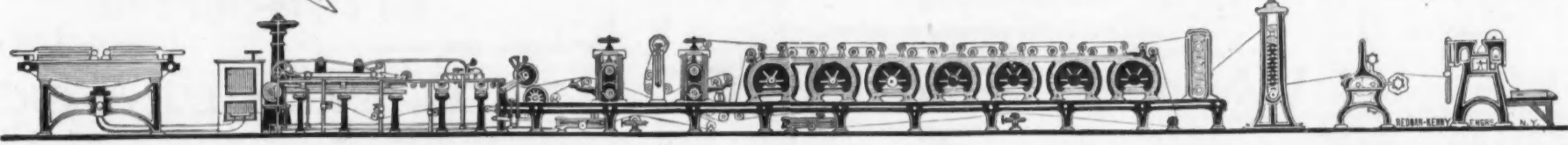


THE PAPER TRADE JOURNAL.



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

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WHOLE NUMBER 543.

Trade Topics.

The Cylinder Machine.

(Continued.)

Thus far little has been said about the multiple form of the cylinder machine, but all of the points discussed apply to it as well as to the single cylinder. This, the multiple form, is most likely to prevail in the future. It is the best adapted for making the heavy papers and boards now so much in demand. The points of excellence desirable in these forms of paper are strength and stiffness, density and adherence, hard sized and a smooth surface, and to these ends the first requisites are a proper selection and preparation of the stock without which good paper or good boards can not be made on any form of the cylinder machine. This being done the construction and management of the machine requires consideration.

Heavy paper and boards are made on a machine having from two to four cylinders. They are made in layers formed on each cylinder, and taken up by the felt as it passes from one to the other. These layers may be all of the same kind of stock, or each layer may be of a kind different from all of the others. To accomplish this it is necessary to have a stuff chest, a stuff pump, a screen, a mixing box, a mixing vat, and fan pump, for each kind of stock. In practice, only two kinds of stock are employed, and they are used as in the manufacture of lined box boards, the board being made on three of the cylinders, of straw, straw chips or other cheap material, the fourth being employed to make the lining. Carpet felt is also made on this machine, but it differs from lined boards in that it is lined on both sides; the main body of this felt is formed on the two middle cylinders, the two end or outside ones putting the lining on each side of the felt. The two inside cylinders are connected with one stuff chest; the two outside cylinders are connected with another chest; but one of the outside cylinders should also be connected with the same chest that the middle cylinders are connected with; so that it can be employed when lined boards are being made. This machine, therefore, consists of two stuff chests, two stuff pumps, two sets of screens, if screens are used, two mixing boxes, two mixing vats, three fan pumps and four cylinders.

The first and fourth cylinders are connected with the first stuff chest, and the second and third cylinders are connected with the second stuff chest, but the fourth cylinder is also to be connected with the second chest. One fan pump will be sufficient for the two middle cylinders, but the end or outside cylinders will require one each, the one on the fourth cylinder to be provided with two discharge pipes for the purpose of connecting with either mixing box as may be required. The mixing vats are to be connected to their appropriate cylinder vats by ample passage ways; the cylinders must be not less than 42 inches in diameter and placed in the vat so that the top of the cylinder will be 4 inches above the side of the vat. Each cylinder must have its own vat, separate from and independent of the others. The only boards allowed inside the vat are two, located in front of the cylinder and dividing the space there into three smaller spaces. The first of these boards reaches from within 2 inches of the floor of the vat, to the top of its side, the second is placed close down to the floor and reaches two-thirds of the way up the side. Each fan pump is provided with a gate which will shut the water entirely off from the pump when required; each of the cylinders has an overflow gate, which can be raised or lowered at will, for the purpose of regulating the height of the water inside of the cylinder, thereby maintaining a uniform suction.

Cylinders on the multiple machine are set level with each other, and in this position it is difficult to couch the paper properly on account of the way in which the felt comes in contact with the pulp on the cylinder. It is therefore suggested that each cylinder shall be set a few inches higher than the one in front of it, thus raising the point at which the felt comes in contact with the pulp, thereby couching the paper better, and lessening the danger of

crushing it and causing the water to run over the back of the cylinder. To secure the adhesion of each layer to the other it is necessary that they should be quite wet when they are laid or couched together. It is not reasonable to suppose or expect that this soft pulpy board can be passed through a pair of iron press rolls, heavily weighted, without crushing it, and to prevent this, suction boxes are used under the felt at any convenient point between the couch rolls or between them and the press rolls. A small roll is also used as an auxiliary press roll, and is hung in arms attached to the stands of the press rolls and presses the board or paper against the top roll before it passes between the press rolls. A top felt passing around the top press roll and up over carrying rolls, where it is washed and passes through squeeze rolls on its return, is also used, thus pressing the board between two felts. There is also a contrivance for pressing these heavy papers and boards after the manner of the couch rolls on the Fourdrinier machine; but means are still lacking by which a heavier board may be made or the same be made at a higher rate of speed. It is suggested here that the press rolls for these machines should be made hollow and perforated, so that the water from the paper can pass readily through them, and the danger of crushing be greatly lessened. The bottom roll might be made the same as a cylinder, the top roll should also be an open roll, but with buckets or troughs inside which would either carry the water to each end, and discharge it there, or would empty themselves into a stationary trough or spout inside the shell of the top roll and discharge the water at one or both ends. A thin felt or a wire cloth might be used on the top roll in this case, and, although on rolls constructed as they would necessarily be it would not be possible to put a heavy pressure, yet it is likely that a greater quantity of water would be taken out than could be taken out by solid rolls without crushing, and that the board would be dry enough to pass safely through the second press rolls to the dryers.

To sum up the whole, the multiple-cylinder machine, as suggested, will consist of stuff-chests, stuff-pumps, mixing-boxes and screens as usual, the new points being the mixing vats, where the pulp shall be uniformly diluted and distributed to each of the cylinder-vats; the cylinders to be provided with overflow gates for the purpose of securing a uniform suction at all times; the pulp to be delivered in front of the cylinders after passing under one board and over another, and forming on the cylinder in a uniform, well-felted, close sheet; each cylinder to be set a few inches higher than the one in front of it, thus obtaining an improved method of couching; open, perforated press-rolls, with a thin top-felt or a wire cloth, which, it is believed, will press a heavy board without crushing it.

(To be continued.)

Sizing.

(Continued.)

Dr. Würster, in his "Essay on the Historical Development of Sizing Paper," declares strongly in favor of white size which contains free rosin. He says, "the very numerous methods suggested for the preparation of sizing resolve themselves into but two processes: 1. The preparation of a rosin soap completely soluble in water; this is brown sizing. 2. The preparation of a rosin soap containing free rosin, and the precipitation of the free rosin to a milky state by diluting the soap with an excess of water." This is white sizing. It has been shown in this paper that neither the white nor the brown form of sizing is a reliable sizing agent, but that a third form, which is of a cream color, is reliable and never fails. This contains no free rosin as shown by the fact that it is completely soluble in water, and is not precipitated when diluted with an excess of water; this being the test prescribed by Dr. Würster. He also maintains that it is not the resin of alumina which sizes the paper, but that "it is the liberated rosin which renders the fibre impermeable by coating it. The aim of vegetable sizing should be simply, therefore, to spread over the surface liberated

rosin. The alumina only plays a secondary part."

The course of reasoning by which Dr. Würster reaches the above conclusion does not seem to be sufficient. He states correctly that "through the action of the sulphate of alumina on the resin of soda a double decomposition takes place—an insoluble precipitate of the resin of alumina and a soluble sulphate of soda are formed. The resin of alumina which is intimately incorporated with the pulp must render the paper impervious to water." This is the fact; but from what follows, the Doctor does not seem to believe it. He continues: "All the experiments which have been made since that time" (he refers to the year 1827) "have been with the view of facilitating this double decomposition, and in every treatise on the subject we find the sizing attributed to the resin of alumina. There is nothing easier than to form this body under the most favorable conditions, and yet, though we may work with all possible care, the paper is not always sized. However, it has been very clearly shown that the pulp sizing is solely due to the action of the salt of alumina on the rosin soap, and it is therefore in this reaction that we must look for the theory of sizing. The theory of vegetable sizing by the resin of alumina was a suspicious one from the first, for only indifferent results were obtained most of the time, and they should have shown that the theory of sizing, which had been accepted was at least doubtful. During a lengthened investigation in several paper mills, we paid particular attention to pulp-sizing. The results of our researches have been to convince us that our accepted theories as to the nature and practical application of sizing are altogether erroneous. The reaction of the salts of alumina which are in excess of the resinous soap are altogether different from what has been believed. In the conditions of ordinary practice, that is, using a large excess of the salts of alumina and operating with a very diluted solution, the resin of alumina which has been previously formed is completely or in a great measure decomposed by the prolonged action of the salts of alumina which are in excess into a liberated rosin and the basic salts of alumina." He then goes on to state the conclusion first quoted, *i. e.*, that it is free or liberated rosin which sizes the paper. There are only two points in his argument which favor his view, and they are both negative. The first is that the resin of alumina is very easily formed; but that although we work with all possible care, the paper is not always sized. Now, there is nothing positive or decided about this, and the second is like unto it. The theory of vegetable sizing by the resin of alumina was a suspicious one from the first, for only indifferent results were obtained most of the time; but he states positively that the resin of alumina is easily formed, and that if it is intimately incorporated with the pulp, it must render the paper impervious to water. If this is true—and it is his own statement, and we do not doubt it—whenever the resin of alumina is formed in the pulp, the paper will be sized. If, after incorporating the resin of soda and the sulphate of alumina in the pulp, and the paper made from that pulp is not sized, it ought to lead to the conclusion that the resin of soda is not there, or if there, it is in some way defective, because, as the Doctor has shown, it will size the paper if it is there.

But the Doctor gives us light on this point unconsciously, possibly, but it is nevertheless light. He states that if a great excess of alum is used, the resin of alumina will be completely, or, in a great measure, decomposed into a liberated rosin and basic salt of alumina.

"Papyrus," in his early "Chats about Paper-making," written a dozen years ago, advises to put the alum into the engine first and after it is dissolved to put in the size, saying, "When a very strong solution of alum comes in contact with the size, it destroys it, but a large quantity of size is not injured by a small quantity or a weak solution of alum. Now, by putting in the alum first and having it thoroughly dissolved and mixed with the pulp, it is, if a reasonable quantity has been

put in, just strong enough to precipitate the size without injuring it; but, if the size is put in first, the alum, when it is put in, destroys the size in the particular place it first touches, and this destroyed size is the cause of froth on the machine. Let me ask those strong believers in strong alum to take a little engine-size in a hand-basin and pour into it a little alum solution, they will find the size thicken immediately, just as it ought to, but pour in more of the alum solution and it will become thin and frothy, I judge, if it does so in the hand-basin it will do so in the engine. When paper makers learn to use just the right quantity and proportions of all the chemicals they employ, they will find they can engine-size their paper much harder, with less material and with little or no froth on the machine than ever they will by the indiscriminate use of chemicals."

This covers the same point, and, although a different conclusion is come to, it corroborates what Dr. Würster states in regard to the decomposition of the size by an excess of the sulphate of alumina, but the doctor believes and attempts to prove that it is only when this decomposition takes place which liberates the rosin or by making a size with free rosin in its composition that the paper is uniformly sized; whereas, the writer believes that it has been proven that a size true to the test of a cream-color and perfect solubility in water, precipitated among the fibres of the pulp by the use of a moderate quantity of alum is the most reliable form of rosin size that is made.

(To be continued.)

A Paper-Making Primer.

Q. What preparatory treatment do the hard-stock and wood pulp require before being made into paper, and what machinery is needed?

A. The machinery consists of two engines, one used as a beater, the other as a mixer. Mechanically, they are both alike, the terms beater and mixer being used to designate the work they do, and either can do the work of the other. The hard-stock is furnished in the beater and made short enough for the Jordan engine; then it is emptied into a stuff-chest of the same kind as that used for the machine. In the meantime the mixer is ready to be furnished; one-fourth of the quantity of hard-stock emptied from the engine is pumped by a centrifugal pump into the mixer, which is then filled up with wood pulp, and, as there is only a little time to spare, and no bleach to wash out, the alum is to be put in while the engine is being furnished, so that the alum will be dissolved by the time that the furnishing is completed. As soon as this is done the size and clay are put in; next the bluing for white paper is added and the engine is to be thoroughly stirred up with the paddle. As it is intended only to brush out the pulp and to mix it with the hard-stock, size, alum, clay and coloring, it is not necessary to move the engine-roll, which may be set near to but not touching the plate. As soon as the ingredients are well mixed, which ought to be in half an hour after the furnishing is complete, the engine will be emptied into the Jordan chest. The whole time taken to do this should not be more than one and a half hours.

Q. How should the Jordan engine be managed?

A. There is little management required; a Jordan engine will do just about so much, and no more; it is a very useful adjunct to a paper mill, but really it is time that we had something better. Promises have been made more than once in this direction, but they don't seem to come to anything. We do not look for an engine that will boil, wash, bleach and make the rags into pulp at one operation, but we do look for considerable advance over our present system. The Jordan engine was only a step in the right direction; but it is in no sense a finality. What we need is a system that will enable us to feed the half stuff into a machine continuously, and have that machine discharge it as a pulp ready for the paper-making machine. This ought not to be a difficult thing to do; a series of engines resembling the Jordan might be placed in connection; with each other, the first to receive the half-stuff and make it somewhat shorter, the second to advance it a step

farther, and the third to finish it. Suitable mechanism should be placed between the first and second and the second and third for the purpose of conveying the pulp from the one to the other. It would seem that a large saving in time and power might be effected by some such means as this. It would, of course, be necessary to grade the different engines to do the special work required of them, so that thereby just the requisite amount of power and time, and no more, should be applied thereto.

Q. Does the Jordan engine admit of a change being made in the quality of the pulp to suit the different qualities of paper to be made from it?

A. Considerable change may be made in the quality of the pulp—first, by setting the roll up more or less hard; second, by the quantity of pulp allowed to pass through it; third, by retaining the pulp in the engine a longer or shorter time. If a small quantity of pulp is supplied to the Jordan engine, and the roll is set up pretty hard and the pulp allowed to discharge at the lowest point, the pulp will be as quick and free as it can be made by this engine; but if the point of discharge should be changed from the lowest to the highest point and the roll is set up light, the pulp will be made as slow as this engine will permit. These are the two extremes. A modified management will produce intermediate qualities of pulp.

Q. How much size, clay and alum are used in print paper?

A. That depends entirely upon the instructions received at the mill with the order. Some people want paper with just a trace of size in it; others want it hard-sized. When mention is made of size or pails, the size meant is the cream-colored size, which is now most generally used, and which, when diluted and ready for use, contains about two-thirds of a pound of resin to the gallon, and a pail means the ordinary ten-quart pail, such as is in common use everywhere. Half a gallon of size to 100 lbs. of pulp will show a decided trace of size in the paper, and two and a half gallons will make a hard-sized paper. The quantity of alum used will be the same for soft-sized as for hard-sized, since alum precipitates and holds the clay and the finer fibres of the wood-pulp. Three pounds of alum per 100 lbs. of pulp make the regular quantity; but it may be found necessary to vary this to suit, and more or less may be taken as occasion requires. A small quantity of clay improves this paper by making it more dense, or opaque. Fifteen pounds of clay to the 100 lbs. of pulp may be used, and of this about 7 lbs. will remain in the paper.

Q. What is alum? There are so many different so-called alums in the market, that it would be well to know what is meant by alum.

A. Alum proper is a double salt, composed of the sulphate of an alkali, as soda, ammonia or potash, combined with the sulphate of alumina. This constitutes the old-fashioned lump alum; but we have now natrona porous alum, pearl alum, aluminous cake, and concentrated alum. These are all forms of sulphate of alumina, more or less pure. Lump alum is still used by some of the more conservative fine mills, but the standards are the natrona porous and the pearl alums, and these are mostly employed. Therefore, when alum is referred to, it is to be understood that the reference is to either of these alums. Keeping these explanations, in regard to size, pails and alum, in mind, it may be stated here that to an engine carrying twelve hundred pounds of pulp there are six pails of size, thirty-six pounds of alum, and one hundred and eighty pounds of clay, and that this will size paper sufficiently hard for the ordinary news print paper.

Q. What quantity of pulp can be prepared, in say twenty-four hours, with the two engines?

A. Suppose that the two engines have rolls $4\frac{1}{2}$ feet in length and 4 feet in diameter and that the size of the tub is in proportion. The mixer will hold enough pulp to make one thousand two hundred pounds of paper, and the beater will be of sufficient capacity to prepare hard-stock enough for this quantity. As the pulp in the mixer requires neither washing nor beating it can be furnished, mixed and emptied in one and a half hours, giving sixteen engines of

one thousand two hundred pounds each per day, making a total of 10,200 pounds of paper per day. But the "broken" from the machine cutters and finishing-room must be used over; the dry, or the greatest portion of it, can be best used in the beater by putting some in each time that it is furnished; a little of the dry and all of the wet will go into the mixer.

Q. Can the hard stock be made short enough in the process of washing and bleaching, so that it need not be furnished, and again beaten to make it suitable for mixing with the wood pulp?

A. By giving it more time in the washer, say, eight hours instead of six, it may be made short enough provided that care is taken to have it washed clean and well drawn out into half-stuff before proceeding to beat it. It should be beaten to the right length before bleaching, and while it is being bleached the roll ought to be taken up, or, at the most, be placed at a "light brush." In case this should be done, while no beaters would be necessary, more washers would be required. It would also be necessary to use up the dry "broken," or the greater portion of it, by putting it in the washer just before emptying it, and this would cause some inconvenience when making colored poster and shelf papers.

Q. Is it possible to furnish the hard-stock and pulp into the beater and beat it off short enough to make it into paper without the intervention of the Jordan engine?

A. This system is largely practised, and it has some advantages over the others. The half-stuff is made fairly short and furnished in the beater, which is filled up at once with wood pulp, and the whole is beaten the same as if the stock was all rags. This system is, upon the whole, the best for mills where the wood pulp is not made, but is shipped from a distant point, inasmuch as some of the pulp will be dried out somewhat by exposure on the way to and at the mill. Now, by this system, it receives four to five hours' beating in the engine with the hard-stock; this beating does not make it any shorter, but it makes it softer and smoother. Where colors are made of this stock this system is preferable, as it gives time to color the pulp.

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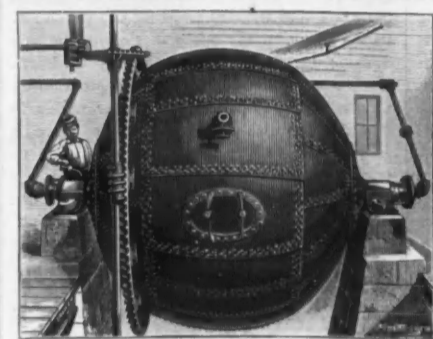
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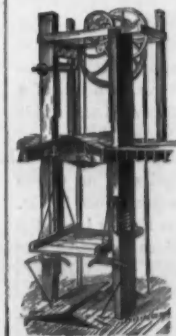
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Boston Notes.

[FROM OUR REGULAR CORRESPONDENT.]

EASTERN OFFICE LOCKWOOD PRESS,
250 Devonshire St., Boston, September 24, 1884.

Owing to the settled policy of the Government concerning the importation of rags, the paper-stock market is decidedly firm, with an upward glide. As will be seen by the revised quotations of the Boston market, paper-stock has during the week advanced an 1/8c. over the quotations of the previous week.

There is an evident anxiety on the part of manufacturers to secure supplies, but stock-dealers are not in position to satisfy the demand, or even to quote figures with any certainty of filling orders. All lots offered at seemingly fair prices are quickly taken.

Alexandria, Smyrna and Constantinople rags are entirely out of the market, and are not quotable. Nor is it at all likely that any of these grades will be offered for some months.

Domestic rags are quite firm, the supply being very small and but little accumulating. Domestic cottons have advanced to figures ranging from 2 3/4c. to 3c., and firm. Old papers of high grades are also marked up.

Dealers' ideas of last week concerning "colors" were a little in advance of the market. Colored rags were boomed up to 2 3/4c., but quotations now stand 2 3/4c. to 2 1/2c.

Just how high in the digits rags will go during the next ninety days is a matter beyond prediction. No man can foresee or foretell what the result will be.

The steamer Galileo, from Hull, which arrived at this port last week, was detained at Quarantine Station some twenty-four hours, pending an investigation of her cargo of rags. Evidence was given to the government authorities that the steamer had completed her cargo and was ready to sail on the last day of August, but, being detained by low water, was unable to leave Hull for a day or two afterward. This was really the first cargo that entered subject to the restrictions issued prohibiting the landing of rags which left foreign ports after September 1, and the trade here were considerably annoyed as to the results of the shipments. After a thorough investigation, the rags were landed, but it must be admitted that it was a narrow escape from Galap Island. Still the trade are disposed to be thankful in this case, and would vote a card of thanks for the wise decision rendered in behalf of the paper industry.

The chemical market is not very active. Bleaching powders are quoted at 2c. to arrive, 2 1-16c. for spot lots, with a fair jobbing demand. In view of the scarcity of rags, mills will be obliged to use other material more largely, and dealers think that bleaching powder will be more largely used. As it is, no decrease in consumption is noted. Seventy per cent. caustic soda is quoted at 2 3/4@2.80c. per pound of 60 per cent., steady demand; 1 1/2@1 1-15 is reported for sal soda to arrive, and 1.20c. for store. Soda ash is in fair demand at 1.42 1/2@1 1/2c. Sales of 150 tons last week brought these figures. Caustic soda ash is in light supply and not much is near at hand. Quotations range from 1.45@1 1/2c. Rosins are firm at former quotations. Clay is quiet.

Imports of chemicals for the week include 665 casks bleaching powders, 113 casks soda ash and 100 drums caustic soda, 24 casks clay and 1,066 barrels rosin were received.

Of paper-stock the imports for the week to date are 889 bales rags, 2,091 bales paper-stock, and 107 bales old baggings. There was also received 200 bales jute and 20 bales jute bagging.

This entry of rags will be the last that will be reported from this port for some time to come, unless, perchance, the Paper Makers' Association should take the matter under advisement, and present such facts to the Government as will convince the authorities that the great danger to public health feared by the importation of rags is largely imaginative and somewhat overdrawn.

The efforts of THE PAPER TRADE JOURNAL in gathering the opinions of paper makers on this subject, as published in the last two issues of THE JOURNAL, are highly appreciated by such members of the trade as I have had the pleasure of meeting during the past week. These are valuable facts, and would make good evidence in behalf of the cause. Why should they not?

Consumers are gradually becoming cognizant of the advance in paper, and orders are more numerous. Dealers report that trade is looming up, campaign demands giving it some little help. A prominent Federal street dealer reports that mills have acted very generously in relation to the advance of prices—increasing rates only as they were forced to pay higher figures for paper-stock. And as stock advances paper must follow.

Such jobbers as carry large stocks, instead of depending on mills for supplies at short notice, are reaping the most benefit from the advance in paper.

Certain lines of twine are meeting with good demand. This is the more notable with hemp and sisal, which being low at present encourages manufacturers to buy freely. Edward H.

Haskel is having a big trade with these twines.

Mr. Downing, of the chemical department of Warren & Co., has returned to his duties after an absence of two weeks among the White Mountains, fully refreshed and prepared for an active trade.

As the season has come when buyers will be more numerous in the city they should remember that two industrial exhibitions are now open where a few hours can be very agreeably spent, either in the pursuit of pleasure or instruction.

The "Old Mechanics Fair" presents many attractions which the visitor will find most interesting to examine. The policy of the Massachusetts Charitable Association, under whose auspices this fair is held, is to hold exhibitions but once in three years, and the present fair is its fifteenth exhibition.

The New England Manufacturers and Mechanics' Institute opens its doors annually for exhibition purposes and four very successful fairs have been held in its spacious building. At the present exhibition are displayed a number of exhibits which would interest paper makers.

One of the most important to the trade is the display of the Canton Manufacturing Company, a new bleaching concern, with headquarters in Boston. This company shows numerous textile fabrics and fibres bleached by the "Toppan" process. This Toppan process of bleaching, I think, has been previously noted in THE PAPER TRADE JOURNAL, but here are displayed its results. The success of the "Toppan" process is remarkable. All fibrous structures can, it is said, be readily bleached by the Toppan compound, so that a great variety of tough grasses and wood fibres can be treated to make a very much better article of paper than can now be produced by a mixture of wood pulp and fibres from rags which have been subjected to processes of bleaching, which are more or less destructive of the cell structures of the wood and cotton fibres.

This process is certainly of much interest to paper makers and should be looked into. A large saving in cost is claimed by the company over old bleaching processes, and better results are promised. A. L. D.

Philadelphia Notes.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, PA., September 23, 1884.

Nearly every mill in and around Philadelphia, and those located at more distant points, represented by houses in this city, are running on full time and turning out quantities of paper. The profits have been narrowed down, so that the only way to do a profitable business is to keep every wheel going, and to make just as much paper as the mills are capable of producing. Of course, this keeps the supply fully up to the demand, and affords little hope of better prices; but an occasional concern drops out and makes room for the others to do a little more. Last week I noted the retirement of J. G. Ditman. W. Brelsford, who has been for some years associated with Mr. Ditman, has concluded to branch out on his own hook. The new firm will be formed under the style of Brelsford, Raiguell & Co., and will purchase the paper business of M. H. Eaton, and continue at Mr. Eaton's former place of business, 723 Chestnut street. Mr. Eaton will retire from the paper business, and will devote his attention entirely to the manufacture of printers' inks, in which he has been engaged for some time past.

The reported increase of the cholera in the vicinity of Naples is having its effect upon the rag market. It is rumored that the three months' quarantine enforced upon foreign rags will, in all probability, be followed by an additional six months when Congress meets. As fully one-third of pure rag supply is from foreign sources, one can easily see that the effect will be to stiffen prices of the domestic article; in fact, such has already been the case. Rags have advanced fully 25 per cent. White rags, that a short time ago were selling at 4 cents, are selling now at 5 cents and 5 1/2 cents. This advance of 1 cent per pound in rags means an advance in the cost of making paper of from 1 1/2 cents to 2 cents. Some of our leading houses have already put up the price of their stock in hand from 1 to 2 cents per pound. Others will follow suit. This means no greater profit in the long run, but may enable our dealers to realize a little more on what they now have in hand. Circulars have been issued by a good many houses to the effect that new orders will not be taken at the figures that have been heretofore quoted, and that they are not willing to make large contracts for future delivery. It is evident that it is a pretty general opinion that the advance will be maintained.

This movement in the rag market was not unforeseen. A good many of our rag dealers have already discounted it. Stocks of rags that have been withheld because the holders were confident that 4 1/2 cents would one day be realized for them, will now come into play very nicely, and the fortunate holders will hug themselves and congratulate themselves on their foresight. Few, however, anticipated such a sudden jump; but whether expected or

not, those who can will not be slow to take advantage of it. It may serve to counterbalance some of the doleful times they have had to wade through during the past year. We are glad to see even such a slight chance for any improvement. Perhaps the worst is over and the paper trade is once more in the ascendant. Were this advance not due to its present source, perhaps its advent might be hailed as the precursor of steadily improving times. As it is, it will be taken for what it is worth and the most made of it that can be. Our people would be very glad to see a decidedly marked improvement in the paper business. There is room for it, and not only in paper but in a good many other branches of business. Perhaps the general hope that business may be better after the election is over may not be without foundation, and a brighter era be dawning for the City of Brotherly Love and for the whole country.

PENN.

Holyoke Notes.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, MASS., September 25, 1884.

Please tell "Dandy" that there is the best prospect that "Ichabod" will be a stranger to Holyoke for a good many years to come. Why, we had to go to the dictionary to find out what the word meant. Oh, no! Holyoke is a pretty big dam site yet, notwithstanding a little leak, or a big leak if you choose. The water is holding up well this week, although we have had very little rain. The mills are running full time, or nearly that, and instead of mourning disconsolately over the state of the river or the leaky dam, the paper makers are talking of shutting down voluntarily. The following notice has been received to-day, at the mills, from the National Writing Paper Makers' Association:

There will be a special meeting of the writing-paper manufacturers, at the Massasoit House, Springfield, Mass., Wednesday, October 1, at 11 o'clock, A. M., to see what action shall be taken in regard to running the fine mills on short time, to counteract the bad influence upon the rag market, caused by the prohibition placed upon the importation of all foreign rags by the United States Government. Per order of committee.

E. C. ROGERS, Secretary.

This does not look as if the manufacturers of paper at least were complaining much of a want of power. The fact is, the enforced stoppage of the mills has been a benefit to trade; but, still, I don't think that the mill-owners generally will care to shut down any more than they are obliged to. Many will, doubtless, attend the meeting in answer to the above invitation, but there is no certainty that any action will be taken. The new orders that are coming in since prices began to rise are likely to crowd the mills so much that they will feel obliged to run full time.

Prices have already advanced fully a cent a pound, and many large orders have been refused. Things are decidedly mixed, and changes in rags and paper are the chief topics of conversation. The latest effort to move the Treasury Department to do something is a petition which the manufacturers are signing, setting forth the little danger there is of bringing disease in rags and asking that foreign stock may not be prohibited long.

The Holyoke Card and Paper Company is the new name of the Holyoke Glazed Paper Works.

James S. and Fred. H. Newton have gone to California, to stay about three months.

L. C. Beals, watchman at the Riverside Paper Mill, had an encounter with a tramp the other night at one o'clock. The tramp insisted on making a lodging-house of the mill, but Beals was too many for him.

George Nightingale, the local stock-dealer, has given the contract for his brick block to A. A. Jones.

Foreman Jackson, of the Massasoit finishing-room, has been presented by the employees of his department with two easy-chairs for his new house over the river.

The Manufacturers' Association has chosen this board of officers: President, Timothy Merrick; treasurer, J. Metcalf; executive committee, Timothy Merrick, J. C. Parsons, James H. Newton, O. H. Greenleaf, William Grover, T. Parsons and George W. Prentiss; auditors, George B. Holbrook and J. H. Appleton.

The American Pad Company is doing a growing business. Many styles are made and the business promises well.

A New York trade paper recently said that the leak in the dam caused a loss of power which was estimated by some at 14,000 horse-powers. This is only 1,000 less than half the entire horse-power of the dam; and shows pretty careless journalism. H.

In Town.

Thomas Duncan, Poquonnock, Conn.; J. T. Emerson, Claremont, N. H.; Geo. W. Russell and A. N. Burbank, Lawrence; Mr. Faxon, Lee; Mr. Judd, Stillwater, N. Y.; Joseph Magargee, William Nixon and Edward McCready, Philadelphia, Pa.; Henry Southworth, Mittenaeque, Mass.; E. B. Ripley, Unionville, Conn.; E. R. Soliday, Lambertville; Mr. Carmichael, Amsterdam, N. Y.; Charles S. Wheelwright, Providence, R. I., and Mr. Craig, New Battle, Scotland.

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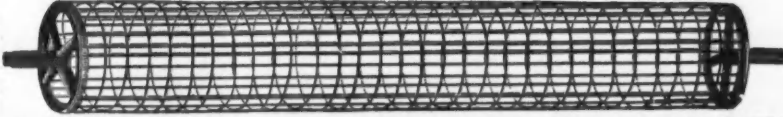
BOOKS OF REFERENCE.

THE following is a list of Books of Reference on
subjects connected with Paper Making, Chemi-
cals, Colors, Machinery, Hydraulics, &c.:

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| AUERBACH.—Anthracene: Its Constitution, Properties, Manufacture and Derivatives. 8vo. | 5 00 |
| BAIRD.—Standard Wages Computing Tables. Folio. | 5 00 |
| BENSON.—Principles of the Science of Color. 4to. | 7 50 |
| BENSON.—Manual of the Science of Color. 12mo. | 1 00 |
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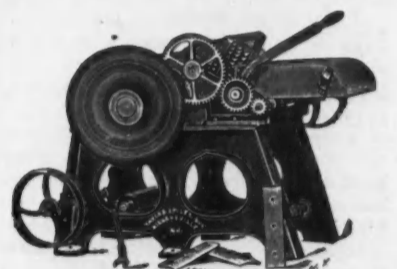
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IMPORTS of Paper and Paper Materials, Books, &c., at the Port of New York, for the week ended September 19, 1884. Quantity given in packages when not otherwise specified.

Table with 3 columns: Item, Quantity, Value. Includes Aniline Colors, Alum, Alumous Cake, Bleaching Powders, Soda Ash, Soda, Caustic, Soda, Sal., Ultramarine, Books, Newspapers, Engravings, Ink, Lead Pencils, Paper, Steel Pens, Stationery, Slate Pencils, Clay, Jute Butts, Paper Hangings, Paper Stock, Terra Alba, Waste, Wood Pulp, and Totals.

Table with 3 columns: Item, Quantity, Value. Includes General Merchandise for the week ended September 23, 1884, Paper, Paper Stock, &c., and Imports of Rags and other Paper Stock at the Port of New York, since January 1, 1884, from the following Ports, showing quantities from each Port.

Imports of Rags and other Paper Stock at the Port of New York, since January 1, 1884, from the following Ports, showing quantities from each Port:

Table with 4 columns: Port, Rags, Old Paper, Wood Manilla. Lists various ports including Amsterdam, Antwerp, Avonmouth, Bordeaux, Bremen, Bristol, Cadix, Calcutta, Cape Town, Catania, Cetta, Christiania, Copenhagen, Danzig, Dundee, Fiume, Genoa, Glasgow, Hamburg, Havre, Hiogo, Hull, Leghorn, Leith, Liverpool, London, Malaga, Marcellis, Messina, Naples, Newcastle, Newport, Pillau, Rotterdam, Salonica, Seville, Shanghai, Smyrna, Stettin, and Trieste.

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports for the Week Ended Sept. 23, 1884, with Aggregates and Values.

BOOKS, cases, to Liverpool, 45; to Bremen, 9; to Mexico, 14; to United States of Colombia, 47; to Hamburg, 11; to Glasgow, 13; to Central America, 14; to Nova Scotia, 12; to Leghorn, 11; to Lisbon, 6; to Cuba, 16; to Venezuela, 11; to Brazil, 10; to Japan, 4; to China, 26. STATIONERY, cases, to Liverpool, 48; to United States of Colombia, 82; to London, 3; to Cuba, 16; to Hamburg, 12; to Porto Rico, 2; to Mexico, 35; to Danish West Indies, 6; to British West Indies, 2; to Hayti, 2; to Brazil, 9; to Glasgow, 2; to Nova Scotia, 4; to Genoa, 1; to Central America, 13; to Venezuela, 2.

AGGREGATES AND VALUES.

Table with 3 columns: Item, Quantity, Value. Includes Paper, reams, Paper, packages, Books, cases, Rosin, bbls., Stationery, cases, and Totals.

TOTAL EXPORTS.

General Merchandise for the week ended September 23, 1884. Paper, &c., for the year ended May 27, 1873, 8,706,417. Paper, &c., for the year ended May 26, 1874, 2,880,482. Paper, &c., for the year ended May 25, 1875, 1,783,877. Paper, &c., for the year ended May 23, 1876, 2,327,082. Paper, &c., for the year ended May 22, 1877, 1,054,384. Paper, &c., for the year ended May 21, 1878, 1,792,059. Paper, &c., for the year ended May 20, 1879, 1,576,502. Paper, &c., for the year ended May 19, 1880, 1,889,783. Paper, &c., for the year ended May 18, 1881, 2,016,545. Paper, &c., for the year ended May 17, 1882, 1,990,058. Paper, &c., for the year ended May 16, 1883, 2,439,208. Paper, &c., for the year ended May 15, 1884, 2,585,129. Paper, &c., for the year ended May 14, 1884, 2,500,782. Paper, &c., for quarter ended Aug. 26, 1884, 559,106. Paper, &c., for the week ended Sept. 2, 1884, 30,726. Paper, &c., for the week ended Sept. 9, 1884, 47,187. Paper, &c., for the week ended Sept. 16, 1884, 64,555. Paper, &c., for the week ended Sept. 23, 1884, 57,129.

NEW YORK IMPORTS.

FROM SEPTEMBER 16 TO SEPTEMBER 23, 1884. Paper Stock. M. A. Ring, Jr., M. Blanca, Bordeaux, 219 bs. old papers. Belauzaren & Florez, Sirena, Cadix, 65 bs. rags. Lewy Brothers, Hecla, Copenhagen, 105 bs. rags. Burgass & Co., by same, 279 bs. rags. Perkins, Goodwin & Co., by same, 200 bs. wood pulp. Lewy Brothers, Galileo, Hull, 784 bs. rags. Cohn, Lazarus & Co., by same, 105 bs. rags. Perkins, Goodwin & Co., by same, 116 bs. rags, 120 bs. manillas. Train, Smith & Co., by same, 220 bs. rags. E. Hatton & Co., by same, 61 bs. rags. W. H. Parsons & Co., by same, 237 bs. rags. W. Irving Clark, by same, 94 bs. manillas. Burgass & Co., Marengo, Hull, 100 bs. rags. M. A. Ring, Jr., City of Richmond, Liverpool, 35 bs. rags. James Pirnie, The Queen, London, 48 bs. old papers. Perkins, Goodwin & Co., Ludgate Hill, London, 91 bs. old papers.

W. H. Parsons & Co., by same, 138 bs. old papers. Lewy Brothers, by same, 90 bs. rags. R. H. Overton, by same, 166 bs. old papers. J. W. Lyon & Co., by same, 121 bs. manillas. R. H. Overton, Egyptian Monarch, London, 273 bs. old papers. Perkins, Goodwin & Co., by same, 86 bs. old papers. M. A. Ring, Jr., by same, 81 bs. old papers. J. W. Mason & Co., K. S. Foyn, London, 215 bs. manillas. Woolworth & Graham, Romeo, Newcastle, 47 bs. manillas. W. H. Parsons & Co., by same, 85 bs. old papers.

Paper.

Herter Brothers, Bothnia, Liverpool, 1 cs. hangings. Berger Brothers, Rhein, Bremen, 2 cs. colored. Baldwin Brothers, Canada, Havre, 1 cs. L. De Bebian, by same, 1 cs. L. De Jonge & Co., Frisia, Hamburg, 3 cs. Charles Cooper & Co., by same, 3 cs. H. Bencke, The Queen, London, 1 cs. R. Giedhill, by same, 1 cs. hangings. L. De Jonge & Co., Hammonia, Hamburg, 5 cs. G. Gennert, by same, 6 cs. A. Silvrade, by same, 1 cs. E. Fougere, Chateau Yguim, Bordeaux, 27 cs. Avery, Penabert & Co., by same, 12 cs. McKesson & Robbins, M. Blanca, Bordeaux, 18 cs. W. H. Schieffelin & Co., by same, 14 cs. Dodge & Olcott, by same, 13 cs. Merchants' Dispatch Company, Servia, Liverpool, 2 cs. R. F. Downing & Co., Alaska, Liverpool, 1 cs. E. J. Riley, Germania, Liverpool, 5 cs. E. Jansen, Rugia, Hamburg, 3 cs. E. & H. T. Anthony & Co., by same, 7 cs. B. Lawrence & Co., by same, 30 cs. Keuffel & Esser, by same, 17 cs.

BOSTON IMPORTS.

FROM SEPTEMBER 17 TO SEPTEMBER 23, 1884, INCLUSIVE. Books. Estes & Lauriat, Pavonia, Liverpool, 1 cs. Little, Brown & Co., by same, 14 cs. Houghton, Mifflin & Co., by same, 1 cs. Carl Schoenhoff, by same, 1 cs. E. A. Snow & Co., Kansas, Liverpool, 1 cs. Paper, &c. A. H. Roffe & Co., Pavonia, Liverpool, 4 bs. periodicals. Forbes Lithograph Company, by same, 3 cs. almanacs.

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The Paper Trade Journal.

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WE want to warn the trade against a man who is said to be representing himself to be a reporter for, or connected with, THE JOURNAL. Stop him, if you find him, and let us know. We ask those who have been imposed on by this man to furnish us with their names and with the facts, so that we can "deal gently" with the "fraud."

A FEW more replies to the circular anent the infected rag question have been received. Each of them answers the three leading inquiries in the negative. One correspondent says that in a mill which has been running for fifty-seven years, and for a large part of the time on foreign stock, not one case of disease which could be traced as originating from the rags has occurred. Such experiences demonstrate that the prohibition of imports was too hastily made.

Two interesting communications appear in this issue—interesting in the fact, that they bear upon the important point of paper-making fibres. Our Jamaica correspondent renews his invitation to paper makers, to take advantage of the fibres of that island, and a Canadian correspondent directs attention to a stock which is being utilized by a mill in the Dominion. We have samples of the paper made from the Canadian fibre, which we have reason to consider as good as esparto.

RETURNS are coming in from the British paper makers to whom the inquiries concerning infectious rags had been addressed. We present abstracts from the replies received. Thirty-one responses from the United Kingdom have come to hand so far, and they are in harmony with those sent in by our own mills. In no instance has a case of cholera been associated with rags used in paper mills. This covers the first inquiry; to the second three affirmative and twenty-eight negative answers are given, and to the third there are twenty-nine negative and two affirmative replies. Testimony such as this ought to satisfy the Treasury Department that there is less danger of infectious disease, particularly cholera, from paper-makers' rags than from other sources.

Two communications relating to the demand for a settlement from mills using "yielding journal-boxes" on their machines appear in another column. These are supplemented by a note from a paper maker who asserts that he adopted the principle of these boxes at a date prior to that of the patent under which the claim of infringement is set up. We believe in giving inventors their just dues, and if the claim under the patent is righteous it ought to be admitted, and the privilege of using the invention should be paid for; but if the patent was improperly granted, or if the claim to novelty and priority of invention cannot be sustained thereunder, we advise paper makers to resist it. In such a case the aid of the Association could properly be invoked and given.

THE present artificial famine of rags draws attention to chemical fibre and its possibilities. It is believed by many that the future of paper-making largely depends upon the development of chemical fibre, and that we only need to put forth the necessary effort to obtain it in a quantity and at a cost that will render us en-

tirely independent of the supply of foreign rags and give us at the same time a paper superior to that made from rags. Chemical fibre is not a shoddy article, but a true and genuine fibre; it is just as truly a fibre as cotton, linen or flax, and we expect to see in the near future paper made from all chemical fibre superior for all purposes to the rag paper of the present time. This may be pronounced visionary. Be it so—visions sometimes become realities. Thirty years ago the daily newspapers were printed on a paper made from all rags, much inferior to that now utilized for the same purpose; but the paper now used is made of nearly all ground wood at half the cost of the inferior paper made of rags. The quality and cost of samples of paper made from chemical fibre, now before us, reveal to us the probabilities of the future.

THE Treasury Department has definitely decided that gunny bagging is to be classed with old rags, and their import will consequently fall under the prohibitory order. We have been furnished with copies of telegrams which have passed between Watson, Sumner & Co., of this city, and Acting Secretary Coon within the past twenty-four hours. These read as follows:

TELEGRAM TO TREASURY DEPARTMENT.
Shall we cable to England stopping all further importations of gunny bagging, or may we rely on being permitted to enter them, accompanied with clean health certificate and affidavits made before American Consul, Liverpool and Manchester, that the bagging was taken from cotton imported from America? Please telegraph your decision promptly, as we must send cables to England to-night to stop shipments if restrictions continue.

REPLY.

Order admitting forty-seven bales gunny rags per City of Richmond was made upon condition stated in your letter of twenty-third instant that you would import no more rags of this character—Department expects that stipulation be carried out. Hence further shipments of this character should be stopped.

On the face of these telegrams we cannot but think that the action of the Assistant Secretary is ill advised. That clean stock like bagging stripped from cotton imported from America is likely to bring infection is absurd. This only shows to what extreme lengths super-serviceable official zeal can go.

OUR remarks of two weeks ago on paper mill insurance have been rather strongly emphasized since that time by the burning, partially or wholly, of six paper mills, with an estimated loss of \$157,000. We have also reported fires from two rag warehouses, with a loss of \$41,500, making a total estimated loss of nearly \$200,000, all covered by insurance. Are these fires unavoidable? If so, insurance rates will surely be high and insurance hard to get, but paper-mill owners will have to pay them or go without insurance. We believe, however, that with due care and attention, the greatest number of such disasters may be avoided. Of one of them it was said: "The origin of the fire is unknown, and as no rags were stored in the building, spontaneous combustion is improbable." Improbable it may be, but not impossible, because a few handfuls of greasy waste or rags are quite sufficient to get up a case of spontaneous combustion. Another fire started in the machine-room, from what cause it is not stated, but it suggests attention to our remarks about kerosene torches and loose "broken" in the vicinity of unprotected lights. An exploded lamp is the cause of a third fire. We suggest here that where a fire is caused by kerosene oil from a broken or exploded lamp, wet rags, wet half-stuff or wet "broken" thrown promptly on the fire will be most effectual in putting it out. Upon the whole, we think that we stated the case about right when we said that paper-mill owners themselves make the rates high or low.

Watermarks.

By DANDY.

How manhood repeats childhood! "Here we go up, up, up, and here we go down, down down," says Mother Goose, and the childish mind has its full measure of excitement in the contemplation of the rhythmic action. And now prices go up, and by and by they come down, and the paper maker, dealer and paper-stock man all share in illustrating the measure of old Mother Goose. Do they—do any of us—feel any different from the time when we were "kids" frolicking around and unconsciously learning market mutations in nursery verse? I guess not. There are boys who were born old men, and men who are boys to-day, and all are just the same in impulse with the bit of shading acquired by experience. And then comes the end, and this suggests the inquiry: When

shall we come to the end of the cholera circumstance?

Somebody is making a frantic effort to get bagging on the old rag list. This is too ridiculous; but there is no telling what an over-zealous public official may do. After the Metropolitan Board of Health was organized, in 1866, there was quite a time with the cholera in New York; but I don't recollect that rags were stopped then. I shall have to look this up. I meant to have done it this week, but didn't get the chance.

I have just heard a rumor to the effect that that same old Coon has prohibited the landing of gunny bagging. Well, if this is so, what are you going to do about it? Call another meeting. If there is to be another committee to go to Washington, put me on it, and send me a pass.

But enough of "stock" discussions. Let me get down among the boys. I understand that the "twins" in the paper trade are about to wear whiskers alike. Now, how are people going to tell which is Charles and which is Clarence?

There is a young man who went to Holyoke the other day. He is said to have learned how to warble. How about that "trala-la," Hans?

By the way, I learn that William Dunn has dropped into political poesy. I saw an ode of his the other day in a Richmond paper. I meant to have spoken of this before. Of course, as THE JOURNAL is not a political paper, it will be out of place to quote—but, William, how could you?

The following is a transcript of a communication which lately passed between a man in our town and a Holyoke manufacturer.

"We presume you do not care to be bothered with questions from paper makers at present, and will therefore make our communication as brief as possible. What have you to offer in the way of rags?"

Following is the reply:

"We regret to say we have nothing to offer at present."

Seems to be considerable diplomacy in the above!

Communications.

No Secrets.

To the Editor of The Journal:
Can any of your correspondents who have been so ably discussing the question of felt-marks tell us how the threads of the felt can in any way injure the paper? We have got the cure, but not the disease. Come, boys, speak out! No secrets. SAM.

First and Best.

To the Editor of The Journal:
There must be some trouble with the suction that "Suction Box" does not comprehend why the impression of the felt on the paper should make any difference. The difference comes in on selling the paper. Other things being equal, the paper without felt-mark will sell first and best. A SUCKER.

A Question of Priority.

WEST HENRIKER, N. H., September 25, 1884.
To the Editor of The Journal:
I notice your item in THE JOURNAL of September 20 with reference to yielding journal-boxes for paper roll, and I will say that I invented a spring and box combined for the same purpose in 1868, and put them in use in 1869, and am using one of them on our stop-cutter now. I think that I have three sets of such boxes on hand now. H. A. EMERSON.

Cylinder Marks.

To the Editor of The Journal:
"X" inquires about cylinder marks. I saw some board marked that way. The boss said it was because there was no backing wire on the cylinder. If "X" had his trouble when the cylinder covering was nearly worn out, his remedy is a new covering. If the marks showed when both coverings were new, then ask someone else. SONNY.

The Yielding Box—Is It Old?

To the Editor of The Journal:
We are in receipt of a communication from certain parties claiming royalties for use of the "spring roll" on paper machines. Their patent is dated 1870. We are under the impression that the device was in use before that date. Could you not bring some light on the subject by a properly couched inquiry in THE JOURNAL which would bring out answers from old paper makers and machine-tenders? As their circular has probably been sent to all paper makers, any information on the subject will be of interest. H.

Yielding Journal-Boxes—Is the Claim Good?

To the Editor of The Journal:
The enclosed circular has been sent to me, and I suppose to other mills as well. The claim may be good, and it may not. Would

it not be well to notice it in THE JOURNAL, and ask if some of the older paper makers have not used substantially the same roll prior to the date of this patent—August 9, 1870. My foreman thinks that he used it eighteen years ago. Please ask in your paper for replies, and if the claim is not good let the trade have the benefit of it. W.

[The circular referred to is a demand for settlement of a claim for infringement of a patent on a yielding journal-box, the invention having for its object to prevent the straining and breaking of the paper at any point in its passage through the machine prior to reaching the calendars. The device is said to consist in sliding-boxes in standards and supported on springs, in which boxes the journals of the carrying-roll, over which the sheet passes on its way from the driers to the calendars, are mounted, the springs enabling the boxes and carrying-roll to yield to the strain exerted by the sheet and thus prevent its rupture.—ED.]

A Thirst for Knowledge.

To the Editor of The Journal:
Having been assigned to write a paper on paper-making, &c., at our next literary meeting, would you please inform me through your columns where I can get the best points as to making paper, and also the growth of the industry since the start, who the inventor was, the first mill, and all such items of interest. By so doing, you will confer a great favor. X. Y. Z.

[You are asking too much. Do you think that we know more than anybody else in this wide world.—ED.]

New Fibre for Paper-Making.

MONTREAL, September 22, 1884.

To the Editor of The Journal:
Your present correspondent had the pleasure of being one of a company of gentlemen who visited last week the works of the St. Lawrence Pulp and Paper Company which are situated on the western or left bank of the Richelieu River, near the point of confluence with the St. Lawrence, and opposite the town of Sorel, which is, as many of your readers may know, the first stopping place of the steamers which ply between Montreal and Quebec.

This company, the St. Lawrence Pulp and Paper Company, was organized a short time ago for the purpose of collecting and manufacturing into pulp one of the grasses indigenous to the locality; it is found on the banks of the St. Lawrence and its tributaries, as well as on the shores of the many islands in these rivers. The works are built of brick on stone foundation, they are commodious and well adapted for the purpose for which they have been constructed; the property of the company is of considerable extent, and there is a very large quantity of the grass now stacked thereon.

The company of gentlemen had a good opportunity of making a minute inspection of the works and process of manufacturing the pulp, such as boiling in caustic alkali, washing, bleaching, &c., and its finally being run off in a continuous sheet of white pulp. This pulp exhibits a long and very strong fibre, well fitted, so it is said, by experts, to be used in the manufacture of very fine papers.

Steam for boiling and motive power for the works is supplied from two large boilers conveniently placed.

Afterward the company partook of a sumptuous and recherché dinner set for them in Piché's Hotel, Sorel.

Some left for Quebec that evening or returned to Montreal next morning—all very much gratified with what they had seen and heard.

I enclose a copy of the dinner card which is printed on a sheet of the pulp. You will also find enclosed a small piece, part of which had been dipped in a weak aniline dye. Observe how well it is colored.

In these days when your Government in its wisdom is guarding against the introduction of cholera by foreign rags by prohibiting their importation from certain parts for a time, your manufacturers should turn their attention to this pulp as a means of supplementing their supplies of raw fibrous material at a cheap rate.

I am very sure that any request made for information or samples of C. T. Irish, secretary and treasurer, at Sorel, will receive prompt and willing attention. DELTA.

P. S.—Your correspondent, "Why," in your issue of the 13th inst., is suggestively profane. Shame on him! And would it not be more grammatical to write *less hot* instead of "less hotter?" DELTA.

[Our correspondent is grammatically "out." "Why" hit it right, even if "suggestively profane." Read it again, Delta.—Ed.]

The Wants of Jamaica.

OVO CABESSA, Jamaica, W. I., August 20, 1884.

To the Editor of The Journal:
In your issue of the 2d inst. I read a report of the proceedings of the seventh annual meeting of the A. P. M. A., at Saratoga, on the 30th ult., in which appears the copy of a letter addressed to the secretary of the asso-

ciation by Clarence W. Scott, of Monroe, Mich., which I think contains some excellent suggestions for adoption by the trade, and which Mr. Ripley equivalently observed were deserving of notice. The letter contains also two very pertinent remarks which interest and please me very much, and so I venture to send you a few remarks thereon. In his allusions to the obstructions and opposition placed in the way of American manufacturers in some foreign markets he asks: "Cannot this condition of trade in great part be changed?" and secondly: "Cannot the market for our products be greatly enlarged?" To both of these questions I beg to tender the affirmative, Yes!

At the present moment the British West India possessions are petitioning that the mother country should endeavor to obtain for them from the United States Government the benefits of a reciprocity treaty such as Spain has obtained for Cuba, and in none of the British West India Islands is this wish more paramount than in this beautiful "isle of springs." The people of Jamaica are eagerly anxious that this state of trade should be developed as quickly as possible and our contiguity makes it especially desirable. Americans are not sufficiently informed on these points, nor are they aware of the fields which are open to them in these islands of the Caribbean Sea, for the outlet of their surplus productions and manufactures. More particularly is this the case with regard to Jamaica, inheriting as we do all of the privities of our common ancestor, "John Bull." Our requirements have kept pace, in a measure, with the mother country in the march and improvement of the age—which is not generally the case in the other islands in the same waters under foreign rule. There is a growing want and a more expansive field for the progress of literature, which is permeating every strata of society, and I am firmly of opinion that at the close of this century every man, woman and child in this country will be able to read and write.

If American paper manufacturers would only take cognizance of these facts, they would see the necessity of establishing a paper mill in Jamaica (a small one at first).

Supplies for your own mills are obtainable in vast quantities nearer to you and at considerably less cost and trouble than is the case at present, as much of the raw material that is consumed in the paper trade of the United States has to be fetched from distant foreign parts into your markets. Why should this be, seeing that many of your wants can be supplied nearer home? In like manner, as many, nay, most, of our wants can be and are supplied by America.

At the close of last year I paid a visit to the United States, and while there met several of the leading paper makers in the State of Pennsylvania, to whom I showed several varieties of fibrous materials, straw, wood, bark, &c., suitable for paper-stock, all of which were pronounced first-class.

Observing in the same paper that certain restrictions are about to be placed on the importation of foreign rags into the United States, owing to the spread of cholera, I beg leave to draw the attention of your leading men in the paper trade to the varied resources at their command in this country from which to draw supplies. Bananas, as you are aware, are extensively cultivated for the sake of the fruit only, and in the near future it will become the leading article of export as soon as the sugar industry dies out, which is only a matter of time. Can you have better raw material for paper-stock than this? Then, again, there are the bamboo and fibrous plants in endless variety, palms, barks and woods of very superior structure for producing wood pulp, and rags can be had in abundance.

I must inform you that Jamaica is purely an agricultural county. We can boast no mineral wealth, but the fertility of the soil is unequalled. It is only necessary to send a committee of qualified gentlemen from your association to investigate and see for themselves and to be satisfied that my statements are facts, and at the same time find a market for other productions, and a safe outlet for American capital and push.

The resources of Jamaica, I reiterate, are not sufficiently known to American manufacturers. While we are anxious to trade with the United States, if we can secure the same privileges as Cuba and Mexico under "The most favored nations clause," and when the New Orleans Exhibition shall have closed, we shall have Americans flocking to the "isle of springs," where there is to be enjoyed by the weak and sickly a perpetual summer, a healthy climate for all, with magnificent scenery, and warm hearts, like your own, to greet all who may choose to come and dwell with us. You have my card already, and if any one desires my address after what I have said, you are at liberty to furnish it.

I send you the names of a few newspapers published in this country as a proof of the growing intelligence of our people.

Newspapers published in the Island of Jamaica: *The Colonial Standard, The Gleaner, and The Tri-weekly Gleaner, The Express, Gall's Daily News-Letter, and a Tri-weekly News-Letter, The Budget, The Creole, The People's Banner, The Evening Express, The*

Jamaica Tribune, The Jamaica Gazette (government organ), The Trelawny Advertiser, The Falmouth Gazette, The St. James' Gazette, The Jamaica Colonist, The Westmoreland Telegraph, The Baptist Reporter, The Church of England Miscellany, The Wesleyan Messenger, &c., besides other minor papers in other parts of the island.

The requirements for all grades of paper is to be met, and if some of your moneyed men would invest their capital in a paper mill, I am pretty sure that it would meet with protective support from the Government of this country. A large quantity of American common straw-wrapping paper finds its way here from the States, but nearly all of the better class comes from Great Britain. G. R.

Changes, Removals and New Firms.

Mullane & Andrews, publishers, Neola, Ia., have sold out. Kehoe & Co., printers, Maysville, Ky., have sold out to J. N. Kehoe.

Moore Brothers, stationers, San Bernardino, Cal., have closed up their business.

E. L. Meyer, bookseller, &c., Hutchinson, Kan., has sold out to G. W. Hodges.

Swirnurne, Adams & Co., printers, Minneapolis, Minn., have dissolved partnership.

Beverly Ward has sold his stock in the New York Commercial Advertiser to Parke Godwin.

E. A. Hayes, publisher of the Register, Torrington, Conn., has sold out to H. M. White.

Charles E. Ramsey, stationer, &c., Kalkaska, Mich., has been succeeded by Charles E. White.

Clark & Underwood, printers, Newark, Ohio, have sold out to the American Printing Company.

J. H. Cooper & Co., printers, Redding, Cal., have dissolved partnership. J. H. Cooper continues the business.

The United States Music Engraving and Printing Company, Limited, Philadelphia, Pa., has been dissolved.

J. & J. Durel, stationers, bookbinders, &c., New Orleans, La., have dissolved partnership. James Durel succeeds to the business.

F. S. Hasbrouck & Co., dealers in envelopes, New York city, have dissolved partnership. F. S. Hasbrouck continues the business.

R. W. Webb has assumed control of the Gazette Company, publisher of the Daily Gazette, Las Vegas, N. M., and the style of the business is unchanged.

Fred. J. Collins & Co., dealers in strawboard, Boston, Mass., have dissolved partnership. Frederick J. Collins continues the business alone under the same style.

Berwald & Frisius, booksellers and stationers, Davenport, Ia., have dissolved partnership. John Berwald continues, and assumes the liabilities of the late firm, and collecting all accounts due.

Negotiations have been completed for the purchase of the Minneapolis Daily Tribune, Minneapolis, Minn., from Gen. A. B. Nettleton by A. J. Blethen, late business manager and co-owner of the Kansas City Journal, and William E. Haskell, son of E. B. Haskell, editor of the Boston Herald. The Tribune was founded in 1880, and has been very successful. The consideration is understood to be approximately par for the capital stock of \$200,000.

E. A. Norris, printer, Fitchburg, Mass., has sold out to A. G. Norse.

The Record Publishing Company, St. Louis, Mo., is reported about to sell out.

Horace North, bookseller, &c., Augusta, Me., has sold out to S. J. Milliken.

A. C. Miles & Co. have succeeded A. C. Miles, bookseller, &c., Pierce City, Mo.

A. W. Hawkes, bookseller, stationer, &c., Austin, Tex., is closing out his business.

E. L. Eckley, publisher of the Record, La Grande, Ore., has sold out to Lou Cleaver.

Owen Scott, publisher of the Democrat, Effingham, Ill., has sold out to G. M. Le Cron.

Rufus Adams & Co., stationers, formerly 46 Pine street, have removed to 106 Broadway.

John M. Gore, publisher of the New Castle Democrat, New Castle, Ind., has sold out to M. L. Reed.

A. Simon, stationer, New York city, has opened a new branch store at No. 4 West Fourth street.

William J. Pell has succeeded W. B. Folger as proprietor of the Mercantile Printing House, 92 John street, New York.

St. John & Wallace, booksellers, &c., Eureka, Kan., have dissolved partnership. Wallace Brothers succeed to the business.

Wright & Bryam, booksellers and stationers, San Francisco, Cal., have dissolved partnership. G. W. Wright continues the business.

Bollong & Flinn is the name of a new stationery firm at 45 Broad street. The firm is composed of Andrew Bollong and Hugh Flinn.

Phelps & Bryant, booksellers and stationers, St. Joseph, Mo., have dissolved partnership. E. E. Phelps will continue the business, assuming the liabilities and signing in liquidation.

J. E. Bryant will remain with the house until January 1.

A dissolution has taken place in the firm of Pond & Child, booksellers and stationers, Hartford, Conn., De Witt C. Pond succeeding the firm.

SPECIAL NOTICES.

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

EUGENE SULLIVAN, Packer of Rags and Paper Stock, 356 & 358, WATER STREET, NEW YORK.

THOS. BUTLER & CO., Rags, Paper Stock, Old Metals, Rubber, 349-353 CAUSEWAY ST., BOSTON, MASS.

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY, September 26, 1884.

THE MONEY MARKET.—The financial situation is unchanged, the money market being easy, and loanable funds abundant. Commercial paper is in increasing supply, but limited demand, only the best names being freely discounted at 5@5½ per cent., and good endorsements at 6@6½. The stock market closed somewhat irregular, but generally strong. Government bonds were strong and higher for the 4s. Railroad bonds were moderately active and irregular. The market for sterling was dull but steady, and without new feature. Posted rates closed at 4.83½ for sixty days, and 4.85½ for demand. The actual rates ranged: At sixty days' sight, 4.82½ @ 4.83; demand, 4.84½ @ 4.85; cables, 4.85 @ 4.85½, and commercial 4.80¾ @ 4.81¾. Continental exchange weak and quiet; francs, 5.22½ @ 5.21½ and 5.20 @ 5.19½; reichsmarks, 94¾ @ 94½ and 94¼ @ 95½; guilders, 39¾ @ 40½.

THE PAPER TRADE.—We are nearing the close of the first month of autumn and an inquiry into the conditions and prospects of fall trade elicits the general opinion that, thus far, the results obtained have not come fully up to anticipations of a month or two months ago. In July, many of our leading city houses expressed themselves satisfied that the coming autumn would witness a moderate but distinct revival in business. The autumn has come, and there has been some increase in purchases, but thus far the total sales appear to be behind that of a year ago and somewhat less than had been looked for. In short, the beginning of fall has not met anticipation, and there is, thus far, no sign of much improvement in the early future. The advance in price at the mills, noted last week as having been made in Fine Writings, is felt very little as yet by the dealers, as most of them are fairly well supplied with stock, but those dealers who may not be so fortunately situated will find that when they seek to place new orders the advance of ½c. to 1c. is quite a general thing. Dealers' selling prices have not yet been changed, but this will not be the case very long. The finer grades of Print Papers, Book more particularly, hold to about the same prices as of late, but these cannot be produced at the present cost of rags and other raw material, and the paper cannot be sold at current prices, except at a loss to the manufacturer. The result will be that unless prices advance in proportion to the advance of stock a good many mills will be compelled to shut down or continue running at a loss. News and Manillas both hold their own very well and are firm at quotations in dealers' selling lots. Straw Boards and Straw Wrappings are without any new feature.

JUTE BUTTS.—We have very few sales to report on spot, say, 500 bales at 1 13-16c., with the market closing strong at 1 7-8c. cash. In futures, there are no sales and no arrivals to note.

WOOD PULP.—Manufacturers of Ground Wood Pulp have not yet realized their expectation of an advance in price which they thought would soon follow the upward turn in the rag market. Spruce Pulp is probably as cheap to-day as at any time during the past three months, the range of price being 2@2¼c. Poplar Pulp is nominal at about 1¾ @ 1 7-8c., and very little sought after. Norwegian Pulp of best quality continued quoted at 1.80c. for pure white, wet, 50 per cent. allowance for water, and 1.90c. for prime white dry. We note an import of 200 bales this week.

WOOD FIBRE.—Although no concerted action was taken at last week's meeting of the American Fibre Association, several of the principal manufacturers of Chemical Fibre have advanced their quotations ¼c., and we now quote the range for Bleached at 4¼ @ 4½c. We have not heard of any change having been made in Unbleached, for which the demand is limited, with prices nominal at 3¼ @ 3½c., according to quality and quantity.

FOREIGN RAGS AND PAPER STOCK.—Under the influence of diminishing supplies and a quickening demand, the market here has developed an amount of activity during the past week that the trade has not been experiencing for a long time before. It may be that a good many manufacturers hold supplies of stock quite sufficient to meet their requirements for some time to come, but it is equally

as true that a much larger number have not been buying far ahead of their actual necessities for a number of months past, and their anxiety has been disclosed through the constant inquiries they have been making and the readiness with which many of them have accepted offers made to them by importers and dealers, and those who have been compelled to buy, and have delayed doing so, have done so at a higher cost. The supply here has been drawn upon considerably during the past week, and, furthermore, there are no rags afloat destined to this country and shipped prior to September 1, except what may be on the way by sailing vessels, all the steamers having arrived. Stocks of the best grades of both Cottons and Linens are not only very nearly exhausted, but some of the medium and low grades are running low, and Waste Papers, particularly White Post Shavings, and other fine grades are more in demand and are selling at somewhat better figures.

Among the transactions reported last week were Hamburg New Shirt Clipping at 6¾c., do. S. P. F. F. No. 1 Linens at 6¾ @ 7¼c.; S. P. F. F. No. 2 do. at 5¼ @ 6c.; S. P. F. F. No. 3 do., 4¾ @ 5¼c.; F. F. No. 4 do. at 3¼ @ 4c.; L. F. X. No. 5 do., 3½ @ 3¾c.; L. F. B. do., 3¾ @ 4c.; C. S. P. F. F. No. 1 cottons at 4¼ @ 5½c.; No. 2 do., 4¼ @ 4¾c.; No. 3 do., 3¾ @ 3¾c.; C. C. do., 2¼ @ 2¾c.; Low grade Hamburg cottons, 2¾ @ 2¾c.; C. F. B. do. at 3¾ @ 3¾c.; and extra fine blue cottons at 3¾ @ 4c. In English stock we note sales of London seconds at 3¼ @ 3¾c.; do. thirds, 2@2½c.; checks and blues, 3¼ @ 3¾c.; light prints, 3¼ @ 3¾c.; black calicoes, 2@2½c.; new cotton clippings at 5¼ @ 5¾c.; London fines, 5¼ @ 5¾c.; outshots, 4¼ @ 4¾c.; and new print tabs, 4@4½c. The small supply here of No. 1 Leghorn Linens is held at 6¾ @ 6¾c.; No. 2 do. 5¾ @ 5¾c.; No. 3 do. 4¾ @ 4¾c.; and of Cottons at 5¼ @ 5¾c. for No. 1; 4¾ @ 4¾c. for No. 2 do.; and 3¾ @ 3¾c. for No. 3 do. Egyptian Whites and Blues are held at 3¼ @ 3¼c., and Colors at 2¾ @ 2¾c. Ordinary White Japanese are held at 3¼c., selected 3¾ @ 3¾c., while Russians generally are about ¼c. below Hamburg quotations on Linens. The arrivals during the past week aggregate 4,280 bales and bags, embracing 2,296 bales Rags and 1,984 bales Old Papers, 200 bales Wood Pulp, and 597 bales Manillas.

DOMESTIC RAGS.—The growing scarcity of foreign stock has quickened the demand for domestic packed goods, and prices have advanced so rapidly that it is impossible to give a quotation to-day with any assurance that it would be accepted by the seller to-morrow. At the close of our review on Friday of last week sales of No. 1 City Whites were reported as having been made on that day at 5c.; on the subsequent day, Saturday, 5¼c. were paid for several lots, and the ruling price throughout the market here to-day is 5½c., and we hear of a packer who holds his moderate supply firmly at 6c., but whether this figure will be reached remains to be seen. It is getting to be much more a question of where to get the rags than the price. No. 2 City Whites were quoted a week ago at 3@3¾c., and now they are firm at 3¾ @ 3¾c., and even Seconds which could be picked up most anywhere between 1¾ @ 1¾c. will now bring 1½ to 1¾c., according to the packing. Cotton Canvas, which for some time past has been sluggish at the range of 4¼ to 5c., now moves with considerable freedom at 5¼ @ 5½c., and brings about the same price as linen.

BAGGING, &c.—There is still the same uncertainty that existed a week ago in respect to what action the Government officials will take with regard to Gunny Bagging, whether they will class it as old rags and prohibit its importation under the Treasury Department order of August 30, or permit its landing with Jute Butts and other classes of Jute stocks. It has been semi-officially stated that "Gunny Bagging if commercially known as rags will be excluded." It would be some relief to the trade if the Government would as speedily as possible promulgate some ruling which will put an end to this uncertainty. Bagging is not commercially known as rags and the sooner this fact is impressed upon the minds of those who claim jurisdiction over the imports of paper-stock the better it will be for those whose business is very much hampered. The line of steamers plying between Hull and this port refuse to accept Gunny Bagging as freight for fear of detention upon arrival here and the possibility of having to carry the goods back again if they did bring them. There is now at Hull a considerable quantity of bagging sent there from German and other ports for transshipment to New York, which has been placed on storage awaiting the time when it can be brought over here without the risk of its landing being prohibited. As regards the market here for Gunny it is in a very similar position to the status of a week ago. Stocks are lightening up under a very light demand and a considerable falling off in the receipts and values are about as nominal as at any time during the month. Well-known brands of No. 1 Manchester such as P 83's are held at 1¼c. and a small fraction less might buy, but there are inferior grades in the market offering at 1¼c. Manilla Rope is yet easy and dull at 2¼c. to 3c. for English and 3

to 3¼c. for Domestic. Jute Rope and Threads are still sluggish at 2¼ @ 2.45c. for the former and 2¾ to 2.55c. for the latter.

OLD PAPERS.—The advance in the rag market has given an impetus to the demand for some of the better grades of waste papers, such as White Shavings and Ledger Stock, and some sales have been made at rather better prices than have ruled for some time. We quote: No. 1 Manillas 1¼ @ 1 7-8c., Soft White Shavings, 3¼ @ 3 7-8c.; Hard do., 3¼ @ 4c.; Folded News, 1¾ @ 1 7-8c.; Commons, 40 @ 50c.; Solid Printed Book Stock, 2¼ @ 2.31 1/4c.; Mixed Shavings, 2¼ @ 2 7-8c.; Ledger Stock, 3¾ @ 3 7-8c.; Light Book Stock, 1 7-8 @ 1 7-8c.; Bogus Manillas, ¾c.; Straw Board Clippings ½ @ 5/8c.; and Binders' do., ¾ @ 7/8c.

STRAW.—There is a fair demand for Straw, and prices rule steady. We quote prices in New York: No. 1 Rye Straw, 75 @ 80c.; No. 2 do., 50 @ 60c.; and Oat, 40c.

ROSIN.—The market for Rosin remains quiet at unchanged quotations, with the lower grades in moderate request, and the stock of Strained about exhausted. We quote yard lots, cartage included, viz: Common to Good Strained, \$1.50 @ 1.60; E at \$1.70; F Good No. 2 at \$1.70 @ 1.75; G Low No. 1 at \$1.85; H No. 1 at \$2 @ 2.10; I Good No. 1 at \$2.37 1/2; K Low Pale at \$3; M Pale at \$3.50; N Extra Pale at \$4, and W G at \$4.75.

CHEMICALS.—Supplies are taken in rather a spiritless manner, but holders are quite confident of their position, and unwilling to urge business in excess of legitimate wants, thus maintaining steadily their previous prices. Bleach continues to move steadily into the channels of consumption. Consumers are supplying their wants as such develop themselves, and there is a fair trade passing at 2-16 @ 2-16c., according to brand and quantity, and report steady sales at the range. Liverpool advices state that "irresponsible rumors have been set afoot as to the dissolution, in December next, of the Bleaching Powder Makers' Combination. Such a result seems scarcely probable, in the present depressed state of trade. Increase of production in any branch just now would certainly not tend to improve matters, and the manufacturers are hardly likely to overlook this in their arrangements. Bleaching Powder in little request, chiefly for America. Considerable sales reported at £8 2s. 6d. @ £8. ros. f. o. b. for September." Soda Ash and Caustic Soda are without any new feature.

CHINA CLAY.—English Clay continues to rule very quiet, although several sales have been made which do not equal the amount of business that was done this time last year. We report sales 150 bbls. prime Medium Clay at \$14 @ 14.50 per ton, 90 casks of superfine prime white at \$16.50 @ 17.50. Domestic grades have been in better request, while for Southern grades we report sales of about 25 tons at \$10 @ 11.

COAL.—Anthracite coal is quiet, with a tendency toward better things in the demand. Seward's Coal Trade Journal says: "There is a disposition to buy coal at prices at which it can be had, and the extremely favorable freights now ruling in all directions. As noted last week, the tonnage is being kept well in hand; although a reduction of one hundred thousand tons per week would tend to put the trade in a more thoroughly active condition. As next week is to be an idle one at the mines, there must be a stiffening of prices before long. Where an industry is so easy to manage to the general good as is the coal trade and keep a perfect balance between demand and supply, it seems strange that it is not done in a business-like way. Fluctuations profit neither the producer nor the consumer. Bituminous coal is quiet, and quotations continue to be made at very low figures on certain qualities of coal reaching the seaboard." Quotations for Anthracite are: Scranton at Hoboken at \$3.80 for Lump, Grate and Egg; \$4.40 for Stove, and \$4.15 for Chestnut. Philadelphia and Reading Company at Elizabethport, N. J., quotes Broken and Egg, \$4.10; Stove, \$4.40, and Chestnut, \$4.15.

PRICES CURRENT. NEW YORK MARKET.

Table of Paper Market Dealers' Selling Prices. Includes items like Ledger and Record, Flat Caps, Blotting, Book, super-sized and calendared, Book, extra machine finish, Book, machine finish, low grade, Book, No. 1, shavings & imperfections, News, No. 1, News, rag and wood, News, straw, Hanging, superfine, No. 1, Hanging, superfine, No. 2, Hanging, machine satin, Hanging, white blank, No. 1, Hanging, white blank, No. 2, Hanging, curtain, Hanging, buff, Hanging, brown, Colored papers, glazed medium, Colored papers, tobacco, Colored papers, tissues, 20 x 30, 7 1/2 ream, Tissues, black, 20 x 30, 7 1/2 ream, White tissue, 20 x 30, 7 1/2 ream, White tissue, 24 x 36, 7 1/2 ream, Manillas, Flour-sack, cream, Manillas, Flour-sack, drab.

Table of various rags and shavings prices. Includes items like Manillas, Rope, unbleached No. 1, Manillas, Rope, unbleached No. 2, Manillas, No. 1, light weight, Manillas, No. 1, heavy weight, Manillas, No. 2, Bogus, Manillas, Bogus, Tissue Manillas, full count, weight and size, Hardware, light colored, No. 1, Hardware, No. 1, glazed, tarred, Hardware, No. 1, glazed, Binders' Boards, 10 ton, No. 1, Binders' Boards, 10 ton, No. 2, Straw Boards, air-dried, No. 1, Straw Boards, steam-dried, No. 1, Straw Boards, steam-dried, No. 2, Straw Boards, steam-dried, No. 3, State, Straw Wrapping, 10 lb., heavy weight, Straw Wrapping, 10 lb., light weight, Cigarette Straw Tissue, per case of 100 boxes, 50 books to the box, 200 sheets to the book, Tea Papers, 16-sheet quires.

Table of Woolen Rags prices. Includes items like Comforter Stock, White Woollens, Blue Gray Stockings, White Stockings, Blue Flannels, Reds, old, New Shirt Clippings, Mixed Softs, free of Carpets, Seamed Cloth, Skirted Cloth, New Cloth Clips, New Satinets, clean stock, Satinets, old, Seams, Delaines, stripped for extract, Blankets, Woolen, Wool Carpets, Mixed Carpets, White Linseys, Mixed Linseys.

Table of Rags, Rope and Bagging prices. Includes items like White Shirt Cuttings, No. 1, Mill Assorted Whites, Unbleached Muslins, City Whites, No. 1, New Seconds, light, New Seconds, dark, No. 2, Whites, Cotton Canvas, No. 1, Linen Canvas, No. 1, Country White Rags, Country Mixed, free of Woollens, Seconds (City), Colors, per 100 lbs., Manilla Rope, Manilla Rope, tarred, Gunny Bagging, No. 1, Gunny Bagging, No. 2, Burlap Bagging, No. 1, Tar Shavings, Hemp Twine Stock, Jute Waste.

Table of Shavings and Old Paper prices. Includes items like White Collar Cuttings, muslin lined, White Envelope Cuttings, Hard White Shavings, No. 1, Soft White Shavings, No. 1, Mixed Shavings, part white, Ledger and Writing, Solid Stock, Book Stock, No. 1, light, Old Newspapers, Pure Manillas, Hardwares, No. 1, Bogus Manillas, Commons, Binders' Board Cuttings, Straw Board Cuttings.

Table of English Old Papers and Shavings prices. Includes items like Hard Shavings, No. 1, Soft Shavings, No. 1, White and Colored Shavings, No. 1, White and Colored Shavings, No. 2, Cream Shavings, Paper and Book Cuttings, Briefs and Letters, Newspapers and Pamphlets, extra, Old Newspapers, Broken News and Letters, Old Book Bindings, Old Printed Books, White and Buff Railway Sheets.

Table of English Rags prices. Includes items like New Cuttings, cotton, London Fine cotton, Outshots, cotton, Seconds, Thirds, New Print Tabs, Checks and Blues, Light Prints, Light Fustians, Dark Fustians, Black Calicoes, First Canvas Linen, Second Canvas Linen, Black Bagging, Gunny Bagging, No. 1, Gunny Bagging, No. 2, Burlap Bagging, No. 1, Rope, Manilla, Rope, Manilla, tarred, Best Jute Threads, Clean Jute Ropes, Mixed Jute Rope, Flax Tow.

Table of Hamburg Rags prices. Includes items like N S C, New Shirt Cuttings, S P F F, No. 1 Linens, S P F F, No. 2 Linens, S P F F, No. 3 Linens, F F, No. 4 Linens, L F X, No. 5 Linens, Extra Fine Blue Linen, light color, L F B, Blue Linens, Gunny Bagging, No. 1, Gunny Bagging, No. 2, C S P F F, No. 1 Cottons, C S P F F, No. 2 Cottons, C S P F F, No. 3 Cottons, C C C, Colored Cottons, X C F, Low grade Cottons, C F B, Fine Blue Cottons, Extra Fine Blue Cottons.

Table of various rags and shavings prices. Includes items like White Manilla, Tarred Manilla, Old Book Paper, Old Printed Books, Imperfections, White Shavings, Colored Papers, Writing Papers, Leghorn Rags, P P, No. 1 White Linens, S S, No. 2 White Linens, T T, No. 3 White Linens, R R, Linen Stripes, P C, No. 1 White Cottons, S C, No. 2 White Cottons, T C, No. 3 White Cottons, R C, Cotton Stripes, C C, Colored Cottons, Whites, Blues, Colors, Memel Rags, S P F F, S P F F, F F, F G, L F B.

Table listing various types of rags: Japanese Rags, Trieste Rags, Russian Rags, Smyrna Rags, Whites and Blues, etc.

Table listing various types of rags: Copperas, American, Extract Logwood, Lime, Rockland, Prussian Blue, etc.



Elevators and Conveyors for Wood Chips. Improved Appliances for Elevating and Conveying Rag, Straw, Manila and Wood Pulp.

BRANCH HOUSES: 81 John Street, New York. 921 N. Second St., St. Louis.

Improved LOG HAUL for Pulp Mills. LINK BELTS for driving Beating Engines.

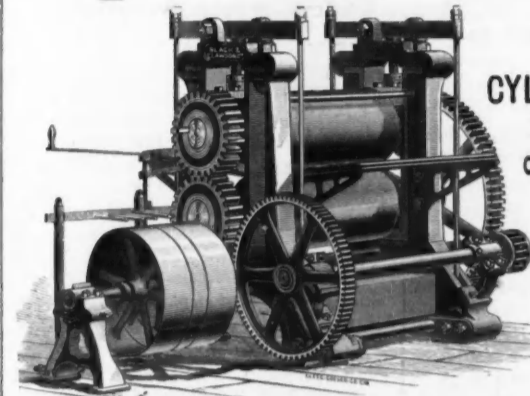
PAPER MILL MACHINERY Of Every Description, and STEAM ENGINES, R. O. MOORHOUSE & CO., Thirteenth and Buttonwood Sts., Philadelphia.

PARTNER WANTED. To join the advertiser in the manufacture of Reinicke Patent Rotary Universal Pulp Strainer.

A PAPER MILL For Sale or Rent, WITH MACHINERY.

FOR SALE-CHEAP. One 48-inch Harper Fourdrinier Machine. One 1200-lb. Washing Engine and Tub.

THE BLACK & CLAWSON CO., Paper Mill Machinery, FOURDRINIER



CYLINDER MACHINES, Beating and Washing Engines, CALENDERS, CUTTERS, STUFF AND FAN PUMPS.

ADDRESS THE BLACK & CLAWSON CO., Hamilton, Ohio.

CLEVELAND WIRE WORKS. - W. S. TYLER. Fourdrinier and Cylinder Wires, DANDY ROLLS, &c.

CYRUS CURRIER & SONS, NEWARK, N. J. General Machinists, Founders and Engine Builders.

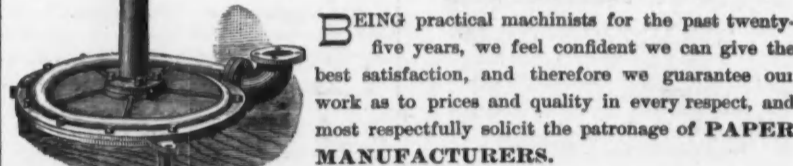
PAPER MACHINERY A SPECIALTY. Fourdrinier and Cylinder Machines, Chilled Iron and Paper Calenders.

KINGSLAND BEATING ENGINE, THE BEST AND CHEAPEST. UPWARD OF TWO HUNDRED IN USE.

GUARANTEE SATISFACTION. 30 DAYS' TRIAL.

THE ORIGINAL IMPROVED BALDWINVILLE Centrifugal Pump

Our Patterns are New and of the Best Design. Our Shop has been fitted up with New Tools and Appliances of the best manufacture.



Manufactured by BOGGS & CLARKE, 123 & 125 South Clinton Street, Syracuse, N. Y.

BOSTON MACHINE MFG. COMPANY, Office and Works, Granite, cor. First St., Boston, Mass., MACHINISTS, IRON AND BRASS FOUNDERS,

PAPER MACHINERY OF EVERY DESCRIPTION.

FOURDRINIER, CYLINDER and LEATHER BOARD Machines, IMPROVED Washing and Beating Engines, Roll Bars, Bed Plates, Plunger and Fan Pumps.

TYLER'S COPPER CYLINDER WASHER.

I have fitted up a shop expressly for the manufacture of these Washers, and am ready to furnish everything complete (except wire) ready to set up.

THE PATENTEE AND SOLE MANUFACTURER, JOHN TYLER, Claremont, N. H.

PHILADELPHIA MARKET.

Table listing various types of paper stock: White Rags, Cotton Canvas, Cotton Canvas, No. 2, Gunny Bagging, etc.

Advertisements.

THE WRITER IS MAKING, TURNING AND GRINDING ROLLS; making and repairing Dandies and Cylinders. GEO. C. HOWARD, 18th St., N. of Chestnut St., Philadelphia.

WANTED.-SITUATION AS FOREMAN BY A practical paper maker of 27 years' experience on Manila, Straw or Rag Wrapping, Straw Board, Hoisting, &c.; salary asked \$1,000 per year; first-class references. Address WM. H. SMITH, P. O. box 1154, Elkhart, Ind.

WANTED.-SITUATION AS FINISHER; HAS been used to assisting on straight Fourdrinier. Address W. L., care of Paper Trade Journal, New York.

WANTED.-SITUATION AS BEATER ENGINEER on Print or Manila. Address R. Miller, Cleveland Paper Co., Valley Mills, Cleveland, O.

MACHINERY.-68-IN. FOURDRINIER MACHINE, good with and extra strong; Paper Engine, 32 x 28, large new Cedar Tub, Steam Press, Hydraulic Press, 49 x 27; 3 Pratt's Steam Traps, Holyoke Duster, 15 x 5 feet; Holyoke Duster, 14 x 8 feet; good 25-in. Houston Water-Wheel, two cheap Water-Wheels, Hydraulic Ram, two 60-in. Section Boxes, two Copper Filters, four Screen Plates, 42 x 38; Flat and Rope Pulleys, Gears, &c., &c. PLATNER & POETTER MFG. CO., Unionville, Conn.

FOR SALE CHEAP.-ONE HORIZONTAL Corliss Engine, 30 x 48 inch. One Beam Corliss Engine, 30 x 48 inch. One 12 x 14 slide Valve Engine. One Upright Corliss Boiler, 60 horse-power. One Locomotive Boiler, 50 horse-power. Two Horizontal Tubular Boilers, 40 horse-power. Six Horizontal Tubular Boilers, 60 x 16 feet; been run three years. 100 feet 1 1/2-16 Shafting, nearly new. Several Rotary and Steam Pumps will be sold low. D. B. OBUICKSHANK, 83 Dyer St., Providence, R. I.

FOR SALE, AT LESS THAN HALF PRICE. One Woodruff & Beach Steam Engine, 30 x 48, with Condenser; 44-inch Leffel Water-Wheel, special build brass buckets; two Regulators for Machine, Wheels, made by Snow; one 4-inch brass Stuff Pump; one 35-inch Holyoke Trimming Press, just right for folded papers. HURLBUT PAPER CO., South Lee, Mass.

FOR SALE, OR WILL LEASE FOR TERM OF years, PAPER MILL, situated 1 1/2 miles from New Milford, Conn., consisting of one 48-in. Double Cylinder Machine, seven Dryers, 36 ins. in diameter; Stack Calenders and Cutters complete, 40 horse-power Boiler, Steam Engine (15 horse-power) used for machine, two 400-pound Beating Engines, one Jordan Engine, Rag Cutter, Rag Duster, Rotary Boiler, Boiling Stock Chest, 50 x 18, Leffel Water-Wheel, improved, under a head of 19 1/2 ft.; about nine acres of land, including the pond; the buildings are frame-two dwelling-houses, barn and carriage house; plenty of water, and of the best quality, with a reservoir that is four miles long and will average half a mile wide, which can be drawn down about 7 1/2 feet; power enough for another beater. For particulars address N. C. LYON, JR., 55 Ann Street, New York City.

FOR SALE.-SET OF SIX 25 x 68-INCH DRYERS, with Frames, Boxes, Gears and Rolls complete five 13 x 70-inch Chilled Calender Rolls; one 15 x 92-inch Pulled Roll; two Engine Rolls, 28 x 30 inches, with Lights and Stands. Address BOSTON MACHINE MFG. CO., South Boston, Mass.

BUYERS OF PAPER MACHINERY WILL save trouble and money by communicating with JAMES B. DAVENPORT, 81 Five Street, New York, broker in Paper Mills, Paper Machinery, Steam Engines, Boilers, &c., new and second-hand.

MILL PROPERTY FOR SALE, AT ROSLYN, LONG ISLAND, 25 miles from New York, on Long Island Sound. The above property consists of Flour Mill (two wheels), with 12 acres Pond, supplied by natural springs; also valuable frontage immediately on tide-water. Vessels can load and unload at the mill. Suitable for any manufacturing requiring cheap transportation by water. Apply on premises to WALTER HICKS, Roslyn, L. I.

FOR SALE.

Three (3) 500-pound Rag Engines, 36-inch rolls, consisting of two washers, one beater, copper lined. Can be seen running at our mill. CAREW MFG. CO., South Hadley Falls, Mass.

FOR SALE.

ONE 72-INCH FOURDRINIER PAPER MACHINE, complete in all its parts and now ready for delivery. For printed description and full particulars, apply to ORRS & CO., Troy, N. Y.

A PAPER MILL

For sale or rent, with machinery; good lasting water-power. Address ANDREW J. BEAUMONT, New Hope, Bucks Co., Pa.

BOSTON MARKET.

Table listing various types of paper stock: Mill Assorted Whites, Cotton Canvas, Cotton Canvas, No. 2, Gunny Bagging, etc.

Table listing various types of English Old Papers and Shavings: Hard Shavings, No. 1, Soft Shavings, White and Colored Shavings, etc.

Table listing various types of New Papers: Superfine Book, Fine Book, News, rag and wood, News, straw, etc.

Table listing various types of Leghorns Rags: P. P. No. 1 Linens, S. S. No. 2 Linens, T. T. No. 3 Linens, etc.

Table listing various types of Alexandria Rags: Whites, Blues, Colors, etc.

Table listing various types of Smyrna Rags: Whites, Blues, Reds, etc.

Table listing various types of Constantinople Rags: Whites, No. 1, Whites, No. 2, Whites, No. 3, Blues, Reds, etc.

Table listing various types of Chemicals: Alkali, 36 cent., Alum, lump, Alum, ground, Alum, pear, Alum, porous, etc.

**THE CLARY PATENT
FILTERING STONES**

Or Perforated Drainer Bottoms,
IN USE IN THE LEADING PAPER MILLS.

For Circulars and Prices address the manufacturers,
SAMUEL SNELL, Holyoke, Mass.

H. DE MAZIERE,

No. 41 Broad Street, New York,
—AGENT FOR—

CHR. CHRISTOPHERSEN,
CHRISTIANIA, NORWAY,

Norwegian * Wood * Pulp.

FRANK DILTS,

Fulton, Oswego Co., New York,
MANUFACTURER OF

Paper Mill Machinery,

Cone Pulley Paper Cutters, Paper
Trimmers, Rag Cutters, Straw
Washers, Stuff Pumps, and
Cylinder Washers.

*Specialties made of Paper Mill Engines, complete
and Straw Board Machinery.

GENERAL JOBBING & REPAIRING.

A. H. GERE,

73 Walnut St., Cincinnati,

Manufacturers' Agent and Dealer in Paper Makers'

DYE STUFFS

Chemicals.

I carry a large stock and ship
promptly on receipt of order.

BAUGHER, KURTZ & STEWART,

YORK, PA.,

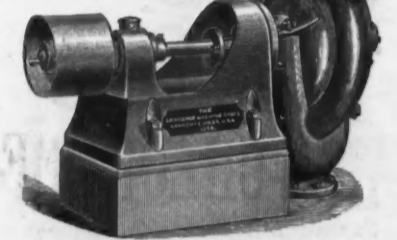
Manufacturers of the
RECHARD TURBINE
—AND—
Mill Gearing and Machinery
OF ALL KINDS.

The Rechard Wheel has
given the highest results
in scientific tests and gene-
ral use. Satisfaction guar-
anteed. Large catalogue
with illustrations and
prices, free on application.

**IMPROVED
CENTRIFUGAL PUMP,**

Constructed on the "Gwynne"
System.

EFFICIENCY GUARANTEED.



The only Centrifugal Pump built in this country
with Double Suction and Balanced Disc. Takes
less power per gallon of water raised, than any other
centrifugal pump. Built by
LAWRENCE MACHINE SHOP, Lawrence, Mass.,
U. S. A.

**VAN NOORDEN'S
PATENT VENTILATORS**



For Paper Mills, Fac-
tories,
In galvanized iron and copper. A powerful and
rapid exhaust Ventilator. Working models
mailed on receipt of 50 cents.

Ventilating Metallic Skylights,



Neat, Light, Fire-proof and Durable.

Absolutely no leakage or condensation. Have hol-
low bars provided with gutters underneath, commu-
nicating with roof. Skylights and glass furnished
and put up by us in any part of the country.

E. VAN NOORDEN & CO.,
No. 381 Harrison Avenue, Boston, Mass.



THE VICTOR TURBINE.

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

On view at Permanent Exhibition of Mill Machinery, 36 Broadway, New York.

Possesses more than Double the Capacity of other Water Wheels
of same diameter, and has produced the Best Results on Record,
as shown in the following tests at Holyoke Testing Flume:

| SIZE WHEEL | HEAD IN FEET. | HORSE-POWER. | PER CENT. OF USEFUL EFFICIENCY |
|-------------|---------------|--------------|--------------------------------|
| 15-inch | 18.00 | 30.17 | .9832 |
| 17 1/2-inch | 17.96 | 36.35 | .9990 |
| 20-inch | 18.31 | 49.00 | .9332 |
| 25-inch | 17.90 | 68.62 | .8294 |
| 30-inch | 11.53 | 58.54 | .8676 |

With proportionately High Efficiency at Port-Gate.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably commend it to the
attention of ALL discriminating purchasers. These Wheels are of very Superior Workmanship and Finish, and of the
Best Material. We also continue to manufacture and sell at very low prices, the

ECLIPSE DOUBLE TURBINE,

So long and favorably known. State your requirements, and send for Catalogue to the

STILWELL & BIERCE MFG. CO.

DAYTON, OHIO, U. S. A.

THEODORE PINKHAM, Straw Boards,

And Agent for ANDROSCOGGIN PULP CO.'S

WHITE BOX BOARDS,

52 Elm and 24 Friend Streets,

CORRESPONDENCE SOLICITED.

BOSTON, MASS.

O. E. MERRILL & CO.

BELOIT, WISCONSIN.

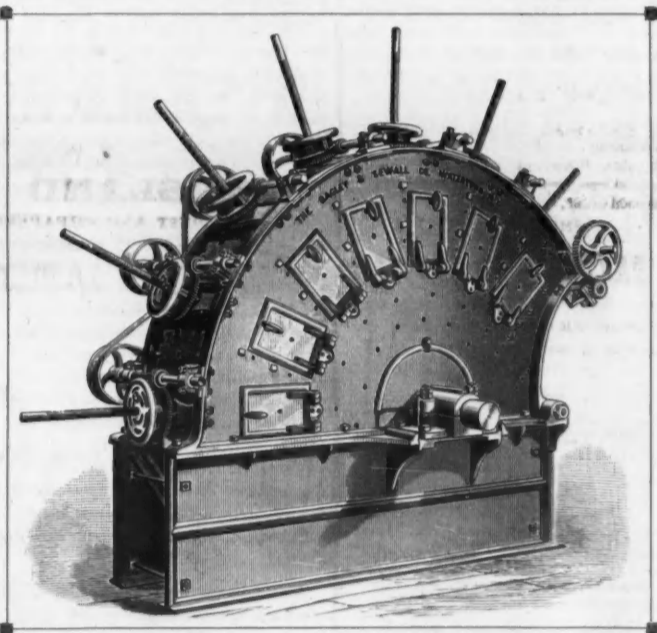
—MANUFACTURERS OF—

Paper * Machinery

OF EVERY DESCRIPTION.

ESTIMATES ON BUILDING OR REFITTING PAPER MILLS CHEERFULLY FURNISHED.

VOELTER WOOD PULP MACHINES.



For information and prices for Pulp Machines, and other Machinery for the Voelter
Process, address

THE BAGLEY & SEWALL CO., Watertown, N. Y.



STANDARD PAPER BAG CO.,

46 Federal Street, } **BOSTON, MASS..**
147 Congress Street, }

Manufacturers of Patent Machine-Made

SACHEL-BOTTOM PAPER BAGS.

"STANDARD'S CHALLENGE."

THESE BAGS ARE EXTRA STRONG, FULL COUNT, FULL WEIGHT.
Each Bag numbered. The bottoms being ready shaped for immediate use,
save the time and trouble of having to form the bottom and corners before
filling. Guaranteed to be Superior to any other Bag in the market.
Send for Samples of the "STANDARD'S CHALLENGE BAG."

KEYSTONE CLAY CO.

Office, 4984 Main Street,
GERMANTOWN, Phila., Pa.
Mines and Works, **EASTON, Pa.**



Ask by Postal Card for
SAMPLE and PRICE.
Will name Rates Delivered at your Railroad
Station.

A. A. SIMONDS,

—MANUFACTURER OF—

Paper Mill Engine Bars and Plates,



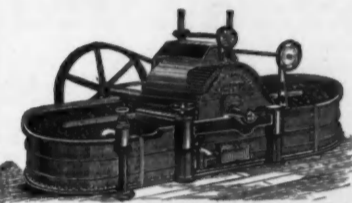
RAG CUTTER

—AND—

TRIMMING KNIVES.

Book-Binders' Knives and every variety of Pattern Knives made to order.

—WORKS ON DAYTON VIEW HYDRAULIC, DAYTON, OHIO.—



KREIDER, CAMPBELL & CO.

1030 Germantown Ave., Philadelphia, Pa.,
W. H. RUSSELL'S SAND WASHER.
An Improvement in Washing Engines.

MACHINISTS & MILLWRIGHTS

MANUFACTURERS OF
Beating and Washing Engines, Pumps,
Rag Dusters and Paper Mill
Work in general.

MILLWRIGHT WORK A SPECIALTY.



CATALOGUE
—ON—
APPLICATION.

UNION STONE CO.

38 & 40 Hawley St.

BOSTON, MASS.

PATENTED AND IMPROVED

Automatic Knife Grinder,

FOR ALL KINDS OF
LONG KNIVES.

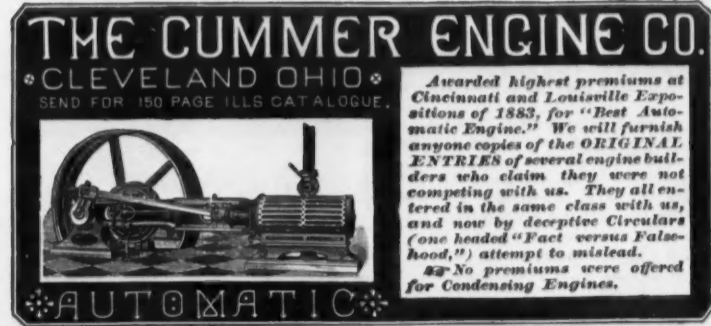


THIS MACHINE SOON
PAYS for itself in the
labor it saves. It will
grind a knife in less
time than on a grind-
stone, and with a per-
fectly straight edge, in
itself a sufficient rea-
son for purchasing the
machine, to say nothing
of the economy.

UNION EMERY WHEEL

For Grinding Wood for Manufacturing
Wood Pulp.

Wheels Made to Order, and Castings Filled.
SATISFACTION GUARANTEED.



THE CUMMER ENGINE CO.

CLEVELAND OHIO
SEND FOR 150 PAGE ILLUSTRATED CATALOGUE.

Awarded highest premiums at
Cincinnati and Louisville Ex-
positions of 1883, for "Best Auto-
matic Engine." We will furnish
anyone copies of the ORIGINAL
ENTRIES of several engine build-
ers who claim they were not
competing with us. They all en-
tered in the same class with us,
and now by deceptive Circulars
(one headed "Fact versus False-
hood") attempt to mislead.
No premiums were offered
for Condensing Engines.

UNION MACHINE CO.,

—MANUFACTURERS OF—

PAPER MACHINERY OF EVERY DESCRIPTION.

HEAVY SUBSTANTIAL FOURDRINIER and CYLINDER MACHINES for fast
running; Washing and Beating Engines, from new patterns, and with latest
improvements; Screen Plates, Bleach Hoisters, Railroad Dusters, Engine Bars and
Bed Plates.

124 WATER STREET, FITCHBURG, MASS.

Are Rags Dangerous?

PAPER MILL EXPERIENCES.

A number of replies to the circular sent out by the publisher of THE JOURNAL have been received from English paper makers. The responses made to the appended inquiries are subjoined:

- 1. Has there ever been, to your knowledge, any authenticated case of Cholera communicated to individuals from Foreign Rags?
2. Do you know of any disease communicated to your employees from foreign rags?
3. Do you know of any disease communicated to your employees from Domestic Rags?
4. If so, mention disease, the kind of rags and the country from which they were imported, and about the date thereof.
5. Do you believe that Cholera, Small-Pox or other infectious diseases are communicated by Rags and paper-stock in transit, or in course of manufacture into paper?
6. Please state, in your opinion, what is the general health of paper mill employees, and your reasons for such opinion.

JAMES DIMMOCK & CO.

- 5. Never knew them to be communicated.
6. In no respect different from that of other work-people in cotton mills around us.

J. E. & A. MAYFIELD.

- 5. Do not know of any cases.
6. Good.

VATES DUXBURY & SONS.

- 6. General health good, owing to good ventilation of paper mill and the free use of chemicals.

A. CANNON.

- 5. Small-pox may be communicated in sorting rags, but it is of very rare occurrence.
6. Very good health and largely owing to the nature of work, especially the vapors from lime-boiled stuff, which, in my opinion, is most cleansing and healthy when inhaled.

FRED'K SPICER, EAST LANCASHIRE PAPER MILLS COMPANY. The doctor once thought he had traced a case of small-pox to the rag-house, but it appeared very doubtful, as the person attacked was living close to an infected house. The rags were English.

5. Theoretically I should consider it highly probable, but, with the solitary exception above mentioned, never found that practice supported theory.
6. I believe they are, if anything, more free from contagious diseases than most operators. The large quantity of chlorine used acting as a disinfectant in many departments, and the good wages are earned usually in paper mills, good food is procurable by the work-people. They also work in well-ventilated rooms at an even temperature.

SAMUEL EVANS & CO.

- Good—chlorine being freely used in the mill.
5. I feel sure they could be so communicated.
6. Good. We use so much lime and chloride of lime that it has a good effect, and when fever is rife in our neighborhood our employees never take it.

STEWART & SONS.

- 5. We have never experienced anything of the kind.
6. Good health. Chemicals employed in the manufacture, such as bleaching powder.

J. R. JONES—ATWEN PAPER MILLS.

- 6. Good. Because we always consider paper-making a healthy occupation. Hand made paper: I know but little of machine.
The above is answered by one who has had over sixty years' experience.

G. & E. G. BAGSHAW.

- 5. We cannot say why it should not, but have known no instance where it has.
6. General health very good. Can give no reason other than that no cases of illness are known among our employees, and we consider the occupation generally healthy.

JAMES HALL, KENSHAM PAPER MILL COMPANY.

- 5. At Hele Mill, Mount Comlpton, Devon, there were two fatal cases of small-pox, said to have been caught in sorting Baltic rags.
6. As good as that of other work-people residing in our own district.

SIMONSTONE PAPER MILLS.

- 5. There is no disease contracted in the manufacture into paper.
6. Very good—as there are many chemicals used in a paper mill, such as ash, lime, chloride of lime, and many others which are disinfectant. In all our experience (of twenty years) in the making of paper, we do not know of a single instance through the use of rags and paper-making materials, and have used all kinds.

H. ALLNUTT & SON.

- 3. We have had small-pox among our rag-sorters on two or three occasions; we do not know that the contagion came from any rags at all, but consider it most likely. We use domestic rags.
5. Such diseases may certainly be communicated by rags in course of manufacture.
6. The general health of our paper mill employees is good; but there is more illness in the rag-house than elsewhere. This is, no doubt, partly owing to the lower class of people employed there, but also in part to the nature of employment.

WM. HALL, NORTH WALES PAPER COMPANY.

- 1-2-3-4-5. Forty years' experience in paper-making at home and in the United States enable me to say that I never knew a case of epidemic arising from paper-stock of any description in any paper mill, and I have used rags from all countries in the manufacture of paper.
6. I have invariably found a great absence of sickness in the vicinity of paper mills, and this I attribute in a great measure to the use of so much chemicals, especially chlorine or bleaching powder, which acts as a disinfectant and secures to the employees an immunity from many illnesses that others are liable to.

WM. TOD & SON.

- 5. Not with present arrangement, but believe they might be.
6. Excellent—we believe owing to the amount of chlorine used, which, we believe, tends to kill any germs of disease.
As a fact, however, the health of employees in all mills we are acquainted with is good as a rule.

SHATLEY BRIDGE, ENGLAND.

- 6. Good—on account of the quantity of bleaching powder used.

ASTON PAPER MILL COMPANY.

- 5. Yes; I have heard of it at other mills, but have not known it personally.
6. Good—we use so much chloride of lime and other disinfectants.

T. & W. LUNNON.

- 2. No; we do not use foreign or domestic rags.
3. Not at our mill, but at others where they do use rags.
4. Do not know where their rags came from.
5. Yes; certainly small-pox.
6. Generally healthy; personal observation of many mill hands for forty years.

PATENT PULP MANUFACTURING COMPANY, LIMITED.

- 5. It is possible.
6. Good—country air and careful attention to sanitary conditions.

BEN. HAIGHT.

- 5. Cannot give an opinion, but have never known any case of infection from rags, foreign or domestic.
6. The general health of paper-mill employees is as good as any other inside employment and much more healthy than many. I found this opinion on observation rather than statistics.

BROWN, STEWART & CO.

- 5. We have had no experience that such might be the case.
6. They enjoy excellent health.

JOHN DICKINSON & CO.

- 2-3. We believe that in one or two instances our employees have caught small-pox from rags, but we cannot say whether foreign or English rags. The last time that the people thought they caught small-pox from the rags was about two years ago.
5. Only in dusting, sorting and cutting.
6. Very good, with a slight tending to rheumatism owing to the moisture and heat in some departments.

R. & W. WATSON.

- 5. No such case has come under our observation nor have we heard of one.
6. Above the average. The healthy nature of the manufacture, coupled with the chlorine fume pervading the works.

JOHN EMMET & CO.

- 5. Clothing worn by persons suffering from such disease, we believe, might and would cause infection, and we would ourselves not knowingly buy or handle such rags, but we have never known such a case. Once the rags were in process the infection would cease.
6. Paper mill employees are proverbial here for good health. This is partly to be accounted for by the mills being situated invariably in the country or outskirts of towns. The absence of close confinement in heated rooms, the amount of clean water used, the use of such disinfectants as lime, soda and bleaching powder, together with the absence of any deleterious substances in the manufacture.

Mortgages, Etc.

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

Table with columns: Mortgagee, NEW YORK CITY, Amount. Includes entries for L. Carroll (\$1,250), W. Casper (B.S.) (200), O. Freeman (R.) (750), W. E. Hoole (4,300), J. B. Jackson (1,325), Williams & Shirley (2,300), J. B. Foot (1,000), A. R. Hamilton (5,000), E. F. R. Lent (200), S. Rosenfeld (396), R. B. Smith (400).

EASTERN STATES.

Table with columns: Name, Address, Amount. Includes Edward C. Davis, Boston, Mass. (3,000); H. Irving Dillenback, Boston, Mass. (5,000); Thomas E. Leyden, Boston, Mass. (300); Chalmers H. Libbey, Boston, Mass. (300); Charles W. Keyes, Farmington, Me. (Real) (2,500); Francis W. Jackson, Boston, Mass. (92); M. A. Ring & Sons, Boston, Mass. (3,000); Charles H. Woodman, Boston, Mass. (800); John T. Roy, Holyoke, Mass. (517).

MIDDLE STATES.

Table with columns: Name, Address, Amount. Includes Charles Blaser, Newark, N. J. (300); Charles H. Dressel, Newark, N. J. (100); Andrew M. Clark, Trenton, N. J. (500); Henry C. Saffen, Brooklyn, N. Y. (3,800); Patrick H. Carney, et ux. (Carney Brothers), Utica, N. Y. (Real) (2,000).

WESTERN STATES.

Table with columns: Name, Address, Amount. Includes D. R. Frazer (Frazer & Brundy), Mount Carroll, Ill. (110); H. B. Clark, Ottawa, Ill. (Real) (600); William Haneisen (Charles Mayer & Co.), Indianapolis, Ind. (Real) (13,000); George Waters, Crawfordsville, Ind. (200); G. W. Peck, Akron, Ia. (179); H. Schmidt, Council Bluffs, Ia. (67); William N. Sargent, Deep River, Ia. (200); W. H. Hunt, Maquoketa, Ia. (50); W. B. Swigart (Swigart & Sons), Maquoketa, Ia. (Real) (500); D. J. McIntyre, East Saginaw, Mich. (74); J. W. Morrison, Omaha, Neb. (350); E. J. Morris, Cincinnati, Ohio (Real) (800); George W. Chase, Newark, Ohio (Real) (700); William Farrell, Ogden, Utah (R.) (3,500); C. A. Foerster, Denver, Col. (25); The Baker-Collings Company, Chicago, Ill. (2,000); J. K. Hudson, Topeka, Kan. (300); William J. Sheard, Topeka, Kan. (950); Narquist & Co., St. Paul, Minn. (50); George C. Smith, St. Paul, Minn. (B.S.) (50); John J. Dittgen, Cincinnati, Ohio (100); Severance & Tocum, East Portland, Ore. (309); A. Noltner, Portland, Ore., Standard (8,627); William M. Bickley, J., Minneapolis, Minn. (400).

TERRITORIES.

Table with columns: Name, Address, Amount. Includes The Herald Publishing Company, Seattle, W. T. (450).

LIENS RELEASED.

Table with columns: Name, Address, Amount. Includes Edward C. Davis, Boston, Mass. (9,000); H. Irving Dillenback, Boston, Mass. (Boston Sunday Times) (400); Frederick Haythorn, Trenton, N. J. (400).

Failures.

Atwood & Sherburne, stationers, &c., Boston, Mass., have failed.
Madison Finch, bookseller and stationer, Knoxville, Ia., has failed.
A judgment has been secured against W. A. Rowland, publisher of the Mansfield Advertiser, Mansfield, Pa., and execution is issued.
E. A. Gear, dealer in paper-hangings, Oneida, N. Y., has assigned to William Barker. Liabilities, \$800; nominal assets, about \$500.

The Weaver Mailing Envelope and Box Company, Philadelphia, Pa., has been sold out by the sheriff and bought in by E. C. Tracy.
John E. Potter & Co., book publishers, of Philadelphia, have become financially embarrassed, and executions have been issued on judgments for \$10,000. Their notes have gone

to protest, and an attachment was recently obtained against them in New York.

R. C. (Mrs. F. L.) Mitchell, printer, Duluth, Minn., is reported to have failed, offering creditors unsecured notes at one and two years. Liabilities, about \$12,000.

George Virtue, publisher, Toronto, Ont., offers his creditors fifty cents on the dollar, half cash and half in four months. Liabilities, about \$12,000; nominal assets, \$18,000.

A meeting of the creditors of the T. S. White Stationery Company, St. Paul, Minn., which failed in the spring of last year, was held in the rooms of the Stationers' Board of Trade on Saturday, September 20. The T. S. White Stationery Company was started in 1881. It subsequently got into financial straits and asked an extension from its creditors. The company's showing was so good that an extension was not only readily granted but in addition thereto some of the heaviest creditors were so confident of the soundness of the company that they took a certain amount of its stock. After the extension the company still failed to do a profitable business. It became embarrassed again and a Mr. Ward, of the firm of Ward, Hill & McClellan, of St. Paul, which was interested in the failure, came to New York and a meeting of the creditors was held. It resulted in a tripartite agreement between the creditors, the T. S. White Stationery Company and Ward, Hill & McClellan. The latter agreed to start a stock company with a capital of \$30,000, and proposed to take \$20,000 in stock and office fixtures of the T. S. White Stationery Company at the market value of the goods and pay for them in \$20,000 worth of stock, and also to sell the remainder of the stock of the old concern or such portion of it as they could on commission, the time for the disposing of the stock and closing up the transactions of the defunct company being limited to October 1 of this year. The assets of the T. S. White Stationery Company were valued at something like \$100,000, and the liabilities about the same amount, so it was believed that the company would pay dollar for dollar of its indebtedness. Lately, Ward, Hill & McClellan complained that there had been considerable shrinkage in the value of the assets, and from their showing the creditors could not realize over seventy-five cents on the dollar, of which twenty-six cents have been paid. It being near the time for the closing out of the company's accounts, it was deemed advisable to call a meeting of the creditors. Mr. Gordon, a large Boston creditor, was authorized to visit St. Paul and take such action on behalf of the creditors as he deemed necessary. One very unpleasant feature of the matter is the fact that the creditors who took the stock of the T. S. White Stationery Company are, under the laws of Minnesota, liable for such portion of the liabilities as is equivalent to the amount of stock they hold. This gives some of the creditors the belief that their claims will be settled at par.

General Notes.

The Davenport Gazette Company, Davenport, Ia., has been attached.

A receiver has been appointed for the Chronicle Publishing Company, Seattle, W. T.

Martin Van Buren Bennett, publisher of the Kansas Prohibitionist, Leavenworth, Kan., has been attached.

The Herald, published by N. W. Smalls, Freemont, Neb., is not mortgaged, as has been reported, and the business is believed to be sound.

Michael and James Norton, rag dealers, Boston, have each been arrested and held to bail in \$6,000. Complaint is made that they disposed of rags on which they had given a mortgage.

The managers of the World's Industrial and Cotton Centennial Exposition have opened an office in the Stewart Building, corner of Chambers street and Broadway, this city, for the convenience of Northern exhibitors. The fullest documentary information may be obtained there.

The Star Clay Company, Mertzown, Pa., has recently increased the capacity of its works and has made such improvements in its process of washing and drying the clay that it is able to supply the trade with an article which it claims is fully equal to English clay. It is said to have a bluish white color, no grit and to possess less moisture than other clays.

James M. Fitzgerald, paper-stock dealer, 135 and 137 South Fifth avenue, New York city, whose warehouse was destroyed by fire several months ago, has erected a new building on the old site, and has added to his business of paper-makers' supplies a full line of book, news, colored cover, and poster papers; also a complete line of manilla, tissue, wrapping and building papers, and will also carry his usual assortment of binders' and album boards, which he claims is one of the largest stocks to be found in the city. He has the entire control of several mills manufacturing bristol boards, colored cover, book and manilla papers, which he offers at manufacturers' prices.

An increasing demand for valve-oleum from machinists, manufacturers and others, is held to be a strong testimonial to its merits as a lubricant. Crane Brothers, Westfield, say: "We like the valve-oleum very much. Please send us one barrel, same quality, by fast freight." George W. Goodrich, 11 and 13 Hampden street, Springfield, Mass., is the agent for this popular lubricant, and he refers to more than five hundred customers in the New England States who are now using it, and most of whom have sent him unsolicited endorsements of its excellence. Among the manufacturers who use valve-oleum are the Keith Paper Company, Turner's Falls, Mass.; Cheney Brothers, South Manchester, Conn.; Smith, Winchester & Co., South Windham, Conn.; Southworth Company, Mittineaque, Mass.; Smith Paper Company, Lee, Mass.; Terry Clock Company, Pittsfield, Mass.; Merrill Brothers, Springfield, Mass., and Samuel M. Gray, City Engineer, Providence, R. I.

Fires.

P. Lambert, stationer, &c., Penetanguishene, Ont., has been burned out.

T. N. James & Co., book publishers, St. Louis, Mo., have been burned out.

Ackerman & Gudger, stationers, &c., Navasota, Tex., have been burned out; insured.

C. E. Snyder, wall-paper dealer, Detroit, Mich., has been burned out. Not insured.

A. C. Osborne, bookseller, &c., Penetanguishene, Ont., was burned out last week.

A. Gordon Lewis, publisher of the Democrat, Georgetown, D. C., has been damaged by fire. Partly insured.

The machine-room of Donaldson & Geer's paper mill at Ballston Spa, N. Y., was burned on Saturday. The fire originated in a kerosene lamp explosion. The loss is \$12,000, and is covered by insurance.

A building, situated on 129th street, between Second and Third avenues, New York city, was destroyed by fire on Friday morning. On the second floor were the offices of three local newspapers, all of which, with their contents, were destroyed. The losses are: Edward H. Phillips, editor of the New York People, \$2,000; General Franz Siegel, editor of the Volksblatt, a German newspaper, \$1,500, and John P. Graff, editor of the Local Reporter, \$700.

Personals.

R. E. A. Wiltry, printer, St. Paul, Minn., died last week.

Adolph Krebs, of the Krebs Lithographing Company, Cincinnati, Ohio, is dead.

C. H. Waterman severed his connection with J. W. Lyon & Co. at the close of last week.

Martin Rourke, paper-stock packer and paper maker, Manchester, Eng., is on a visit to the city at present.

Charles Cohn, of Cohn, Lazarus & Co. arrived home this week, after an absence in Europe of about two months.

John Riordan, the owner of the extensive paper mill at Merritton, Province of Ontario, Can., and president of the Toronto Mail Printing Company, died on Monday at St.

Manufacturing News.

EASTERN STATES.

The insurance on E. & S. May's mill at East Lee, Mass., has been satisfactorily adjusted at \$11,000, and a large force of men are already at work rebuilding. It is expected the mill will be in operation by October 10.

The Owen Paper Company, Housatonic, Mass., is repairing its upper dam.

The Collins Paper Company, North Wilbraham, Mass., has resumed work in all departments, using the new engine in connection with the water-wheels. It has made extensive repairs during the shut-down.

The Fall Mountain Paper Company of Belkows Falls, Vt., is putting up a chimney 105 feet high.

The calender girls and sorters in the Hampshire paper mill, South Hadley Falls, Mass., have had a reduction made in their pay.

MIDDLE STATES.

D. H. and A. B. Tower, of Holyoke, Mass., are building a mill for a new paper-making company at Lockport, N. Y. The company just organized has as officers: President, Charles Keep; secretary, Willis H. Howes; treasurer, Wallace I. Keep. It will manufacture manillas and carpet linings. The machine room will be 140x28 feet and two stories high, the engine-room 40x112 feet, two stories, and the bleach-house 34x44 feet, three stories high. There will be two 80 horse-power steam boilers for the machine, though the mill will run by water-power. There will be four 1,200-pounds rag-engines, one bleach-boiler of four tons capacity and one cylinder-machine. The mill's capacity will be five tons daily. The excavations for the mill are now being made and it is expected to have the mill running by March next. The water-power for the mill is a part of the surplus at the locks of the Erie Canal, where a fall of over 200 feet is utilized by half a dozen old-time owners of the privilege or their representatives, among whom is this new concern.

Neal Brothers & Brooks have rebuilt their paper mill at Lockport, N. Y. They will hereafter drive their cylinder machine by steam instead of water, for which purpose they will use a 30 horse-power Westinghouse engine.

The Hudson River Water Power and Paper Company, Mechanicsville, N. Y., has increased its capacity to twenty tons per day of No. 1 Chemical fibre, by putting in four steam boilers made by Sutherland & Son, Troy, N. Y., and by adding three steam dryers to the machine.

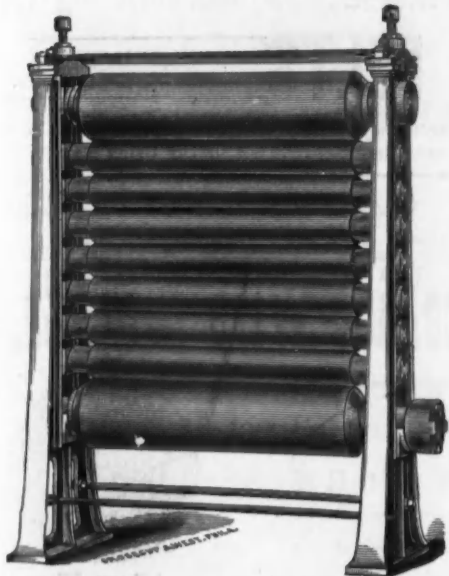
The successful bidder on the contract referred to last week as having been made by a city publishing house for the supply of about 2,000 reams per week, for a year, of a fair quality of wood news at 5 1/2c., was P. H. Gladfelder, Spring Forge, Pa., the contract being made through H. E. Pratt & Co., selling agents, of this city. This is the same party who contracted a year ago.

Advertisement for Horsford's Anti-Chlorine. Includes text: 'Superior to any other Anti-Chlorine in use. It is a very fine white powder, wholly unobjectionable to the most fastidious manufacturer. It is equally well adapted to fine letter or common book or news paper, sized or unsized, and not only neutralizes chlorine, but also the acids left in the stock. It will not affect the most delicate shading colors, nor the alum used in fixing them. For particulars send to the Manufacturers for Descriptive Circular. MANUFACTURED BY RUMFORD CHEMICAL WORKS, PROVIDENCE, R. I.'

Advertisement for THE New American Turbine. Includes image of a turbine and text: 'THE MOST PERFECT AND BEST MADE Water-Wheel yet produced. Utilizes high efficiency at whole and part water, and produces double the power of most of the Turbines made of equal diameter. Will guarantee them to stand the pressure of 100 feet or more head. Don't fail to send for new illustrated Catalogue, giving results of scientific tests and other valuable information on the subject of Turbines and improvement of water-powers. STOUT, MILLS & TEMPLE, Dayton, Ohio, U. S. A.'

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.

The undersigned having examined the product herein described respectfully recommends the same to the United States Centennial Commission for award, for the following reasons, viz.:

This exhibit contains a stack of calendering rolls intended to be part of a complete paper machine. These rolls are of cast-iron, chilled at the surface in casting, and thereby made hard, like tempered steel. They are separately ground according to a highly improved plan, and are so true that, when placed together, they bear upon each other throughout their entire length. This exhibit has the exceptional merit that the rolls are not only GROUND true but CAST by the exhibitor.

(Signed) **JAMES M. WILCOX,**
Signature of the Judge.

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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 UNEQUALED IN QUALITY AND GROUND AS PERFECTLY AS ANY OTHERS.

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GEO. S. HARTON, Pres. and Treas.

LEWIS C. STONE, Manager.

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

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PAPER MACHINERY

OF EVERY DESIRABLE VARIETY.

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

HYDRAULIC PRESSES, FROM 5 TO 14 INCH PISTON.

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 and Paper Roll Super Calenders, Plate Calenders, Chilled Stack Calenders, Rag Cutters, Hand and Power Cutting Presses and 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.

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

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HEAVY and LIGHT IRON CASTINGS,
PROVIDENCE, R. I.

Send for copy Engineers' and Steam Users' Manual, by JOHN W. HILL, N. E. Price \$1.25.

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Manufacturers of CYLINDER AND FOURDRINIER

PAPER MACHINES,

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CHILLED ROLLS GUARANTEED EQUAL TO ANY MADE.

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Calenders and Press Rolls reground by special machinery. The attention of Water-power Users desiring the highest efficiency is especially directed to the

HOUSTON TURBINE WATER WHEEL.

ALWAYS GIVES THE UTMOST SATISFACTION.

MAIN BELTING COMPANY,

MANUFACTURERS OF

THE LEVIATHAN COTTON BELTING,

Unsurpassed for Strength, Durability and Cheapness.

MAIN DRIVING BELTS,

Guaranteed to Run Straight, Even Throughout. No Cross Joints, Unaffected by Damp, Clings well to the Pulley, Has no Equal; in fact, is THE BELT.

MAIN BELTING COMPANY,

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F. GRAY, President. H. C. NELLIS, Vice-President. W. C. GRAY, Secretary and Treasurer.

Piqua Woolen Mills.

THE F. GRAY CO.,

MANUFACTURERS OF

FOURDRINIER and CYLINDER

FELTS,

Press Felts and Jackets for all kinds of Paper.

Special attention is invited to our FOURDRINIER FELTS for FAST RUNNING ON NEWS, which are unsurpassed.

ALSO, TO OUR

"EUREKA FELT,"

For Fast Running on Cylinder Machines,

which we have perfected within the last few months, and which is rapidly gaining favor with Paper Makers wherever it is used.

EXTRA HEAVY CANVAS DEYER FELTS, all widths, cut to any length, at Manufacturers' Prices. WE WARRANT EVERY FELT to work well, and if it does not, it can be returned.

We also manufacture Blankets, Flannels, Stocking Yarns of all Colors, and Men's Heavy Wool Socks. Also, an Extra Heavy 6-4 Scarlet and White Flannel for underwear, which we guarantee not to shrink. All the above we offer to Paper Makers at the Lowest Wholesale Prices, in quantities to suit.

Very respectfully,

THE F. GRAY CO., Piqua, Ohio.

THE J. MORTON POOLE CO.,

Wilmington, Delaware.



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Chilled Rolls

GROUND BY THEIR PATENT PROCESS.

—GET THE BEST.—

TICONDEROGA PAPER & PULP CO.,

TICONDEROGA, N. Y.

Manufacturers of

PURE CHEMICAL

WOOD FIBRE,

Daily Capacity of Mills, 8 Tons.

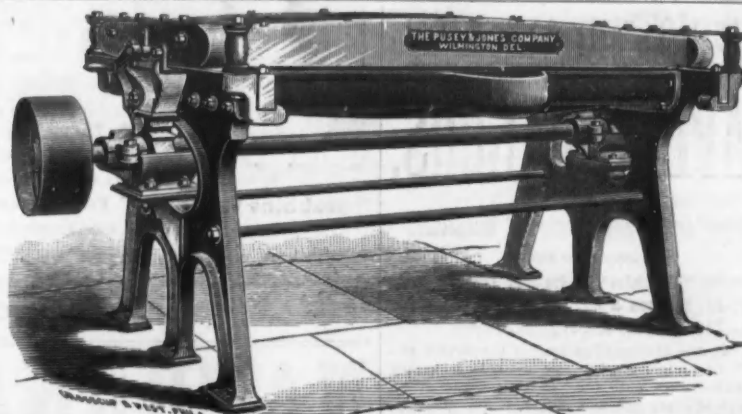
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THE PUSEY & JONES COMPANY,

Wilmington, Delaware,

MANUFACTURE

PAPER MILL MACHINERY,

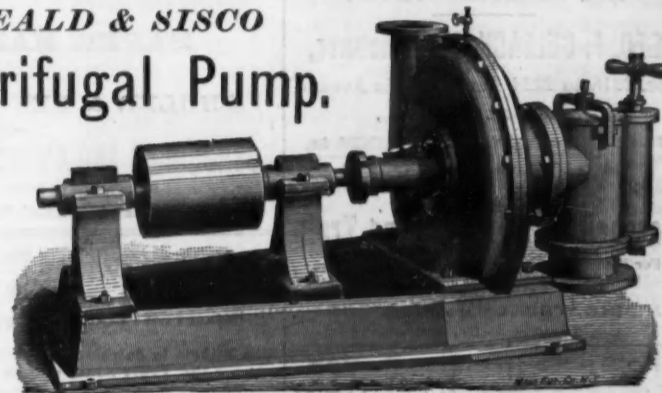
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HEALD & SISCO

Centrifugal Pump.



Specially adapted to the needs of Paper Makers.

A greater number of these Pumps in use than of all other Centrifugal Pumps combined.

CAUTION!—The term "OLD RELIABLE," as applied to pumps, was adopted by us sixteen years ago. Be not deceived by other manufacturers who appropriate our time-honored motto.

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The Largest Makers in the world of

CHILLED ROLLS,

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CHILLED AND DRY SAND ROLLS, FOR ALL OTHER PURPOSES.

CHILLED ROLLS.

All our Rolls are ground by the Poole Grinder, which guarantees their perfectness and finish. Old Rolls Reground at Short Notice.

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Little Giant Turbine Water Wheel

IS THE MOST PRACTICAL AND DURABLE WHEEL MADE, AND IS THE BEST PARTIAL GATE WHEEL ON THE MARKET.

Capacity Increased and Prices Largely Reduced.

We sell Wheels for less money per Horse-Power than any other manufacturer.

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LOGANSPOUT, IND.



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Prices Reduced.

The "OLD RELIABLE" with Important Improvements, making it The Most Perfect Turbine Now in Use.

Comprising the LARGEST and the SMALLEST Wheels, under both the HIGHEST and LOWEST Head in this country. Our New Illustrated Book sent free to those owning water-power.

Write us for NEW PRICES before buying elsewhere. New Shops and New Machinery are provided for making this wheel. Address,

James Leffel & Co.,

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For Mining, Railroad or Steamboat use, Paper Mill, Chemical or Gas Works, Tannery, Brewery or Sugar Refinery, Draining Quarries, Cellars or Plantations, Irrigating or Hydraulic Mining, Sinking Foundations, Coffers, Dam, sewer, Well sinking and other Contractors' Work, or Raising Water for any kind of Manufacturing or Fire Purpose, write for an illustrated descriptive book on the NEW PULSOMETER, containing greatly reduced prices, hundreds of testimonials, etc. Mailed free. Prices 100 per cent. lower than others. Every pump tested before shipment and guaranteed as represented. ECONOMY AND EFFICIENCY UNEQUALED.

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For Burning Coal Dust, Saw Dust, &c.,
Will save from 50 to 90 per cent. in your Fuel Account. Send for Descriptive Circular.

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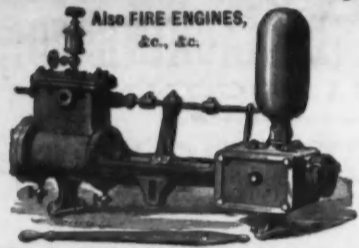
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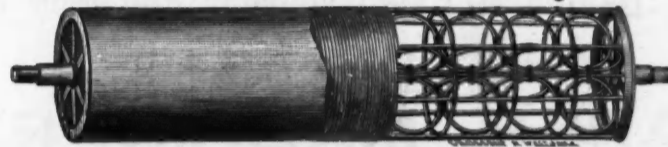
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