 1/2
Country Blue Rags	3 1/2
Country Mixed Cotton	3 1/2
Rags	3 1/2
City Mixed Cotton	3 1/2
Rags	3 1/2
Shoe Cuttings, new	5 1/2
Colored Cotton Rags	3 1/2
Manilla Rope	3 1/2
Hemp Rope	4 1/2
Gunny Bagging	2 1/2
Hard Woolens, old	2 1/2
Hard Woolens, new	11
Soft Woolens (Mill)	9

Paper Stock.	
Soft Woolens, mixed	7 1/2
City	7 1/2
Common Wool Rags	90
White Shavings, No. 1	4 1/2
White Shavings, No. 2	3 1/2
Colored Shavings	3
White Collar Cuttings	6
White Envelope Cuttings	4 1/2
Manilla Envelope Cuttings, new	3
Manilla Papers, No. 1	3 1/2
Manilla Papers, No. 2	3 1/2
Sizes Papers	3 1/2
News Papers	3 1/2
Flour Sacks	3 1/2
Common Papers	90
Straw Board Cuttings	90
Binders' & Tar Board	3 1/2
Cuttings	90
Mill Bagging, No. 1	3 1/2
City Gunnies, No. 2	2 1/2

CHICAGO MARKET.

Rags and Paper Stock.	
City Whites, No. 1	5 1/2
Seconds & Blues	4 1/2
Print Rags, No. 1	3 1/2
Manilla Rope	3 1/2
Gunny Bagging	2 1/2
Hard Woolens	2 1/2
Soft Woolens	7 1/2
Wrapping Wins	1 1/2
New Clips (free from sat)	12 13

Paper Stock.	
Mixed Whites	3 1/2
White Shavings	4 1/2
(H & S)	4 1/2
Book Papers, mixed	3 1/2
Print Papers	2 1/2
Flour Sacks	4 1/2
Manilla Papers	2 1/2
Common Paper	3 1/2
Straw Brl Chips	3 1/2
Seamed Cloth	5 1/2

FOREIGN MARKETS.

**London Market Report.**  
LONDON, Sept. 15, 1877.  
Trade during the week, although not brisk, was more animated, it being felt here that paper manufacturers have worked down their entire stock and are now compelled to come into our market and buy at best possible terms. From America also a few orders were received.  
RAGS.—Fine White Linens moved freely and middle classed Strong Linens were in good request. Fine Cottons unchanged, while lower graded Cottons were more or less neglected.  
WASTE PAPERS.—The American orders referred to above were almost entirely for these; a few good parcels changed hands, so that holders are again stiffer with prices.

**The French Market.**  
PARIS, Sept. 10, 1877.  
PAPER AND PAPER STOCK.—The sale of papers continues slow, although in view of a change manufacturers continue regular provision. A reduction in price of ten per cent. has taken place in some kinds of paper, but this is mostly due to the lessened cost by the use of wood, &c.  
WOOLEN RAGS.—Business is very calm, except in some privileged kinds, and no immediate prospect of improvement.

PHILADELPHIA MARKET.

Paper Stock.	
White Rags	5 1/2
Mill Assorted White Rags	6 1/2
White Shirt Cuttings, No. 1	7 1/2
White Shirt Cuttings, No. 2	6 1/2
Cotton Canvas, No. 1	4 1/2
Cotton Canvas, No. 2	4 1/2
Linen Canvas, No. 1	3 1/2
Blues and Thirds	3 1/2
Colors	2 1/2
Jute Butts	3 1/2
Gunny Bagging	2 1/2
Kentucky Bagging	4 1/2
Manilla Rope	8 1/2
Soft Woolens	7 1/2
Hard Woolens	11
Hard White Shavings, No. 1	5 1/2
Soft White Shavings, No. 1	5 1/2
Soft White Shavings, No. 2	4 1/2
Mixed Shavings, No. 1	3 1/2
Mixed Shavings, No. 2	3 1/2
White Collar Cuttings, paper	3 1/2
White Collar Cuttings, cloth	3 1/2
Solid Imperfections	3 1/2
No. 1 Prints, News and Writing	3 1/2
Ordinary Prints	1 1/2
Manilla Envelope Cuttings	3 1/2
Manilla Papers, No. 1	3 1/2
Hardware and Manilla	1 1/2
Straw Board Cuttings	3 1/2
Binders' Board Cuttings	3 1/2
Common Papers	1 1/2

Leghorn Rags.	
F. P. No. 1 Linens	6 1/2
S. S. No. 2 Linens	5 1/2
T. T. No. 3 Linens	4 1/2
K. E.	5 1/2
F. No. 1 Cotton	3 1/2
S. No. 2 Cotton	4 1/2
T. No. 3 Cotton	3 1/2
H. No. 4 Cotton	3 1/2

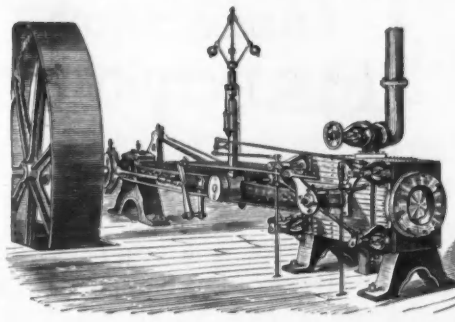
New Papers.	
Thicket Plate	16 18
No. 1 Book, white and tinted	14 15
Superfine Book, white and tinted	13 14
Fine Book, white and tinted	11 12
No. 2 Book	10 11
Colored Glazed Mediums	14 16
Rag News, No. 1	9 9 1/2
Ordinary Rag News	8 1/2
Straw and Wood News	7 1/2
Bleached Manilla, No. 1	8 1/2
Ordinary Manilla	8 1/2
Bogus Manilla	5 6
Straw Wrapping	2 1/2
Glazed Hardware	7 1/2
Unglazed Hardware	7 1/2
Tissue Manilla, 24 x 36	1.10 1.25
Tissue, white, 20 x 30	1.45 1.80
Tea Papers, 14 x 20	50 55
Tea Papers, 13 x 18	40 45
Tea Papers, 12 x 16	35 37 1/2
Straw Boards, air-dried, 7/8 ton	60.00 60.00
Straw Boards, steam-dried, 7/8 ton	65.00 80.00
Binders' Boards, 7/8 ton	70.00 80.00
Leather Boards, Extra	70.00 80.00

Chemicals.	
Aluminous Cake, currency	2 1/4
Alum, Concentrated	2 1/4
Alum, lump, currency	2 1/4
Alum, ground, currency	2 1/4
Alum, potash, currency	2 1/4
Alum, porous, currency	3 1/2
Anti-Chlorine	3 1/2
Bleaching Powder, gold	1 1/2
Caustic Soda, gold	4 1/2
China Clay, English, 7/8 ton, gold	16.50
China Clay "Star", currency	14.50
China Clay, American, 7/8 ton, cur'y	12.00
South Carolina Clay, 7/8 ton	12.50
Terra Alba, English, 7/8 ton, best white	20.00
Terra Alba, American, 7/8 ton	11.00
Prussiate of Potash, yellow	2 1/2
Bichrome of Potash, Scotch, currency	1 1/2
Coppers, American, prime	1 1/2
Extract Logwood	1 1/2
Orange Mineral, gold	1 1/2
Rosin, good strained	2.40 2.85
Rosin, No. 2	2.00 2.25
Rosin, No. 1	2.75 2.90
Rosin, Pale	4.00 5.00
Sal Soda, Alhusen's or Deacon's, cur'y	1 1/2
Soda Ash, carth, gold	2 1/2
Soda Ash, refined, gold	2 1/2
Spanish Brown	1 1/2
Sugar of Lead, white	19 20
Sugar of Lead, brown	19 20
Sulphuric Acid	1 1/2
Ultramarine Blue, gold	2 1/2
Venetian Red, American	1 1/2
Blue Vitriol, English	1 1/2
Yellow Ochre, American	1 1/2
Yellow Ochre, French, gold	2 1/2

62-INCH DRYERS. ROB'T WETHERILL & Co., Chester, Pa.

For Sale Low. Three 62-inch Dryers, 48-inch diameter, with reels, winder, &c., complete and in good order. Also, 12-horse power Portable Engine and Boiler-Wood & Mann. All in good order, and now running at the mill of the Connecticut Paper Pulp Company, Hartford, Conn.



CORLISS ENGINE Builders. MACHINERY. Boiler Makers. SHAFTING AND GEARING.

FOR SALE. The Paper Mill,

AT MANSFIELD, OHIO. Three acres of ground; buildings wood; mill proper, 30 x 168 ft.; boiler house, 30 x 30; engine room, 18 x 38; one 72-in. and one 48-in. cylinder machine, with 6 3/4 in. dryers each; calenders, cutters, reels, and power cutter; 5 rag engines, rolls 36 x 36; straw and rag boilers, pumps, &c. (a complete mill); one Corliss engine, cylinder 18 x 42, in use seven months; 3 boilers, 30 ft. long, 48 in. diameter, 5 flues, each two and three years old; never-failing spring of clear water (over supply); all machinery in No. 1 condition; will sell on easy terms, and for one-third what it would cost to put the machinery there; am not a practical paper-maker; straw plenty, and one of the best shipping points in the State; coal cheap. Call on or address E. HADE, Mansfield, Ohio.

GROUND WOOD PULP.

Ground Wood Pulp in quantities, 2 cents per pound, dry weight. Ground Wood Board for box makers furnished and calendered, 2 1/2 cents per pound, all thicknesses. For sale by J. & W. Reid, 98 and 100 St. Paul street, Quebec, Canada.

J. G. DITMAN & CO., J. G. DITMAN. WHOLESALE PAPER AND RAG WAREHOUSE.

30, 32 and 34 South Sixth Street, Philadelphia, corner of Jayne Street.

THOMAS D. STETSON, Solicitor of Patents,

AND MECHANICAL EXPERT IN PATENT CASES. No. 23 Murray St., New York. Respectfully offers professional assistance in Caveating. Searching on Novelty. Determining if clear of previous patents. Securing Patents in this country. Securing Designs, Trade Marks and Copyrights. Contesting Infringements. Securing Protection in Foreign Countries. Making Conveyances. Reissuing. Opinions on Infringements. Defending against Attacks. Proceeding against Infringers. Advising at all stages. Mr. STETSON asks increased business on the following grounds: Adaptation. Mechanical Training. Experience. Central Location. Modern Facilities. Moderate Prices. Personal Attention. Good Assistants. An Assistant in Washington. Frequent visits there. Best Foreign Agents. Mr. Stetson represented Messrs. Fairbanks in extending the Railroad Track Scale patent, Sir William Thompson in patenting the Atlantic Telegraph Instrument, and Mr. Corliss in patenting the Centennial Exhibition Engine.



LARGEST STOCK AND GREATEST ASSORTMENT IN THE COUNTRY J. G. DITMAN & CO.

KNIVES FOR PAPER MILLS

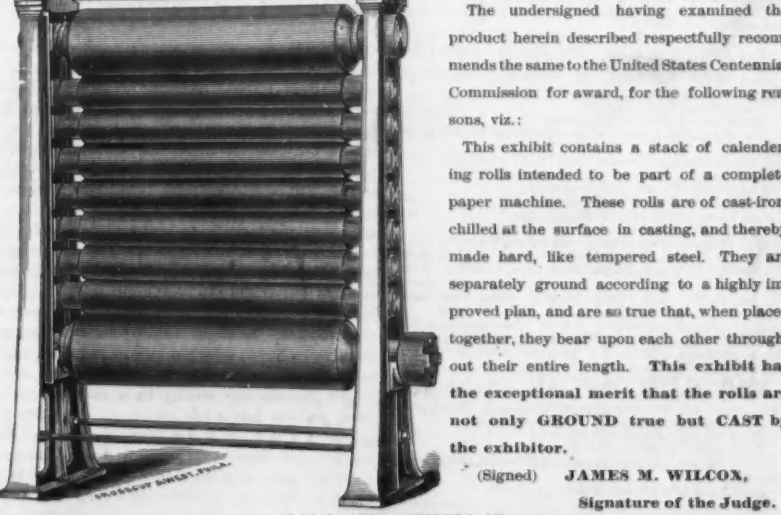
Paper Cutting Machinery. PAPER MILL FLY BARS AND BED PLATES. RAG CUTTER AND TRIMMING KNIVES. LARGE AND DIFFICULT KNIVES A SPECIALTY. All Work Fully Warranted in Every Respect.

IMPROVED ANGLE BED PLATE, THE BEST BEATING PLATE IN USE.

TAYLOR & CORSER, Riegelsville, Warren Co., N. J. F. S. TAYLOR, G. A. CORSER, TAYLOR, STILES & Co., Musconetcong, N. J. A. HANKEY & Co., Rochdale, Mass.

LOBDELL CAR WHEEL COMPANY, WILMINGTON, DEL.

The Oldest and Most Extensive Manufacturers of Chilled Car Wheels in this or any other Country. EXTRACT OF AWARD ON CHILLED ROLLS.



ALSO MANUFACTURERS OF CHILLED ROLLS For Paper Machines, Rubber, Brass, Copper, Rolling Mills, &c. The vast quantity of iron used daily in the business of this establishment permits the very best selection for the composition of CHILLED ROLLS. The long experience of Mr. Geo. G. Lobdell in making chilled castings, and who personally directs the selection, enables them to make CHILLED ROLLS UNEQUALLED IN QUALITY AND GROUND AS PERFECTLY AS ANY OTHERS. GEO. G. LOBDELL, Pres. W. W. LOBDELL, Sec. P. N. BRENNAN, Treas.

BELT HOOKS

The Best Metallic Belt Hook in the Market for LEATHER OR RUBBER BELTS. These Hooks have been thoroughly tried for eight years in all places—in Machine Shops, Cotton, Woolen and Paper Mills—and all who use them admit that they are the best and cheapest fastening in use, taking into account the durability of the Hook, wear and tear, and time in mending belts. GREENLEAF WILSON, Box 447, Lowell, Mass.

Advertisements.

WANTED—TO PURCHASE FOR CASH, FLAX waste, flax tow, raw flax, hemp and jute waste. Address ALBERT J. LINLITHGO, N. Y.

WANTED—BY A YOUNG MAN WHO HAS some knowledge of the paper stock business, a position as salesman with some well established house; present salary not so much an object as a chance to improve. Address PAPER STOCK, Box 5, 514, N. Y.

WANTED—A SITUATION AS FOURDRINER machine tender. Will furnish reference if desired. Address H. L. F., Box 292, Watertown, N. Y.

WANTED—A SITUATION AS FOREMAN of a mill making print, book and Manilla; accustomed to using all classes of stock and fibres; can give first-class reference as to ability, sobriety, &c. Address PAPER-MAKER, 228 Second st., Jersey City, N. J.

WANTED—A SITUATION AS FOREMAN.—An intelligent and experienced practical Paper maker, successful in the management of Mills, desires a situation as Superintendent. Understands every detail of the management of a mill, making Fine Manilla, Book, Colored or News, and the working of the different vegetable fibres. Address during September, C. A. L., Box 1243, Boston P. O., Mass.

TO PAPER-MAKERS AND DEALERS.—An active business man, with a practical knowledge of paper-making, familiar with the details of business carried on by paper houses in the different cities, and a good salesman, would like to connect himself with a manufacturer or dealer; could make himself very useful, as he is a good judge of stock and other material, and a close buyer; or could assist in the management of a mill; a high salary not expected. Address "PAPER," Office P. T. Journal.

WISHING TO GIVE MY SON THE MANAGEMENT of my mill and business for a time I wish to get a situation as foreman. Address JAMES HARPER, Westville, Conn.

FOR SALE.

A 40-inch JAS. LEFFEL TURBINE WATER WHEEL; a 40-horse power STEAM ENGINE; a 60-horse power STEAM BOILER. All in good order. Inquire of Wm. HEYSER, Agt., Chambersburg, Pa.

FOR SALE.

ONE HUNDRED BALES No. 1 GUNNY BAG, carefully sorted, free from shivey, for 35c; 100 Bales New Calico Strips, free of blacks and oily at 45c, all new; 25 Bales of New Bleached Strips at 60c, all covered thin Burlaps. Address WILLIAM SHAY, New Hamburg, Dutchess County, N. Y.

CABOT, BOWLES & CO., New York, BROKERS IN

Jute Butts, Bagging & Rope. Our facilities for buying or importing are unexcelled. The large business we do enables us to make the best possible arrangements for freight. We claim credit for having Butts put in special class.

Wm. Zinsser & Co., 197 William St., N. Y.

MANUFACTURERS OF SUPERIOR SEALING-WAX OF ALL GRADES. Wrapping Sealing-Wax at Low Prices of all grades and colors a specialty.

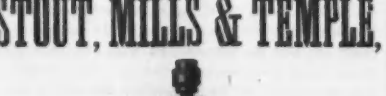
WATERPROOF LEATHER BELTING

Expressly adapted to Paper Mills. Oak Tanned Leather Belting, Hydraulic Packing Leather, Fulled Raw-Hide Lace Leather. MANUFACTURED BY ANTON HEIM, 33 Ferry Street, New York.

A. H. GERE & Co., 73 Walnut Street, Cincinnati,

Dealers in Paper-Mill Supplies. We keep constantly on hand a full stock of all Dye Stuff and Chemicals used by Paper Manufacturers, all of which we guarantee to be strictly pure and at low prices.

STOUT, MILLS & TEMPLE,



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

THE AMERICAN TURBINE, as recently improved, utilizes a higher average percentage power than any Turbine ever known, which justly entitles it to the position claimed for it as the BEST Water Wheel in the world. Large illustrated catalogue sent free on application to

STOUT, MILLS & TEMPLE, DAYTON, OHIO.



ESTABLISHED 1872.

THE PAPER TRADE JOURNAL FOR 1877.

"The best paper (devoted to the Trade) in the English Language."

LONDON BOOKSELLER.

The Journal is the ONLY paper devoted to the Paper Trade whose Proprietor has NO CONNECTION with the Business. It is therefore INDEPENDENT, and does not advocate the interests of any HOUSE or CLIQUE in the Trade.

RATES OF SUBSCRIPTION, PER ANNUM. Weekly Edition \$4.00 Monthly Edition 1.50 POSTAGE PREPAID.

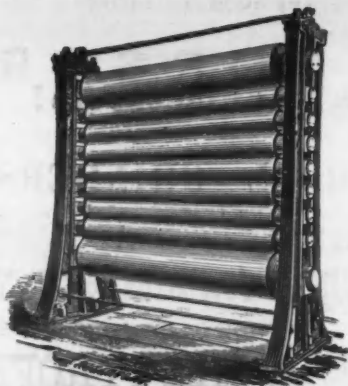
THE JOURNAL is the only representative of the American Paper Trade. It gives early information, with full descriptions of inventions and processes for paper manufacture at home and abroad, account of new fibres and other materials, and records of the operations of paper mills in the United States and Canada. It contains authentic data of the trade in foreign countries, and publishes communications of a practical and scientific character, by able and experienced writers. Its market reviews and quotations show the nature of trade at New York, Boston, Chicago, Cincinnati, Philadelphia, New Orleans, London, Paris, Hamburg, Leghorn and Calcutta, and are as accurate and complete as it is possible to make them. Manufacturers and dealers who want to know of the progress of the paper business in this and other countries will find THE JOURNAL indispensable, and every reader will derive benefit from its contents.

Subscription and Postage for Great Britain (Weekly Edition), per annum £1 Subscription and Postage for France (Weekly Edition), per annum 25 francs Subscription and Postage for Germany (Weekly Edition), per annum 8 thalers French and German subscribers may address our New York Office.

SPECIAL CLUB RATES

With other Publications by HOWARD LOCKWOOD. The Paper Trade Journal and The American Stationer, one year \$5.50 The Paper Trade Journal and Lockwood's Directory, one year 5.25 The Paper Trade Journal, Lockwood's Directory and American Stationer, one year 7.00 The Paper Trade Journal and The Stationer's Price Book, one year 6.00 The Paper Trade Journal, The American Stationer, Lockwood's Directory, and The Stationer's Price Book, one year 9.00

Address the Publisher, HOWARD LOCKWOOD, No. 74 Duane Street, N. Y.



J. MORTON POOLE & CO., Wilmington, Delaware, MANUFACTURERS

Chilled Rolls GROUND BY THEIR PATENT PROCESS.

EMPIRE FELTS.

Cylinder and Fourdrinier WET FELTS, PRESS FELTS, AND JACKETS.

MANUFACTURED BY H. WATERBURY & CO., RENSSELLAERVILLE, Albany County, N. Y.

In ordering Felts, give kind of Stock used and quality of paper made, and we warrant Felts that will please. ORDERS PROMPTLY FILLED. OUR PRICES ARE IN CURRENCY. Will send Price List upon Application. All Felts sent out by us warranted to work well; if not, it may be returned.

Rice, Barton & Fales Machine and Iron Co. AT OLD STAND OF RICE, BARTON & CO. WORCESTER, MASS., MANUFACTURERS OF

PAPER MACHINERY OF EVERY DESIRABLE VARIETY, IRON AND BRASS CASTINGS, Chilled Iron & Paper Calender Rolls, Rag Engines, Rag Cutters, Steam Pressure Regulators, &c. HYDRAULIC PRESSES, FROM 5 TO 14 INCH PISTON.

GEO. M. RICE, Treas. GEO. N. BARTON, Pres. JOS. E. FALES, Madages.

ESTABLISHED 1835.

GAVIT Paper Machine Works. 224, 226 228 & 230 N. BROAD ST., PHILADELPHIA.

MANUFACTURER OF

FIRST-CLASS PAPER MACHINERY, OF EVERY DESCRIPTION.

The attention of the public generally, and paper manufacturers particularly, is called to the following specialties, and their patronage solicited:

Fourdrinier Machines, Cylinder Machines, OF ALL WIDTHS.

Patent Cone Pulley Cutters, Heavy Rope and Rag Cutters, with from one to three Knives.

Also on hand, ready to ship,

ROTARY BOILERS OF ALL LENGTHS AND DIAMETERS, PULP DRESSER PLATES OF ALL SIZES OF ORDINARY BRASS, AND PATENT GUN METAL PULP PLATES, HEAVY AND DURABLE. MAKING CYLINDERS OF ALL SIZES. DANDY ROLLS, WOVEN AND LAID. BRASS WIRE CLOTH OF THE USUAL NUMBERS, LENGTHS AND WIDTHS.

EXCLUSIVE AGENT FOR THE SALE AND MANUFACTURE OF THE

Patent Hard Rubber Suction Box Covers and Doctor Plates, for the States of New Jersey, Pennsylvania, Maryland, Virginia and West Virginia.

PATENT RUBBER COVERED COUCH & PRESS ROLLS FULLY WARRANTED IN EVERY RESPECT.

Roll Bars and Bed Plates, both of Laid and Cast Steel.

RAG ENGINES, OF BOTH CAST IRON AND WOOD.

Super Calenders of all Sizes and Widths.

CHILLED CALENDER ROLLS OF SUPERIOR HARDNESS.

THE PATENT "GAVIT MACHINE" FOR GRINDING CHILLED CALENDER ROLLS, enables me to give beyond a doubt a perfect and correctly finished roll, the only ABSOLUTELY CORRECT MECHANICAL PRINCIPLE upon which the Rolls should be ground.

Gavit's Patent Noiseless One-Armed Pulp Dresser.

This recent invention is one long sought for by the paper manufacturer, furnishing not only the MOST PERFECT SCREEN, but ridding it entirely of noise. All using them recommend them highly.

MACHINES FOR TESTING ALL KINDS OF PAPER.

GORTON GAVIT, General Manager. A. FURMAN BLAIR, Proprietor.

Oldest Established Fourdrinier Wire Manufactory in America.

DE WITT WIRE CLOTH COMPANY, FACTORY, BELLEVILLE, NEW JERSEY.

WAREHOUSES, 90 JOHN STREET, NEW YORK. 703 MARKET STREET, PHILADELPHIA. 6 CALIFORNIA ST., SAN FRANCISCO.

Fourdrinier Wire Cloth, extra heavy and durable. Cylinder Covers, cut from Fourdrinier Cloth. Extra Heavy Canvas Dryers at reduced prices. Rag Dusters and all other Wire Cloths for Paper Mill use. Dandy Rolls, Plain and Fancy Designs.

SEND FOR SAMPLES AND PRICES.

GLENS FALLS Marble Lime The best bleaching Lime known for PAPER-MAKERS' USE.

Osborn & Robinson, AGENTS, 87 Dey Street, N. Y.

Pure Natural Lubricating Oil FOR PAPER MILLS.

This Oil has been used extensively by Paper Mills throughout the United States for a number of years, and has in all cases given perfect satisfaction. It is uniform in quality, and, being prepared without heating, does not chill in cold weather. Price, by the barrel, thirty cents per gallon, and Satisfaction Guaranteed.

Send direct to GEO. ALLEN, FRANKLIN, VERMONT COUNTY, N. Y.

SUPERIOR QUALITY Wood Pulp.

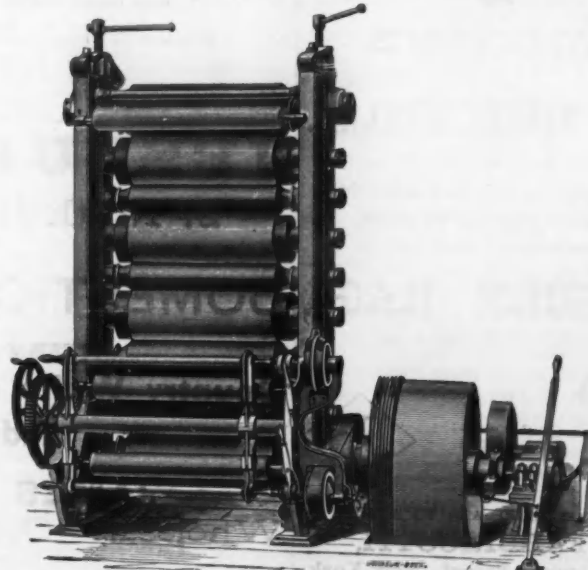
For price and samples address, J. HENRY BLANCHARD, Boston, Mass.

GEORGE HARLEY, Importer of California Rags

AND DEALER IN WOOLEN AND COTTON RAGS, & All Kinds of Paper Stock. 362, 365 & 367 Third Street, Between Avenue C and Lewis St. NEW YORK.

RUBBER BELTING Goods Warranted best quality, AT LOWEST PRICES. Heavy 5 and 6 ply Belts a Specialty. R. LEVICK, SON & CO. 731 CHESTNUT ST. PHILADELPHIA. Agency National Rubber Co.

HOLYOKE MACHINE CO., Holyoke, Mass., MANUFACTURERS OF IMPROVED PAPER MACHINERY



Patent Web Super-Calender.

HIGHEST AWARD AT CENTENNIAL EXHIBITION.

Our Improved Web Super-Calender is a very complete Machine, heavy and substantial in all its parts, with our new patented reeling apparatus, which increases the capacity of the Calender, and effects a saving in broken paper. The shipping arrangement is complete, ready to set up and operate. The paper rolls are made of the best paper, made expressly for the purpose.

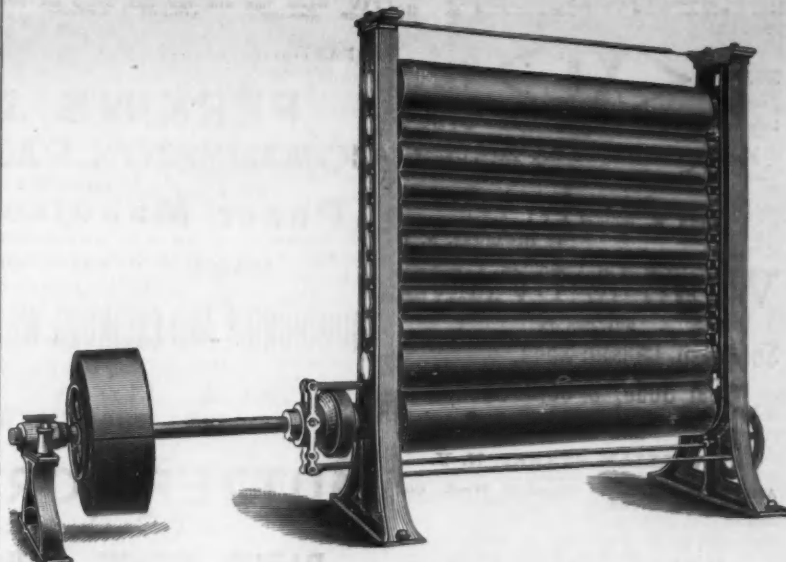
Chilled Iron and Paper Calender Rolls, Web and Sheet Calenders, Friction Calenders, Machine Calenders, Platers, Rag Engines, Gould's Patent Rag Engines, Hydraulic Presses (5-in. to 18-in.) Piston, Elevators, Rag-Dusters, Thrashers, Trimming Presses, Hammond's Patent Stop-Cutter, Ruling Machines with Layboys, Littlefield Power Pumps, Vertical Power Pumps, Bed-Plates & Roll Bars &c.

ALSO, MANUFACTURERS OF THE

Boyden, Risdon, and American Turbine Water Wheels.

Improved Apparatus for Driving Fire-Pumps, Friction Pulleys and Couplings, Shafting, Gearing, and Mill Work of Every Description, Bleach Boilers, Keirs, &c.

ILLUSTRATED CATALOGUE SENT FREE ON APPLICATION.



The undersigned, builders of PAPER MACHINERY, offer their services to Manufacturers of Paper, soliciting orders for all MACHINERY REQUIRED IN PAPER MILLS. Having unsurpassed facilities for producing Machinery in short time, and with patterns and drawings of the best in use, they offer their customers advantages not usually found. Specially they ask attention to their ROTARY BOILERS, the journals of which are turned AFTER the heads have been riveted in, thus insuring parallelism of the bearings, a very important matter.

Also to their CHILLED IRON CALENDER ROLLS, which they guarantee to be ABSOLUTELY PERFECT, both as to hardness and excellence of finish. Address

PUSEY, JONES & CO., WILMINGTON, DELAWARE.

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

ANDERSON & STANTON GENERAL INSURANCE BROKERS

8 CEDAR STREET, N.Y.

CONTROLLING AS WE DO THE INSURANCE ON MANY OF THE LARGEST PAPER MILLS THROUGHOUT THE UNITED STATES, WE HAVE BEEN ENABLED TO EFFECT AN ARRANGEMENT WITH THE INSURANCE COMPANIES TO TAKE LARGE LINES ON THIS CLASS OF HAZARD.

PAPER MILL INSURANCE

BE FREE ASSURED THAT, WITH OUR LONG EXPERIENCE IN THE BUSINESS, WE CAN GIVE PERFECT SATISFACTION TO THOSE WHO WILL ENTRUST THEIR INTERESTS TO OUR HANDS.

WE NOW CONTROL INSURANCE ON PROPERTY VALUED AT OVER \$25,000,000.



**W. H. PARSONS & CO.,**

74 DUANE STREET, NEW YORK,

COMMISSION PAPER MERCHANTS

AND

Importers

OF

PAPER MAKERS' SUPPLIES.

French and English Linen and Cotton Rags, and Papers of all grades, on hand and to arrive.

**LEGHORN RAGS,**

OF THE WELL-KNOWN BRAND



and



FOR SALE, ON HAND, AND TO ARRIVE, BY **J. FABBRICOTTI,** No. 34 Beaver Street, New York. P. O. BOX 4354.

**LEE & STURGES,**

COMMISSION MERCHANTS,

15 BROADWAY.

P. O. Box 2,807 NEW YORK.

**FOREIGN RAGS AND PAPERS.**

SOLE AGENTS FOR THE CELEBRATED BRANDS

of Messrs. John Pfeffer & Co., France and Belgium.

**Liverpool Marine Store Co,**

PAPER STOCK MERCHANTS

72 SOUTH CASTLE ST.

Stores: 30 Townsend St., 10 and 12 Hopwood St., and 15 Litherland Alley, Liverpool. AGENTS IN LONDON.

PACKERS AND SHIPPERS OF THE Celebrated **XL** BRAND OF PAPER STOCK.

Manilla and White Hemp Rope, Gunny Bagging, Jute Stock, &c.

Orders solicited. JOHN W. MASON & CO., Agents, 43 Broadway, N. Y.

**WING & EVANS,**

DEALERS IN

Soda Ash, Caustic Soda, Sal Soda, Bi-Carb. Soda, and Bleaching Powder, 92 WILLIAM STREET, N. Y.

**BUCHANAN & CO.,**

COMMISSION

Paper Warehouse

PACKERS OF AND DEALERS IN

Paper Stock,

38 ROSE STREET NEW YORK.

**SERGEANT BROS.,**

78 William St., New York, P. O. Box 3912.

HAVE ALWAYS ON HAND AND TO ARRIVE

FOREIGN RAGS, JUTE AND PAPER STOCK, CHEMICALS, CLAYS, ANIMAL AND ROSIN SIZE.

ALSO AGENTS FOR The Swan Brand Silesian White and H. & S. Brands Southern Clays.

TENNANT'S Forty-Eight Per Cent.

CAUSTIC SODA ASH.

TENNANT'S

Hard Wood High Test

BLEACHING POWDER.

ARRIVALS BY EVERY STEAMER.

For Sale in lots to suit by

JAMES LEE & CO.,

73 PINE STREET, N. Y.

AGENTS FOR CHARLES TENNANT & Co., St. Rollox, Glasgow.

**H. C. HULBERT & CO.,**

13 Beekman St., N. Y.

IMPORTERS AND DEALERS IN

**Paper Makers' Supplies.**

SOLE AGENTS DURING THE LAST FOURTEEN YEARS FOR THE SALE OF

Stubbins Vale Mills Feltings, Pearl Hardening, & Berger Ultramarine.

Manilla Sizing, Extra Heavy Canvas Dryers.

**JESSUP & MOORE,**

27 North 6th Street, Philadelphia.

DEALERS IN

**DOMESTIC & FOREIGN RAGS.**

OFFER TO PAPER MANUFACTURERS

Country White or Mixed Rags at a Small Advance on Cost.

**JAMES GOODWIN & CO.,**

Wholesale Commission Paper Dealers

AND IMPORTERS AND DEALERS IN

PAPER MANUFACTURERS' MATERIALS OF EVERY DESCRIPTION.

No. 44 Duane Street, New York.

ESTABLISHED 1826.

**LEWY BROTHERS,**

German and Russian Linen Rag Packers.

BERLIN and KOENIGSBERG, Germany.

New York Office: No. 12 BROADWAY.

ESTABLISHED 1853.

**J. W. LYON & CO.,**

RAG WAREHOUSE,

No. 35 PARK STREET, NEW YORK,

CORNER CENTRE AND DUANE STREETS.

FOREIGN AND DOMESTIC PAPER STOCK AND WOOLEN RAGS OF ALL DESCRIPTIONS.

Cash paid for all kinds of WOOLEN RAGS and PAPER STOCK in large or small lots.

**PERKINS & GOODWIN, COMMISSION PAPER WAREHOUSE.**

IMPORTERS AND DEALERS IN

Paper Manufacturers' Supplies.

SOLE EASTERN AGENTS FOR

SHULER & BENNINGHOFFEN, OF HAMILTON, OHIO,

THE WELL-KNOWN MANUFACTURERS OF

FOURDRINIER AND CYLINDER WET FELTS, PRESS FELTS AND JACKETS.

Pronounced by many equal to the best foreign felts, at a much lower price.

Extra Heavy Canvas Dryers.

84 DUANE STREET, NEW YORK.

**BUTTERWORTH & SMALLEY**

32 Beekman Street, N. Y.,

PAPER STOCK AND SIZING MERCHANTS.

DEALERS IN EVERY KIND OF

MATERIAL FOR PAPER MAKERS,

Jute, Hemp and Flax Waste, Papers, Rags, Hemp and Gunny Bagging, Jute Butts, &c.

French Linens, Cottons, &c., always on hand. Sizing prepared at our hide yards, Salford.

HEAD ESTABLISHMENT:

EDWIN BUTTERWORTH & CO.,

2 Ward's Buildings, Deansgate, Manchester, England.

**WARREN, BARNES & Co.,**

69 DUANE STREET,

COMMISSION PAPER WAREHOUSE,

IMPORTERS AND DEALERS IN

PAPER-MAKERS' SUPPLIES,

Superior English Felts and Jackets, and the Heaviest Canvas Dryers.

Several years' practical experience in Paper-making warrants us in saying that we can fill Manufacturers' orders in the most satisfactory manner.

**BEEBE & O'CONNELL,**

Commission Paper Warehouse,

DEALERS IN ALL KINDS OF

PAPER MAKERS' MATERIALS,

Cotton Waste, Jute, Hemp and Flax Waste, Papers, Rags, Hemp and Gunny Bagging, Jute Butts, &c.

DOMESTIC STOCK A SPECIALTY.

78 DUANE STREET, N. Y.

**BULKLEY, DUNTON & CO.,**

NO. 74 JOHN ST., NEW YORK.

**"EXCELSIOR" FELTS.**

PIECE FELTING AND JACKETING.

FOR ECONOMY, DURABILITY AND GOOD RESULTS THEY ARE UNEQUALED. LONG ESTABLISHED AND WELL KNOWN. A TRIAL IS SOLICITED FROM MANUFACTURERS NOT ALREADY USING THEM.

EXTRA HEAVY CANVAS DRYERS.

SATISFACTION GUARANTEED.

SEND FOR PRICE LIST.

**WM. CABLE EXCELSIOR WIRE MFG CO,**

ESTABLISHED 1848

INCORPORATED 1870.

MANUFACTURE



Brass, Copper & Iron Wire,

FOURDRINIER & CYLINDER WIRES,

Making Cylinders & Dandy Rolls,

AND WIRE CLOTH OF EVERY DESCRIPTION.

INNER AND OUTER FACES OF ALL NUMBERS ALWAYS ON HAND.

Medal awarded Wm. CABLE from the Great Exhibition in New York, 1853, for the finest and best specimens of Composition, Brass and Copper Wire, for the manufacture of Cloth for Paper-makers' purposes, and is recommended for its strength and durability.

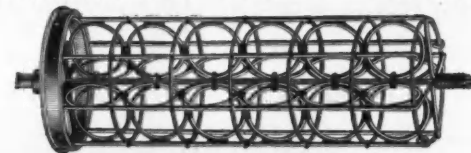
Warehouse: 43 Fulton Street, New York.

**THE SELLERS MFG. CO.,**

707 Market Street, Philadelphia.

SOLE MANUFACTURERS OF

**Whitehead's Patent Dandy Roll,**



ALSO MANUFACTURE

FOURDRINIER AND CYLINDER WIRES,

WIRE CLOTH OF EVERY DESCRIPTION

Cylinders and Dandy Rolls Made and Repaired.

LETTERING & DESIGNING ON DANDIES EXECUTED NEATLY AND PROMPTLY.

Also Dealers in

Felts, Belting, and Paper Mill Supplies.

NEW YORK OFFICE - - - - - 49 FULTON STREET

**Important to Paper Manufacturers!**

We have now running at our works one of

**POOLE'S PATENT ROLL GRINDERS,**

And are prepared promptly to regrind Old Rolls, soft as well as chilled. Manufacturers can rely upon having their rolls ground perfectly, and at a material saving of weight, by applying to

TOWNSEND, JACKSON & CO., Albany, N. Y.

**WM. PICKHARDT & KUTTROFF,**

98 Liberty Street, New York.

BRANCHES AT BOSTON AND PHILADELPHIA.

IMPORTERS OF

Aniline Colors, Carmine, Pulp Colors, Eagle Brand Ultramarines, N. C. F. Concentrated Alum.

**GEORGE WATSON, IR.**

(LATE BRAUTIGAM & WATSON.)

IMPORTER OF

**Paper-Makers' Stock and Materials,**

Whitehead's Feltings,

Pochin's Patent Aluminous Cake,

Curtius' Ultramarine.

DEALER IN

**FOREIGN AND DOMESTIC RAGS.**

NOS. 63 AND 65 BEEKMAN STREET.

New-York.