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

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Trade Topics.

Exhaust for Suction Boxes.

The drawings illustrate a device for exhaust ing the air, gases, and water from suction-boxes of paper-making machines, to be used in connec tion with paper and other machines where it is desired to exhaust the water from felts and pulpy material; and it consists in the combination of one or more draft tubes which are connected with a reservoir of water, a connectingpipe or pipes, and a box having a perforated cover or open top, over which the paper, pulp, or other material is moved in a continuous sheet

The purpose of the invention is to form a more perfect exhaust or vacuum when operating upon pulpy fluids containing a large amount of air or gases, so as to give a much steadier and more reliable suction than can be obtained with syphons of ordinary construction, or pumps as ordinarily used in connection with paper, felt, or other pulp machines of any kind.

Figures 1 and 2 represent side elevations of the invention, taken from opposite sides. Fig. 3 is an end view of the same. Fig. 4 is a plan Fig. 5 is a side elevation showing the relative position of the parts when in use.

C represents a reservoir or water-supply chamher of any suitable shape, size, or construction which may be preferred, and which is connected to any suitable water-supply so as to always maintain about the same elevation. ured to or placed at one end of this reservoir C is a much shallower box or chamber, G, which is to be filled with water or any other fluid which will form a seal for the lower ends of the two draft-tubes A E. In actual operation the lower ends of these pipes will be sealed in a stream of running water. The shorter one, A, of the two draft-tubes is connected to the reservoir, near its top, by the pipe B. which extends a suitable distance downward into the reservoir, and by a second pipe, H, at any suitable distance below the lower end of the pipe B, and which pipe H is provided with a stop-cock, valve or other shut-off, L, so that the flow of the water through the pipe H can be controlled and regulated at will. The longer one, E, of the two draft-tubes is connected with the draft-tube A by means of the pipe T, which extends from the top of the tube A up near the top of the tube E. Also connected with the top of the tube E is the pipe F, which extends any suitable distance down into the reservoir C. Although only two draft-pipes, A E, are here shown, there may be a larger number, if so pre-ferred. The draft-tube E should in no case extend from above the level of the water in the reservoir C to a greater height than the fall from surface of water in reservoir C to the surface of water in G. One or more tubes may be used exending up about thirty feet, or near the limit of a perfect vacuum.

Extending from the top of the draft-tube E is a pipe. N. which has its other end connected with the tube of the separating-chamber M, which can be placed in an adjoining room or at any desired distance from the reservoir, and of same level or at a higher or lower point than the draft tube or tubes. This separating-chamber is shown as placed above the top of the reservoir merely as a matter of convenience and not as a matter of necessity.

Leading from the side of the separating-chamnected with the box O, one only being shown, which has a perforated cover, and over which the endless wire cloth, or screen, or felt carrying a moist sheet of paper pulp is caused to pass, as ed on a Fourdrinier or other paper-making From the bottom of the separatingmachine. chamber M extends a pipe, R, which has it lower end immersed in water or other sealing medium contained in the box S. The term "separating" is applied to the chamber M, because in this chamber the water, air, and gas are separated, the air and gas being drawn off through the pipe N into the tops of the drafttubes A E, while the water and heavier por tions mixed therewith flow off through the

When desirable the separating-chamber M can be located on a level sufficiently above the perforested box O, so as to cause that chember to discharge water out about the same level with the box O, through the pipe R, which, with the box 8, is raised, care being taken to have the pipe R of the same length as usual to discharge on the lower level. As the water which is drawn from the paper or pulpy material often contains some of the material itself, or coloring matter, chemicals of some kind, it is desirable to catch this water and save it, and it is therefore sepa-

The operation of the device is as follows: The | are obtained. The yellow-fibred paper obtained

lower ends of the two draft tubes A E are im mersed in the water in the box G, so as to seal their ends, and thus prevent air and gas working up the draft-tubes, and thus insuring against risk of losing any part of the vacuum through that source. The gate or stop-cock L in the pipe H being opened, a flow of water is started through the pipe A, which will carry with it enough of the air and gas contained in the pipe A and start a flow of water through the pipe B into the top of the tube A. The flow of water from this pipe B will still further cause the air and gas in the pipe A to be entrained with the water, and thus forced out of the pipe, causing as near a perfect vacuum in the pipe as possible.

This pipe A, being connected by the pipe T with ond draft-tube, E, the air and gas contained in the pipe E are drawn out into the pipe A until a sufficient vacuum has been formed in the pipe E to start a siphonic flow through the pipe F into the top of the drafttube E. The vacuum in the two pipes A E, caused by the downward flow of the water, will cause the gas and air to be exhausted from the separating-chamber M, and the vacuum or par-

tial vacuum formed in this chamber M. will be exerted through the pipe P and the perforated cover of the box O upon the sheet of wet paper, pulp, or other material which is being passed over the top of the box O.

Where it is desired to save the water for the purpose of using it over again, the separating-chamber will be not desirable to use the water over again, this separating - chamber will be entirely done away with, and the connecting-pipe will then extend directly from the suction-box the suction-tubes. It will be seen that this separating-chamber may or may not be used.

Bank Note Paper.

An Austrian has de vised a yellow-fibred safety paper for use in the manufacture of bank notes, bonds, checks and other valuable documents, the purpose being to prevent a photographic reproduction of the note or other docu-

ment and the preparation of a printing plate from such reproduction.

The process is as follows: The pulp usually employed in the manufacture of bank-note paper when nearly ready to work has an addition of yellow-colored fibres made to it in the engine, the beating of the stuff being then completed. The pulp is then ready to run on to the machine

The coloring of the fibre is obtained by treating vegetable or animal substances containing albumen or albuminous-like ingredients, or both together—as raw jute, raw linen, raw flax, silk wool, feathers, hair, &c .- with diluted nitric This operation is carried through in the following way: The fibre to be colored, in preference at the ordinary temperature, is put into a bath of diluted nitric acid, and left th in long enough for it to acquire the desired yellow color of a uniform and unalterable tint, The mass is thoroughly washed at the ordinary temperature until the water does not show any

acid reaction, and is then dried. The degree of concentration of the nitric acid to be used, and the duration of the treatment in and with it, can only be determined by the de gree of coloration or tint which it is desired to obtain—the more concentrated the acid used the less time will be required for obtaining the deepest possible tint; but the acid ought not to be employed in a too concentrated state, because it would destroy the fibre, while a too much diluted acid would scarcely produce any coloration, or only after a very long time. It has been found in practise that by mixing 10 to 50 per cent, of the marketable nitric acid of a specific gravity of 1,368 with 100 parts of water, and by exposing the fibre mass for from twelve to forty-eight hours in the bath, good results

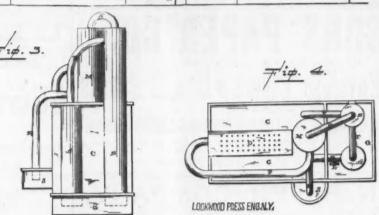
by this process is peculiarly applicable for use in the manufacture of State papers, bank notes, shares and the like, because the yellow-colored fibres resist the action of light, air and chemical agencies, and when printed upon they are hardly perceptible, but on being submitted to a photographic exposure their color is entirely changed (becoming black), so that an imitation by these means appears impossible.

Economy in the Manufacture of Bleaching Powder.

BY GEORGE E. DAVIS.

The alkali trade has had some sad times and ore troubles, and though the products of its furnaces and stills are said to produce but little, if any, profit, it is still some consolation to find that all the economies possible have not yet been practised, and that there may be some margin remaining between the prices at which articles are sold and the cost of their manufacture.

Bleaching powder is an instance of this. It is mented with separately. The liquor was found said to cost three guineas per ton without genter to be free from acid, and the mud contained 78 Tip. 2.



SUCTION BOX EXHAUST.

eral expenses, the items being made up as fol-

0 15 0 17 £3 8 0

Now, anyone conversant with this trade in detail will know that one, if not more, of the ons is of the kind we may call destruc tive. Materials are used and labor employed in converting the free hydrochloric acid of the stills into chloride of calcium, in which form it is of no practical value. The improvements I wish to bring before your notice this evening bear upon this question, and are the result of

experiments carried out by myself in 1874. During eight weeks, in a very carefully conducted works, it was found, taking every precaution to insure accuracy, that 586 tons of real hydrochloric acid entered the chlorine process, and that 111 tons of free HCl ran away in the still liquor, or 13.15 grams per litre (grams per ounces per cubic foot). To combine with the MnO2 in the manganese mud, 345 tons of HCl were employed, leaving 130 tons of hydrochloric acid to combine with the bases in the mud, I may say that I had a check method upon these figures, and the results by this came with in 9 tons of HCl, which on 580 is only 1.5 per cent, of error. Here was the preamble of an im provement. If the base of the mud actually aborbed 130 tons of HCl, why not furnish it from the free acid in the stills, and so save the limestone dust, and the mud on entering the stills would furnish a larger quantity of chlorine than ordinary mud, as it would be mud with practically no base at all ? The process is substanti-

ally one of converting the waste hydrochloric acid from the stills into free chlorine without the expenditure of any materials whatsoever Actually, the 345 tons of HCl which combined with the MnO2 of the manganese mud, produced 410 tons of 35 per cent. bleaching powder, so the 111 tons of free acid would produce 130 tons more every eight weeks, or, seeing that less acid is left in the stills than formerly, I claim that the process will produce at least 600 tons per annum more bleach, from the same materials, than when limestone dust is used to neutralize the acid.

In order to prove the above, a sample of each still was taken as run off, of a bulk correspond-ing to one-tenth of a cubic inch for each cubic foot of the liquor sent into the well, and this was mixed in a mug each day with a corresponding bulk of each operation from the oxidizer. This was carried on for six weeks, when the mug was full. It was then thoroughly mixed and allowed to settle, the clear liquor and the settled mud being subsequently experi-

ounces of MnO₂ per cubic foot, the "base" in this sample of mud being 0,13.

Upon experimenting further it was found that the sulphate of lime was an impurity which could not be overlooked, and my next efforts were directed to its elimination. An average sample of the stills was taken over one week, and found to contain 13 grams per litre of free HCl. The residue contained .56 grams MnO2, and after stand ing eight hours to set tle 84 per cent, of clear liquor was obtained.
A litre of the liquor as running from the stills and cooled down some what by settling contained

Sulphate of lime (sus-pended)...grams. 15.17 Sulphate of lime (in solution)..grams. 2.88

Total 18.15 When allowed to become cold in the laboratory the clear liquor contained 1.81 grams of sulphate of lime per litre in solution. For comparison, a litre of the chloride of calcium running from the settled mud was examined and found to con-

tain 1.68 grams per litre of sulphate of lime. The hydrochloric acid used at this time con tained 5.6 grams per litre of sulphuric acid, equal to 7.7 grams of sulphate of lime, so that the practical man will see there is every opportunity to eliminate this impurity by subsidence alone. It may also be done by the use of chloride of barium. When sulphate of barium is fused with chloride of calcium, in a furnace, a decomposition takes place, and if the melt be lixiviated carefully with cold water, at least 57 per cent. of the barium salt is decomposed. Chloride of barium was added to the acid and to the still liquor in my experiment, but I came to the conclusion that settling only was the best and considerably the cheaper is the long run. This plan was put before Mr. Weldon in 1874, but he was then of opinion that no one in this country would be persuaded to put up the extra settlers required for the process, and furthermore he was of the opinion that the sulphate of lime existed in the still liquor in solution. In the present mode of working, the sulphate of lime settles out wherever it has a chance. In the stills, in the neutralizing well, the top settlers, the mud washers, in all these it is found in the residues. Why not make an attempt to eliminate it at one operation from the still liquor ? To work this process each manganese still would require a stone cistern as a settler of equal capacity with itself, and I have found the best settler for the purpose to be one in which the diameter ratio to its depth is 1.6 to There must also be a series of settlers at a slightly higher level than the neutralized liquor settlers, to hold the mixture of mud and still liquor, as delivered from the well.

In order to set the plant in operation the neutralized liquor is let into the oxidizer, and an operation blown in the usual way, the

finished batch is run into the mud settlers, the chloride of calcium liquor run off, and this round of operations is repeated continually. The still liquor when made and worked down as low as practicable is run into the intermediate settler, where it remains until the next still is ready to run off. It is then run into the well, where it is neutralized with the settled mud of a previous operation. The neutralization takes place with ease even in the cold, and finally the batch, after being well agitated, is pumped up to the settlers above the ordinary neutralized liquor settlers, where the manganese dioxide settles out and the manganese chloride is run into these, ready for a fresh charge in the oxidizer. The mud is then ready for the stills. Contrary to expectation, the mixture of mud and still liquor settled well, in the cold even. In one experiment 500 cubic feet of still liquor required 178 cubic feet of mud to neutralize it, and, after settling eight hours, 512 cubic feet of liquor was obtained from it. When the sediment in the intermediate settler has accumu-lated sufficiently it should be run into the well, neutralized with limestone dust, and pumped up into the neutralized liquor settlers. Such is the improvement I have essayed to bring before you, and I shall be glad to hear that some enterprising manufacturer has adopted it.-Journal Soc. Chem. Industry.

The Metropolitan Daily Press.

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THE TIMES In the fall of 1851 the New York daily Times was launched forth upon the metropolitan pub lic. Though the fourth journal mentioned in these sketches it was in reality the third paper in importance among the journals of that day, at the process and any as said to cooking second place in this respect. The founders the Times were George Jones and Henry J. Raymond. Seven gentlemen whose name not necessary to mention here contributed the capital stock of the new journal. This was

ment of the paper. The first intimation of the intended appear ance of the rival to the Tribune and the Herald produced a flutter of excitement in the offices of those journals. Is was characteristic of the management of the Tribune that as soon as Mr. Raymond made public his intention to start the Times, a bitter feeling found expre the following entry upon the carrier's book in the Tribune office :

\$100,000. Mr. Jones became the publisher and Mr. Raymond assumed the editorial manage-

"A new daily is to be issued in a few days. and any carrier of the Tribune who interests himself in said paper in getting up routes, &c., prejudicial to the interests of the Tribune, will forfeit his right to property in the Tribune. We give this notice now that all who do so may know that they do it at the peril of losing their routes on the Tribune."

The Times was well received, for the public was prepared to welcome a journal which was pure in tone and prompt in the collection of news. These conditions the new paper sought to fill. On the night of September 17, 1851, the first number of the Times was made up. It is needless to say that the paper was a success from the start, and in the new adjustment of things which occurred it was found that there was room for all of the rival journals. whole number of printers required to put the first number of the Times in type was only eighteen. The number of printers employed in the same office to-day is from sixty to one hundred.

One of Mr. Raymond's qualities was pluck. In 1864, when during the draft riots the me was in partial possession of a mob and his journal was threatened with demolition, he, in order to resist the attack of the mob. placed in front of the Times office two pieces of artillery, one of which he took charge of himself. On each night of the riot, in order to show that the Times was prepared for any assault, the whole establishment was brilliantly illuminated.

Mr. Raymond died on June 18, 1869. George Jones, who had been the business partner and cherished friend of Raymond from the origin of the Times, on the death of the latter, assumed entire management of the establishment, and under him various distinguished journalists have assumed, from time to time, the editorial chair of the Times, which is now occupied by Charles R. Miller.

Very early in its career the Times put on record its aversion to slavery as an institution of this country. To an unqualified disapproval and hatred of slavery this journal added a firm opposition to the enlargement of the area of slavery. It insisted that under no circumstances should the boundary of slave territory be widened.

On the other hand, the Constitution, the Times

held, recognized slavery, and by no action of the government could it be set aside. On the opening of hostilities in the war of the rebellion, on the part of the Slave States, the Times, however, was among the first to give the national

government support.

During 1870-1, the Times waged, almost singlehanded, war against the celebrated Tammany Ring, and in 1881, after the inauguration of President Garfield, the Times began a fight against the Star Route thieves, and has continued the same up to the present time. The circulation of the paper is estimated at 45,000 for the daily and 50,000 for the weekly edition

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ROCKHILL MILLS The Cincinnati Commercial Gasette, March 19, says: "One of the latest industries established at Tippecanoe City, Miami Co., Ohlo, is the Straw Board Paper Mill—one of the most thoroughly equipped in the United States. The capital sock is \$50,000, all of which has been taken and paid up. The grounds of the works cover some ten acres, and with the two thousand tons of straw piled up in stacks near the buildings, appearances indicate the Pyramids of Egypt. The buildings and machinery are all entirely new, and are of the construction, and possess every convenience for the easy transaction of the business.

or extent that speaking to the Commercial Gas always sure to get additional or our goods are simply the n and we are not afraid to comp foreman of our works has standing of the straw-board be his skill as well as to our splendid connects the mill with the Dayto gives them first-class shipping fa

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Correspondence.

Holyoke Notes.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOER, Mass., August 16, 1983. As the early part of this season was unusually wet, it would not be strange if the summer should end with a dry time. The farmers are already complaining that the ground is burning under the August sun and that heavy rains must come to save the late crops. But it is always either too wet or too dry with these croakers, and the senson so far has been exceedingly enjoyable. The river, which sometimes falls far below the crest of the dam during this month, still overflows it and gives full power to all of the mills.

The stock market has not changed within a week, although the general tone is toward s There is nothing like a "boom" anticipated either in rags or paper, but nearly every one is looking for a gradual betterment of prices all around. There is a more confident feeling among the manufacturers than for many The general remark just now is, "Well, business seems to be looking up a little." Some would lay this to the general optimism of the Holyoke mind, for it is true that the experience of our Holyoke manufacturers has taught them to look on the bright side of things even in dull times and expect success amid discouragements.

Some of the largest concerns in town are taking advantage of the comparative quiet to put their mills into thorough repair. This is especially true of the Parsons and Whiting companies. The Parsons Company, which owns the oldest paper mills in the city, will entirely remodel the portions of the structures that were built in 1853. Thirty years would be but little in the life of some of the old European paper mills, but here it means a good deal of service with our fast running machinery and rapid march of improvements. From \$50,000 to \$75, 000 will be spent in modernizing the structuresenough to put them into first-class shape for many years. Among the improvements will be sixteen new rag engines, with a capacity of 500 pounds each; sixteen new drainers, two new 66-inch Fourdrinier machines and new floors and one new roof, all replacing those now in use. Besides these changes, two new screen rooms will be built and other minor improve-ments made. The mills will be shut down several months. D. H. and A. B. Tower, the local mill architects, will have charge of the work. The Whiting Company will put a new roof on its No. 2 mill, with new and heavier supports throughout the building. At No. 1 mill two Gould engines are to be replaced by two new ones of the old kind. The necessary interruption to manufacturing caused by these and other changes in town must have some effect upon the amount of paper made, but then the mills will be so much the better equipped for work when the repairs are finished.

The funeral of Foreman James J. Spillane. who was killed at the Crocker Paper Mill, was attended with much ceremony at the Catholic church. After high mass had been performed, the body was escorted to the depot by a band, a procession of Hibernians and a long line of carriages. The burial took place at Windsor Locks, Conn. Mr. Spillane's father was also killed by the machinery in a paper mill.

Robert Buchanan, of the firm of Buchanan, Bolt & Co., sailed from New York on Saturday for a visit of several months in Scotland.

The Pearl Paper Company's manilla mill at South Hadley has just made its first run of paper. The mill has two beaters and one ma-H.

Obituary.

WILLIAM H. O'GRADY.

William H. O'Grady, who has been identified with the stationery house of M. A. Reay and its predecessors for the past seventeen years, died of consumption at his residence in this city on August 2. Mr. O'Grady had been in ill health for several years. He was about forty years of age, and leaves a widow and three children. He was a man possessed of many good qualities, and was well known to the customers of his house and the trade generally.

Eastern Straw Wrapping Manufacturers.

The Eastern straw wrapping manufacturers met at Stanwix Hall, Albany, N. Y., on Tuesday last, but the attendance was comparatively small. The Consolidated Paper Company, of Chicago, which controls a total daily product in the West of 580,000 pounds, was represented at the meeting by R. P. Dart, its manager, and H. P. Tracy, the secretary and treasurer. Mr. Dart was full of facts and figures showing the beneficial workings of his organization, and the main object of the meeting was to meet representatives of the Western trade and interchange views, and take steps to organize the Eastern manufacturers on the same plan as at the West. All of the New York commission cuses were represented at the meeting, with one exception, Cornell & Co. The commission dealers present were requested to from the meeting when the subject of forming an organization similar to the Western one came up for discussion. No action was taken at the meeting, but the matter will probably be disposed of at the adjourned meeting next Tuesday. There is considerable dirsity of opinion among the Eastern trade as to the policy of following the course of the Western trade. The commission men are a unit in opposition to it, and say that their occupation will be gone in case this movement is successful. On the other hand, it is asserted that such an organization as at the West will be of mutual benefit to both the manufacturer and dealer. Such an organization will be able to regulate the product and sustain prices, and the

commission dealer is protected by a discount from the price-list equal to his regular commission. An advance in prices was also discussed at this meeting, but it was finally decided to make no change. From June 15 to August 15 mills representing from 75 to 90 per cent. of the total production have been shut down, but they started up again on Wednesday to run on half time during the next thirty days.

Fires.

A Wolff, bookbinder, San Francisco, Cal., has been burned out.

Stephen Peaslee's straw paper mill, at Canaan N. H., was burned August 8. Loss, \$5,000; insurance, \$3,000.

In Town.

George West, Ballston Spa, N. Y.; Thomas Duncan, Poquonnock, Conn.; Mr. Tate, Trumbull, Conn.; E. R. Solliday, Lambertville, N. J. George W. Wheelwright, Boston, Mass.; S. A. Maxwell, Chicago, Ill.; John N. Mohr, Philadelphia, Pa.; Moses Newton, Holyoke, Mass.; William McCready, Lambertville, N. .J; Hugh McIness, Bridgeport, Pa.; Edward McCready, Philadelphia, Pa.; Mr. Butler, Philadelphia, Pa.

New Patents.

No. 279,192. Tag for Wall-Paper, &c.-Francis H. Shepherd and John W. Meyer, Davenport, Iowa. No. 279,244. Paper Pail or Box.-Ira W. Hollett, Chicago, Ill.

No. 279,285. Machine for Making Paper Boxes.-Ber

maru T. Steber, Utica, N. Y. p. 279,350. Manufacture of Paper or Pasteboard. Curtis S. Cummings and Charles A. Shank. Gioversville, N. Y.; said Shank assignor to said

No. 279,431. Manufacture of Bichromate of Soda Edmund P. Potter and William H. Higgin, Bolton, County of Lancaster, England.

o. 279,435. Method of and Means for Treating Vegetable Matter.—Robert R. Roberts, New Or-leans, La., assignor of one-half to M. J. Wine, Washington, D. C.

No. 279,551. Machine for Reducing Wood to Pulp and Fibre.—G. Frank Evans, Mechanic Falls, Me. No. 279,901. Apparatus for Melting Anchor-Ice .-Alfred H. Martine, Fall River, Mass.

No. 279,505. Paper Bag Machine.—Charles B. Still-well, Watertown, N. Y., assignor to the Union Paper Bag Machine Company, Philadelphia, Pa. No. 279,543. Envelope.—Philip L. Cuskley, Portland,

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No. 279,992. Paper Vessel.-Albert R. Tiffany, Dayton, Ohio.

No. 290,010. Handled Paper Vessel.-Samuel M. Bixby, New York, N. Y.

No. 280,076. Process of and Apparatus for Picking Rags and Waste from Shoddy.—Frank L. Palmer, New London, Conn.

280,088. Manufacture of Sulphate of Alumina. Conrad Semper, Philadelphia, Pa., assignor to Harrison Brothers & Co., same place.

No. 280,089. Manufacture of Sulphate of Alumina,-Conrad Semper, Philadelphia, Pa., assignor to Harrison Brothers & Co., same place.

No. 280,090 Manufacture of Sulphate of Alumina. Conrad Semper, Philadelphia, Pa., assignor to Harrison Brothers & Co., same place

Ursel, Prussia, assignor to Leopold Zeyen, Raguhn, Anhalt, Germany. Patented in Belgium February 28, 1883, No. 60,588; in France February 28, 1883, and in England February 28, 1888, No. 1,084. No. 280,123. Paper Machine,-Carl Bötter, Ober-

No. 280,171. Method of Treating Certain Vegetable

Fibrous Substances for the Production of Fibre for Spinning, Paper Making, &c.—James Anthony Graham, London, County of Middlesex, England. Patented in England November 10, 1882, No. 5,365.

No. 280,286. Paper Fabric or Matting.-John Bray. Washington, D. C., assignor of one-half to Charles H. Longley, Hartford, Conn.

No. 280,564. Suction-Box for Paper Making Machines.-Isaac Bratton, Wilmington, Del.

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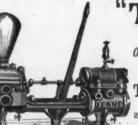
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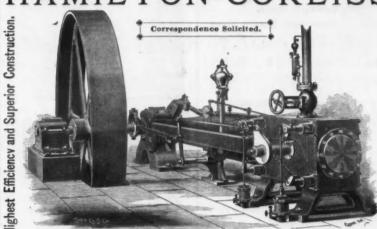
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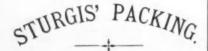
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SNIDER'S, LOUIS, SONS, Manufacturers and Whole-sale Paper Dealers. 121 Walnut st., Cincinnati, O. WHEELER, THOS. H., Cotton and Woolen Rags, New Haven, Cor.

Screen Plate Manufacturers and Repairers. ANNANDALE SCREEN PLATE CO, Manufacturers and Repairers of Screen Plates, Paterson, N. J. ASHMUN SCREEN PLATE CO., Old Plates renewed: charges moderate. P. O. Box 210, Paterson, N. J.

JUDSON, HOWARD, 127 and 129 N. J. R. R. ave., Newark, N. J. New Patent Screen Plates. Solicitors of U. S. and Foreign Patents. CROSBY & GREGORY, 34 School st., Boston, Mass Straw Boards.

PINKHAM, T., Agent for Androscoggin Pulp Co.'s White Box Boards and Ashland Leather Board, 24 Friend and 52 Elm streets, Boston, Mass.

GASKILL, BAUER & CONDERMAN, Straw, Binders' and White Wood Boards, have for sale Straw-Board Cuttings in large quantities. No. 127 M. Fourth st., Philadelphia. Straw Boards and Straw Wrapping.

TUCKER'S, E., SONS, Straw Boards, Paper, Twines, Paper-Box Mach'y, 100 Trumbull st., Hartford, Ct.

FOREIGN HOUSES.

Rags and Paper Stock.

WALKER, J. R., Dealer in Paper Stock, Woolen Rag-and Scrap Metals, 30 and 34 Foundling st., Montreal.

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

IMPORTS of Paper and Paper Materials, Books &c., at the Port of New York, for the week ended August 10, 1883. Quantity given in packages when not otherwise specified.

Aniline Colors	185	\$19,090
Alum	142	879
Aluminous Cake	Acceptance	_
Bleaching Powders	853	11,658
Soda Ash	1,447	96,458
Soda, Bicarb	112	608
Soda, Caustie	1,068	19,594
Soda, Sal	-	-
Ultramarine	6	436
Books	368	41,600
Newspapers	69	2,850
Engravings	68	15,521
Ink	10	400
Lead Pencils	18	8,200
Paper	294	17,900
Steel Pens	6	914
Stationery		970
Sinte Pencils	58	494
Clay	_	2,989
Jute Butts	10,991	67,083
Jute Rejects and Cuttings	_	_
Paper Hangings	8	941
Paper Stock	2,806	89,821
Terra Alba	_	_
Waste	49	5,08
Totala	17 700	#963 PG

General Merchandise, for the week August 10, 1883.

Paper, Paper Stock, &c.—
For the year ended May 23, 1873.

For the year ended May 24, 1874.

For the year ended May 24, 1876.

For the year ended May 34, 1876.

For the year ended May 34, 1877.

For the year ended May 34, 1877.

For the year ended May 34, 1879.

For the year ended May 34, 1879.

For the year ended May 34, 1880.

For the year ended May 37, 1881.

For the year ended May 36, 1882.

For the year ended May 36, 1882.

For the week ended June 16, 1883.

For the week ended June 12, 1883.

For the week ended June 22, 1883.

For the week ended June 22, 1883.

For the week ended June 22, 1883. eral Merchandise, for the week ended \$4,830,500 15,074,825 12,150,855

IMPORTS of Rags and other Paper Stock at the Port of New York, since Jan. 1, 1883, from the following Ports, showing quantities from

	Rags.	Paper.	Manilla Stock
	Bales.	Bales.	Bales
	2,503	_	-
Amsterdam	1,569	68	215
Antwerp	4,514		1,146
Aspinwall	2,234	-	
Bordeaux	166	-	_
Bremen	954	-	139
Bristol	_	175	1,029
Cadiz	548	_	-
Calcutta	-	_	9,020
Cardiff		_	DHI
Catania	384	-	_
Copenhagen	2,075	_	89
Dundee	265	1,834	4,030
Genoa	938	2000	3,00
Glasgow	1,715	5,087	433
Hamburg	1,937	845	87
Havre	1,809	62	46
Hiogo	1,503	0.0	40
		1 005	0.84
Hull		1,065	3,54
Königsberg	1,102		_
Leghorn	3,178	4.000	-
Liverpool	5,679	1,809	9,65
London	9,916	20,420	10,410
Malta	638	-	-
Marseilles	425	-	_
Messina	200		_
Naples	1,186	-	_
Newcastle	880	12	74
Pillau	8,440	-	-
Porto Cabello	8	_	-
Rio Janeiro	114	-	_
Rotterdam	776	-	_
Santa Cruz	9	-	_
Seville	124		-
Shields	57		10
Stettin	-	28	
Swansea	44.00	-	24
Trapani	800		
Trieste	329		
Tyne Docks	OVER		10
West Hartlepool	96	304	10
	-	304	-
Yokohama	2,803	_	_

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports for the Week Ended August 15, 1883, with Aggregates and Values.

BOOKS, cases, to Bremen, 1; to Hamburg, 2; to Liverpool, 20; to Newfoundland, 1; to British Australasia, 7; to Nova Scotia, 1; to British Guiana, 2; to Cuba, 3; to Porto Rico, 3; to Mexico, 24; to Uni-

ted States of Colombia, 10; to Japan, 1.

PAPER, to Danish West Indies, 105 rms.; to Bremen, 1 cs.; to Rotterdam, 12 cs., 20 pkgs.; to Glasgow, 4 cs.; to Liverpool, 1 cs.; to London, 1 cs., 2 pkgs.; to British Australasia, 9 cs.; to Nova Scotia, 2 pkgs.; to British Guiana, 1 cs.; to Cuba, 23 pkgs.; to Porto Rico, 205 pkgs., 4,500 rms.; to Brazil, 103 pkgs., 1 cs.; to Santo Domingo, 1,282 rms., 22 pkgs.; to Uruguay 12 cs.; to Mexico, 4 pkgs.; 58 United States of Colom

STATIONERY, cases, to Danish West Indies, 2; to Hamburg, 2; to Liverpool, 50; to British West In-dies, 1; to British Australasia, 4; to Cuba, 5; to Argentine Republic, 1; to Brazil, 5; to Santo Domingo. 9; to Uruguay, 1; to Chili, 8; to Mexico, 6; to United States of Colombia, 9; to Hayti, 2.

AGGERNATES AND VALUES.

Paper, reams	5,887	\$1,231
Paper, pkgs	412	4,614
Paper, cases	42	2,158
Books, cases	74	4,697
Rosin, bbls	4,865	16,918
Stationery, cases	100	8,068
Totals	11,380	\$87,701

IOIAL BAFORIA	
General Merchandise for the week ended	
August 15, 1860	\$6,558,07
Paper, &c., for the year ended May 27, 1873.	2,889,48
Paper, &c., for the year ended May 26, 1874.	1,783,87
Paper, &c., for the year ended May 25, 1875.	2,327,68
Paper, &c., for the year ended May 23, 1876.	1,654,38
Paper, &c., for the year ended May 29, 1877.	1,790,65
Paper, &c., for the year ended May 28, 1878.	1,576,56
Paper, &c., for the year ended May 27, 1879.	1,889,78
Paper, &c., for the year ended May 26, 1880.	2,016,54
Paper, &c., for the year ended May 25, 1881.	1,920,05
Paper, &c., for the year suded May 24, 1882.	2,432,20
Paper, &c., for the year ended May 30, 1883.	2,585,12
Paper, &c., for the week ended Jne. 6, 1883.	87.62
	36,62
Paper, &c., for the week ended Jne. 20, 1883.	89,68
Paper, &c., for the week ended Jne. 27, 1883,	69,47
	43,80
	30,61
Paper, &c., for the week ended July 18, 1883.	55,76
	51,19
Paper, &c., for the week ended Aug. 8, 1883.	45,88
	General Merchandise for the week ended August 15, 1883. Paper, &c., for the year ended May 27, 1873. Paper, &c., for the year ended May 26, 1874. Paper, &c., for the year ended May 25, 1876. Paper, &c., for the year ended May 25, 1876. Paper, &c., for the year ended May 21, 1876. Paper, &c., for the year ended May 21, 1877. Paper, &c., for the year ended May 37, 1879. Paper, &c., for the year ended May 37, 1879. Paper, &c., for the year ended May 30, 1880. Paper, &c., for the year ended May 30, 1881. Paper, &c., for the year ended May 30, 1881. Paper, &c., for the year ended May 30, 1882. Paper, &c., for the year ended May 30, 1882.

NEW YORK IMPORTS.

FROM AUGUST 8 TO AUGUST 15, 1883. Paper Stock. John H. Lyon & Co., Carl, Bremen, 100 bs. ma-

W. D. Morgan, Warwick, Bristol, 167 bs. manillas. Baldwin Brothers, State of Florida, Glasgow, 22 old papers.

Fett & Sengstak, Ocean, Hamburg, 115 bs. rags. W. Irving Clark, Romano, Hull, 36 bs. rags. W. H. Parsons & Co., Rialto, Hull, 111 bs. rags. W. Irving Clark, by same, 86 bs. rags. John L. Taylor, by same, 62 bs. rags Train, Smith & Co., by same, 62 bs, rage Cohn, Lazarus & Co., by same, 74 bs. rags. Woolworth & Graham, by same, 151 bs. rags. Perkins, Goodwin & Co., by same, 70 bs. rags, 96 J. W. Mason & Co., by same, 110 bs. manillas.

John L. Taylor, by same, 151 bs. old papers Eugene Sullivan, Pavonia, Liverpool, 58 bs. old pa-

M. A. Ring, Jr., City of Rome, Liverpool, 80 bs. Perkins, Goodwin & Co., by same, 14 bs. old pa-

pers. W. H. Parsons & Co., Grecian Monarch, London,

W. Irving Clark, by same, 65 bs. old papers. John L. Taylor, by same, 19 bs. old papers. J. W. Mason & Co., by same, 565 bs. manillas Perkins, Goodwin & Co., by same, 70 bs. old papers, 53 bs. manilias.

Campbell & Smith, Greece, London, 2 bs. rags.

Fett & Sengstak, by same, 119 bs. manillas. John L. Taylor, by same, 91 bs. rags. Train, Smith & Co., Egyptian Monarch, London, 79 bs. old papers.

Lyon & Co., Denmark, London, 45 bs. rags, John L. Taylor, Richmond Hill, London, 58 bs. old

S. Webber Parker & Co., by same, 40 bs. manillas M. A. Ring, Jr., by same, 46 bs. rags. W. H. Parsons & Co., by same, 84 bs. old papers. R. H. Overton, by same, 95 bs. old papers. Train, Smith & Co., by same, 41 bs. old papers Sergeant Brothers, by same, 63 bs. old papers. W. Irving Clark, by same, 517 bs. old pr Perkins, Goodwin & Co., by same, 188

W. Irving Clark, Winston, Newcastle, 106 bs. rags. Train, Smith & Co., by same, 86 bs. rags, 146 D. de Castro & Co., Alvens, Porto Cabello, 8 bs.

Train, Smith & Co., I due Fratelli, Seville, 22 bs.

E. & H. T. Anthony & Co., Frisia, Hamburg, 8 cs. B. Rubens, by same, 65 cs. Scoville Manufacturing Company, by same, 5 cs. A. Ireland, State of Florida, Giasgow, 11 cs. Merchante' Dispatch, Greece, London, 5 cs. draw

Great Western Dispatch, by same, 2 cs. hangings. J. Walker, Abyssinia, Liverpool, 5 ca. Keuffel & Esser, by same, I cs. G. A. & E. Meyer, Rhynland, Antwerp, 1 cs. L. De Jonge & Co., by same, 19 cs. Keuffel & Esser, by same, 5 cs. Davies, Turner & Co., Britannic, Liverpool, 2 cs. C. H. George, by same, 1 cs. A. Haug & Co., Oder, Bremen, 2 cs. B. Illfelder, by same, 4 cs. Charles Beck & Co., Rugia, Hamburg, 4 cs. Keuffel & Esser, by same, 1 cs. Moller & Emmerich, by same, 1 cs.
R. F. Downing & Co., by same, 2 cs.
Herter Brothers, Servia, Liverpool, 2 cs. hangings. C. H. George, by same, 7 cm. J. Walker, Wyoming, Liverpool, 3 cs. Kaufmann & Strauss, Hohenzollern, Bremen, 2 cs. Merchanta' Dispatch, by same, 4 ca. L. De Jonge & Co., Lessing, Hamburg, 4 cs. B. Illfelder, by same, 1 cs.

BOSTON IMPORTS.

E. Fougera, Chateau Lafitte, Bordeaux, 44 cs. A. Haug & Co., Hermann, Antwerp, 5 cs.

FROM AUGUST 9 TO AUGUST 15, 1858, INCLUSIVE.

Order, Iberian, Liverpool, 1 cs. Order, Bavarian, Liverpool, 8 cs. Order, Marathon, Liverpool, 1 cs. C. Schoenhoff, Samaria, Liverpool, 1 cs. Little, Brown & Co., by same, 8 cs.

G. Gennert, by same, 5 cs.

Estes & Lauriat, Palestine, Liverpool, 5 cs. Order, Victoria, Liverpool, 1 cs. Order, Boston City, London, 4 cs.

J. Talbot, Dorian, Leghorn, 1 cs. Paper, &c.

Dennison & Co., Samaria, Liverpool, 16 hs. tissue. Order, Bavarian, Liverpool, 1 cs. paper hangings, Order, Rialto, Hull, 4 cs. paper.

H. M. Knowles & Co., Norseman, Liverpool, 178 bs.

paper stock.
Order, Bavarian, Liverpool, 349 bs. paper stock Train, Smith & Co., Palestine, Liverpool, 168 hs. paper stock.

J. G. Sprague & Co., Rialto, Hull, 55 bs. rags. Train, Smith & Co., by same, 150 bs. rags. H. M. Knowies & Co., by same, 150 bs. rags. S. D. Warren & Co., Rialto, Hull, 80 bs. rags. Lockwood, McClintock & Co., Dorian, Leghorn, 15 bs. rags.

Rice, Kendail & Co., by same, 50 bs, rage. H. M. Castle, by same, 50 bs. rags. Horace Dutton, Waldensian, Glasgow, 191 bs. paper

H. M. Knowles & Co., by same, 40 lm. paper stock. J. O'Connor, Carroll, Halifax, 21 bs. paper stock. Haskins & Montague, by sams, 38 bs. paper stock.

Order, by rail from Quebec, 45 bs. paper stock. Sodu Ash. Linder & Meyer, Bavarian, Liverpool, 83 cks. Warren & Co., Palestine, Liverpool, 86 cks. Merrimack Manufacturing Company, Istrian, Live

rpool, 40 cks. & D. S. Riker, Samaria, Liverpool, 79 cks.

sh and 80 cks. alkali. Caustic Soda Linder & Meyer, Bavarian, Liverpool, 400 drums.

Sal Soda. Warren & Co., Palestine, Liverpool, 280 bbla. E. & F. King & Co., by same, 614 bble

Bleaching Powder. Linder & Meyer, Bavarian, Liverpool, 239 cks. Morey & Co., by same, 188 cks. Warren & Co., Palestine, Liverpool, 109 cks.

China Clay. J. Henry Blanchard, City of Columbus, Savannah

Hide Cuttings. Train, Smith & Co., Rialto, Hull, 72 pkgs.

PHILADELPHIA IMPORTS.

Paper Stock.

Jessup & Moore Paper Company, Tiger, Pillau, J. B. Moore & Co., Napier, Liverpool, 887 hs. ma-

Thomas H. Farr, Ohio, Liverpool, 59 bs. manillas M. A. Ring, Jr., Lord Gough, Liverpool, \$1 bs.

Paper.
Thomas Thompson's Sons, Ohio, Liverpool, 4 ca

tissues.

W. H. Lyon & Co., by same, 2 cs. tissues.

Dell & J. C. Noblit & Co., by same, 5 cs. tissues.

Strawbridge & Ciothier, by same, 9 cs. tissues.

Sharpless & Son, by same, 1 cs. tissues.

Soda Ash. Fergusson Brothers, Joshua Nicholson, Newcastle

585 cks.
A. Murphy & Co., Napier, Liverpool, 178 cks., 178 tes. Churchman & Co., by same, 198 cks.
Fergusson Brothers, by same, 114 cks.
Brown Brothers & Co., Ohio, Liverpool, 151 cks.

Order, by same, 224 cks. Bleaching Powder. A. Murphy & Co., Napier, Liverpool, 286 cks. Fergusson Brothers, by same, 105 cks.

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STEAM JET PUMPS, Best and Simplest Made.

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Paper and Pulp Mills, Bleacheries and Dye Works Tanneries, Breweries, Distilleries, Starch Fac Dry Docks, Wrecking, Irrigating, etc., etc., etc. Will not clog, and has no close fitting parts to wear. Twenty-one years in use

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The Haper Trade Journal.

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Single Copies, · · · 10 Cents.

NEW YORK: SATURDAY, AUG. 18, 1883.

Advertisements cannot be received for insertion in the current week later than 9 A. M. on Friday. The charge for advertising is 25 cents a line, each inser-tion. Special terms for standing and displayed advertisements to be had on application. Directory Column and one copy of paper, \$15 a year.

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

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

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

All communications must be addressed to

HOWARD LOCKWOOD.

Publisher and Proprietor.

No. 74 Duane Street, N. Y.

BRANCH OFFICES.

Western Office; D. C. MIRRIELEES, General Manger, Chicago, Ill. Philadelphia Office: J. Viennot, General Man-

ager, 150 South 4th St. Eastern Office: 49 FEDERAL ST., BOSTON, MASS. Southern Office: F. G. HANCOCK, General Manager, CORFER BROAD AND ALABAMA STS., ATLANTA, GA.

FOREIGN GENERAL AGENTS.

FUREIGN GENERA	
W. F. Catcheside	dgate Circus Building, andon. kholm, Sweden. raltar, Spain. o, Spain. in, Italy. ice and Florence, Italy.
Yahan YYaman (Mel)	bourne, Sydney, and
John Hogan) A	ielaide, Australia.
	edin, New Zealand.
W. SnellingBris	
A. G. WebsterHob	art Town, Tasmania.
Knight & CoNew	
L. D. Clark Sha	nghai, China.
Sargent, Farsari & Co Yok	ohama, Japan.
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John G. ClarkKing	gston, Canada.
W IN W. IN INC.	Westminster, British
Henry W. Hughes	olumbia.

TO CORRESPONDENTS.

As THE PAPER TRADE JOURNAL is the recognised cation in matters of trade in terest, we will be glad to receive correspondence from all parts of the country. Information and sugges tion upon paper-making topics are especially valu-able, and manufacturing news and personal items

Readers of this paper who avail themselves of the information obtained from its columns, by advertisement or otherwise, are requested to notify their cor nts of the source of their information.

Subscribers to THE JOURNAL can be supplied with the best cloth binder in the market. Deliverable at the publication office Price, \$1.25.

THE lament of English free-traders over our revised tariff is something which Americans ought to take note of. The Cobden the fact that free trade in this country has had another defeat. Why this inordinate anxiety that the United States should adopt a British commercial policy?

British manufacturers look to America as their best market. There is none other that they would not resign in preference. If they were to have free access to our ports and could lay down their goods here, cost of freight only included, they would speedily load us up with their products, and we should be forced to meet their competition with lower wages and a complete revolution of our industrial status. We do not think that the time has come

THE protection party in England is growing. It is numerically stronger and its utterances are more open and distinct than when it began to organize under the name

the English sense, is retaliatory in principle. It means to levy duties on the products of those countries which have high or protective tariffs and which refuse to enter into commercial conventions which secure to the British merchant or manufacturer the advantage. But even this feature of protection in England is changing and broadening, and we look to see it thrown to one side in a genuine defense of domestic industry irrespective of the attitude of other countries.

THE straw-wrapping manufacturers of the East met in conclave on Tuesday, and, as will be seen from the report, which appears in another column, toyed with the proposition to combine their interests by the plan adopted at the West. We do not see that any notice was taken of the change in the organization of the American Paper Manufacturers' Association. This is a strange indifference, particularly so because there has been in the past considerable complaint that the wrapping manufacturers did not receive that recognition which they thought was due to them. It was probably a bit of forgetfulness, for which amends may be made at the meeting

EXPANSION OF CREDITS.

THE JOURNAL has heretofore directed the attention of its readers to the dangerous facility with which credit is secured. It has pointed out that cheap credits are the bane of trade, and has tried to dissuade its readers from entering into competition which loses sight of possible and even probable consequences in the effort to dispose of goods. The same thing, in a varied form, has lately been the subject of comment in one of the daily papers, which says:

In the earlier history of mercantile transactions in would now regard as excessively long credits were universal and indispensable. Distribution and connption of merchandise were much slower than now, and interior merchants were seldom heavy capitalists. But, on the other hand, the percentage of profits was larger and the expenses of business and of living were smaller. There was nothing un-sound or unmercantile in the long credits of those days. A wide distinction is to be observed, however between long and unsound credits. The country merchants or jobbers of that time always expected to make a good payment in cash at the time of pur chase and to give their notes at six or twelve months, as the case might be, for the balance. There was no system of open accounts for large purchases. As distribution became more rapid, merchants richer, competition greater and the percentage of profits less, credits were shortened, and ultimately most all large dealers became close buyers for cash. This method of doing business, however, did not become general until after a great inflation of credits, of business and of values had taken place, which finally culminated in the longest and severest period of liquidation that the country has ever witnessed. It was one of the beneficent results of the panic of 1873 that business was brought largely to a cash basis, though this was more especially the case een first and second hands. What is me eash in these cases is payment within thirty days on open account. There is, therefore, still an element of credit in this that calls for the strictest scrutiny into the financial standing of customers, and hence the extensive machinery of credits which now obtains. It is the custom also to allow a special dismay 5 per cent.—if the bill is paid within te

During the past few years there has been an unhealthy expansion of this period of open accounts by what is termed "dating ahead." * * * This device began just before the revival of trade in the fall of 1879, and was partly the cause of the overing of that period. At first, the system forced upon customers; now customers are pressing for still longer periods of credit and larger discounts, which, in the present dull state of the skets, they often succeed in obtaining, espec when stocks are large. The truth is, dating ahead is the crying evil of the dry goods trade to-day, and it edged to be a growing one in all bra of trade. Merchants are painfully conscious of the ould be glad to stop it if they could is no telling to what extent it may yet go, or to what it may ultimately lead, if not discountenanced. * * * But there are other inconveniences and undesirable results of the system. Merchants must have more capital to accomplish the same amount of business; while the customer, requiring less capital, may expand his operations to an imprudent, if not to an indefinite, extent. This may be well enough when the sky is clear and business is going along smoothly, but when the situation is overcast and there is more or less trouble of various sorts, as now, it is easy to realize how radical a departure from sound merca principles this dating ahead has become. Already, bankers and brokers who discount mercantile paper are scrutinizing these facts, and in co-quence restricting their accommodations. Is it not about time that there was some organized ction among business men to discountenance and to iscontinue this dangerous, unmercantile custom & If something is not done to suppress it, it will go on expanding and demoralizing trade until, ultimately, we shall be fortunate if we escape its own remedy in the natural way—a sudden and disastrous commercial collapse.

We have quoted thus fully, feeling that the evil spoken of has extended too widely. In fact, it should never have been permitted to grow. The dangerous facility with which men without capital can secure of "fair trade." Fair trade, however, in credit, and extend their operations without his living out of paper stock. A man who can

proper inquiry into their standing or the nature of their transactions is fatal to safety in business. The undue expansion and general cheapening of credits have put our commercial system on a hazardous basis. Of this we have had sufficient example in our own lines of trade, and we are sure that most paper makers will join with us in the declaration that such things ought to be stopped. It is true that events with which the trade are sufficiently familiar, have had an influence in restricting the evils of which we speak, and that greater caution is exercised than in times past: but, for all that, the remedy has not been radically applied. We need the cautery.

Answers to Correspondents.

J. P. C. wants names of manufacturers of "Old Hampshire" and "Dartmouth" writing papers.

Ans.—The "Old Hampshire" is made, we think, by either the Hampshire Paper Company or by the Southworth Company. We don't know where the "Dartmouth" is made.

Water-Marks.

BY DANDY.

A correspondent of the Times writes to that paper that there is "cheating in both weight and measure by many of the licensed venders, and that the matter "should be looked into by the Department of Weights and Measures.

The venders insert false bottoms in the regu lar measure, and their scales give only ten and tweive ounces to the pound.

This, however, may be of only little interest to the trade.

But the books which taught us that there were sixteen ounces to the pound also stated that there were twenty-four sheets to the quire.

Now, have I not heard something about short weights and counts" in the paper trade I may have been dreaming!

When will we get rid of all of these petty tricks and devices, and when will the merchant and manufacturer learn that it pays to transact ousiness in a "simon-pure," unadulterated, full width, full measure, full weight, full count, square-toed, tail-over-the-dashboard manner ?

Honesty is the best policy; if it is honest to

Really, I had expected ere now, to have seen mething in THE JOURNAL about the active co-operation of the trade in the reorganization of the National Association.

A number of very pleasant gentlemen were chosen to take charge of the different interests, bring them together, pow-wow, and get everything into harmonious operation.

Are these chiefs of the paper-making tribe

content with their honors? If they don't do comething very soon I shall feel like saying something exasperating. Perhaps I shall be tempted to liken them unto the "untutored child of the forest," who, with

haughty dignity folds his robe around him, ejac-

ulates, "Much big Ingun, me!" and-loafs. But this remark is not personal. It certainly is not intended to be, and I am recalled to the fact that some of the participants in the late meeting at Saratoga are at work, earnestly trying to carry out the duties to which they were

I refer to the Export Committee, which mean business, if business there be

One of your correspondents, "Pen," asserts that he knows that Casson's suction-box was a dandy roll. With all due respect to "Pen' want him to tell me how he "knows" it. Is he a Frenchman or did he work in Casson's mill !

I was glad to meet our genial friend Dart at Albany. He is quite convinced of the desirability of forming a straw wrapping company at the East, like unto that of which he is th energetic and capable manager.

It would be really a good thing if the straw wrapping manufacturers could harmonize. But

Why did the straw-wrapping manufacturers at Albany get uneasy and restless because a number of the commission dealers were present This is a conundrum.

I'll give you another one. Why were the sion dealers so anxious and concerned about that meeting ? This is a good one.

Can't D. D. Tompkins and Wells A. Bingham tell us all about who was asked to "take a walk?" Charles J. Cave, I understand, is not addicted to pedestrianism, and, like the man bidden to the feast, could not go.

Some of my friends on Beekman street are very fond of fishing. The fact is, the smaller the man the greater the fisherman. There is one "light weight" whom I revere and admire, and who causes me a great deal of solicitude whenever he gues forth equipped. It would go hard with him should he "hook on" to a whale.

"He's only a rag dealer !" Sometimes this remark is made derisively of a man who makes

amass a fortune of nearly \$250,000 by dealing in rags can afford to be thus spoken of. Such a man died in New York some time ago and left his widow a legacy of \$50,000, and the remainder of his estate, appraised at about \$225,000, he bestowed upon the children of the brother with whom he had been engaged in business. These two brothers were together worth nearly \$500,000, and the foundation of their fortune was laid by picking rags. I have a profound respect

Communications.

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

Globe Boilers.

Piqua, Ohio, August 14, 1883. To the Editor of The Journal:

In answer to your correspondent "Fox River." I made all of my experiments preparing stock for blotting pad with a globe boiler, and found it a big success. If "Fox River" will write to Morris L. Keen, whose post-office address is Experiment Mills, Monroe County, Pa., he will give him a scientific explanation of the advantages of globe boilers, as he uses them in his mill in preference to the ordinary rotary.

W. H. S.

The Driving Train.

To the Editor of The Journal:

I had no intention of again troubling you with remarks on the cone-pulley system, but as this valuable invention is now before the paper manufacturers of the country, it is due to the paper-making interest that its true merits should be made known to them in order that the speedy and general adoption of this great improvement may mark one more step in the march of progress with the result of lessening the cost of pro duction. This desirable end is not likely to be attained very soon if any credence is given the foolish arguments urged against it by men whose absurd statements show their profound ignorance of the subjects they attempt to treat. One Blue Grass," for instance, thinks that the new system will vary the weight of paper. How is that for intelligence? From the remarks of another, a person would infer that the noise made by it would rival a boiler shop. Such objection is unworthy of further comment. As a matter of justice, and for the encouragement of future inventors, the honor and credit of this invention should be given to "O. H." and many thers to whom all of these new inventions are old stories, but who are not able to invent anything themselves, and cannot see any difference between the new method and the complicated Wrigley concern. The difference is that they are totally unlike in construction and operation In the Wrigley system and all French attempts at cone-pulley regulation, the old plan of direct driving has been followed, the only difference being the substitution of cones for straight-faced pulleys. Now, in order to drive the heavy portions of machinery without the purchase obtained by the use of bevel gears, as in Marshall's system, nothing less than a flor 8 inch belt will transmit the necessary power, and any machine man knows that a heavy straining belt of this size cannot be adjusted to different positions on cone-pulleys to obtain the necessary fineness of regulation; whereas, in the Marshall system the great purchase secured by the bevel gears permits the use of small, light-running belts needing only a touch of the finger to regulate with precision and ease.

Changes, Removals and New Firms,

J. F. Siebert, bookseller, Peoria, Ill., has sold out to Joseph Siebert.

J. M. Place, bookseller and stationer, Bolivar, N. Y., has disposed of his business.

Carl H. Uhler has bought out the publishing business of E. B. Chapin, Tolono, Ill.

Moses King, printer, binder, bookseller and publisher, Cambridge, Mass., has sold out.

The firm of Carter, Rice & Co., dealers in pa pers. Boston, Mass., has been incorporated.

George Vesey has bought out the stationery. &c., business of Holsinger & Stewart, La Grange, Ind.

N. E. Woolman & Co., stationers, &c., Sa lida, Col., have dissolved partnership, N. E. Woolman retiring.

James Grand, dealer in blank books and stationery, Toronto, Ont., has admitted Samuel Faye into partnership. Hoag & Heald, publishers of the Echo, Peta-

luma, Cal., have dissolved. Hoag & Towns have succeeded the old firm. E. Blanche Keeler, paper manufacturer, Cam-

bellford, Can., has been succeeded by the North umberland Paper Company. McMurray & Willard, stationers, Bolivar, Ohio, have dissolved partnership. App & Mc-

Murray continue the business. Bates & Field, booksellers and statione Lawrence, Kan., have dissolved partnership. S. T. Field continues the business.

Hurst & Co., publishers, New York city, have dissolved partnership, and Thomas D. Hurst continues business under the same style.

George S. Tolman has succeeded to the busiess of T. H. Brackett & Co., printers, Boston, Mass., the old firm having been dissolved.

Strong & Holmes, publishers of the Sullivan Review, Dushone, Pa., have dissolved partnership. E. A. Strong continues the busine

The Evans Fibre Company, for manufacturing wood fibre for paper and other purposes, has Mr. Hanford.

been incorporated in Maine with a capital stock of \$500,000

C. A. F. Emery & Co., printers, Boston, Mass., have dissolved partnership. Louis K. Brown and James C. Clark continue the business under the old style.

Yancey, Waddey & Co., dealers in blank-books and stationery, Richmond, Va., will henceforth do business under the style of Yancey, Waddey & New.

West, Swaney & Jackson, paper dealers, Pittsburg, Pa., have dissolved partnership. A. new firm has been organized under the style of A. A. Jackson & Co.

Spooner & Brother have succeeded to the business of Dudley Spooner & Co., booksellers and stationers, Leavenworth, Kan., who have dissolved partnership.

The business hitherto carried on by Smith & Knowles, paper dealers, Denver, Col., will be continued by C. N. Knowles, the old firm having dissolved partnership.

The estate of the St. Catharines Pulp and Paper Company (incorporated), St. Catharines, Can., has been sold at sheriff's sale to the Lin coln Paper Mills Company.

H. J. Harding, bookseller and stationer, Wichita, Kan., has admitted Frank Fisher to partnership, and the business will be continued under the style of Harding & Fisher.

The Lincoln Pulp and Paper Mill Company, Lincoln, Me., has voted to accept the act of th Legislature allowing it to increase the capital tock to \$250,000, and voted to set the stock for the present at \$150,000 to be issued by the directors as required to supply working capital.

The copartnership of the Hurlbut Paper Company, South Lee, Mass., has expired by limitation and D. B. Fenn, Jr., retires from the com-The business will be continued by T. O. and H. C. Hurlbut, under the firm-name of Hurlbut Paper Company.

John A. Littlefield, printer, Boston, is reported failed.

John A. Littlefield, printer, Boston, Mass., has gone into insolvency.

An assignment has been made by William England, stationer, Marysville, Cal. An assignment has been made by Judson,

Dunlap & Co., printers, Atlanta, Ga. An assignment has been made by Catharine Fahly, bookseller and stationer, Geneva, N. Y.

B. C. Schaefer, paper-stock dealer, Cincinnati, Ohio, is reported to have made an assign-George P. James, publisher of the Star of the

Valley, Newville, Pa., is reported to have been sold out by the sheriff.

M. Noyes, dealer in paper stock, Burlington, Vt., has failed, with liabilities of \$30,000, chiefly to banks. Nominal assets, \$52,000.

Mortgages, Etc.

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

morePago qui rom cameo.1	
fortgagor. NEW YORK CITY. Am	ount.
E. H. Blinn	\$200
O. G. F. Class (R.)	10,000
I. S. Evans & Co	800
F. Beebe	600
E. G. Rideout & Co	7,200
mith & Spinning	686
L. Stern	175
MIDDLE STATES.	
ohn Waehr, Jr., Brooklyn, N. Y. (R.)	1,508
Ilwood Grist, Lancaster, Pa. (Real)	8,200
EASTERN STATES.	200
Dliver R. Yeaton, Plymouth, Mass	300
feaney & Adams, Boston, Mass	330
WESTERN STATES.	
Baker-Collings Company, Chicago, Ill	8,000
Vinship, Morgan & Co., Chicago, Ill	4,598
Irs. M. Clougher, Davenport, Ia	2,225
mith & Bogue, Macedonia, Ia	800
ohn R. Goldie, Sioux City, Ia	100
Frank Hartman, Durango, Col	1,500
Linn, Versailles Ind	1,885
Linn, Versailles, Ind. (Real)	2,500
. Paul Dahlborn, Cincinnati, Ohio	485
L. E. Weatherby, Cincinnati, Ohio (Real)	1,200
F. Hunnersbach (Ohio Staats Zeitung), Colum-	
bus, Ohio (Real)	1,000
The Times Company, Columbus, Ohio (R.)	1,298
SOUTHERN STATES.	
S. Jacobs, Selma, Ala	450
Beorge Wilner, Washington, D. C. (Trust deed)	1,000
rthur Hamlin, Albuquerque, New Mex	225

S. Webber Parker returned from his European visit by the City of Rome, improved in health and looks.

Lansing D. Lyon, of J. W. Lyon & Co., has been making a trip through the Eastern States, combining business with pleasure. N. W. Taylor, of the Cleveland Paper Com-

pany, accompanied by his wife, will sail to-day per steamship Britannic for a short tour in Eu-John L. Taylor returned home this week from

his vacation in the Lake Superior region, looking brown as a berry, and happy as a lark. The muscalonge can feel glad now, that he has left their pursuit, for he has played havoc with

Thomas Vernon returned home this week from Greenport, L. I., and although a very fine-looking man, is improved in appearance and bene-fited in health. He derived much pleasure during his visit from the company of an ex-Southern general.

Jeremiah Sturges is still unable to attend to es. Under the advice of his physician he has been taking a little fresh air this week by carriage riding. His wife a few days ago suffered a bereavement by the death of her father,

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Chemicals, Coloring Materials, &c.

Manufacturing News.

EASTERN STATES.

The mill of the Pearl Paper Company, at "Pearl City." South Hadley, Mass., in charge of Edward Lester, treasurer of the company, made its first run of paper last week very suc cessfully.

The Parsons Paper Company, Holyoke, Mass., has begun an important series of repairs and im-provements on the old part of its mills, which were built in 1853 and were the first paper mills in the city. The interior of the mill will be torn out and thoroughly modernized.

Work is progressing on the dam for the Southworth Paper Mill, at Burcham, above Chicopee Falls, Mass. There are some thirty men at work upon it. The gateway, including seven gates leading into the canal, is completed and the main structure about two-thirds done. It is built in a very substantial manner, the material being of Monson granite.

The Bowdoin Paper Company, Topsham, Me., and the Androscoggin Pulp Company, Brunswick, Me., are making preparations to build a new dam across the Androscoggin, and make other improvements which will add to their manufacturing facilities.

A paper mill is to be started at West Ware. The foundations are already in and the materials for the new building on the ground.

Ward Brothers, Riverton, Conn., have their mill well under way. Frank Dilts, Fulton, N. Y., has supplied them with an engine and dryers. besides doing some other work on their machin

A paper mill will be built next spring at Mechanicsville, N. Y., adjoining the chemical fibre mill of the Hudson River Water Power and Paper Company. The product is to be twenty ns per day.

Moore & Wilson, Waterford, N. Y., have been refitting their mill, and have put in a 48x48 ating engine, made by Frank Dilts, Fulton,

WESTERN STATES.

The Niles Paper Mill Company, Niles, Mich., is putting in a Westinghouse engine to drive its Fourdrinier.

SOUTHERN STATES.

H. D. Mentzel, Ellicott City, Md., is enlarging and improving his mill. He will drive his Fourdrinier by a 25 horse-power Westinghouse en-

SPECIAL NOTICES.

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

MAURICE O'MEARA. Packer of Rags and Paper Stock

277 WATER STREET, NEW YORK. EUGENE SULLIVAN.

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

THOS. BUTLER & CO., Rags, Paper Stock, Old Metals, Rubber, 269-258 CAUSEWAY ST., BOSTON, MASS.

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, | FRIDAY, August 17, 1881.

THE MONEY MARKET.-The money market remains extremely easy. Usually at this period money flows to the agricultural districts to aid in moving the crops, but the tide has not yet set in, and the rates for call loans remain 2@3 per cent. and for prime mercantile paper 4@6 per cent. All but gilt-edge paper is slow of

There has been an improvement in stocks, but it was only of short duration, and proved to be spasmodic, the market having been depressed at the close, a sharp decline in the Vanderbilt and Pacific properties carrying the whole list down. Government bonds were active and strong, with an advance in all issues.

Railroad bonds were active and strong, and prices show some important changes.

The market for sterling exchange is easier, and rates have been slightly reduced under an increased supply of bills. Continental exchange is also more abundant and weaker. We quote : Bankers' sterling, 60 days, actual \$4.8234@4.8234 Bankers' sterling, sight, actual..... 4.87 @4.8714 Prime commercial sterling, long..... 4.8114@4.8134 Documentary sterling, 60 days 4.80 @4.8016 Paris, bankers', 60 days..... 5.221/4@5.231/6
 Swiss, bankers', 50 days.
 5.18%@0.19%

 Swiss, bankers', sight.
 94½@0.19%

 Reichsmarks (4), bankers', 60 days.
 94½@0.94%

 Reichsmarks (4), sight.
 94½@0.94%

 Guilders, bankers', 60 days.
 39½@0.94%

 bankers', sight.
 40½@0.94%
 Swiss, bankers', 50 days..... 5.2114@5.2214

THE PAPER TRADE. - Very nearly the same features that have ruled the paper market for some time past have been shown during the week just closed. The production although have little difficulty in marketing their product. This ie done in very many instances at some sacrifice, yet prices have touched such a low level that most large consumers and buyers do not expect much in the way of any further con-It might be an advantage to the manufacturers to have to pay more for their paper stock as they could then have an opportunity to make an advance. If any change has been developed during the week it has been toward

market during the past week for paper quality, and under a fair demand the price has advanced 1-16c., so that nothing can be found to-day under 1 15-16c. cash, with most holders asking 2@ 21/sc. Bagging Butts are unchanged. have been reported to the extent of 2,500 bales of paper quality on the spot and near at hand. arrivals since our last report embrace the Ceylon, with 4,030 bales, all to a bagging manucturer, and not for sale; the Rosignol, with 6,317 bales, all of which, except 1,000 bales, were old prior to the arrival; the Aurora, with 10,-731 bales, all of which were sold to manufacturers, except about 3,000 bales that are held at 2c., and the Belistane, with 4,772 bales, all of which were sold prior to arrival. The cost of import is claimed to be 2c. to 21/2c. for paper quality, at which price the market closed firmly held. Shipents to the United States during July, 1883. 20,000 bales: do. do. for the same month last year, 13,736 bales; shipments during August, 1882, 15,765 bales; do. do. September, 25,421 The arrivals during the 30 days ending August 16, 1883, were 51,379 bales; do. do. same time last year, 15,774 bales. Stock January 1, 1883, and imports to date, 430,876 bales; do. do. same time last year, 252,203 bales. The distribution for past thirty days to August 16, 1883, 36,379 bales; do. do. to same time last year, 26,074 bales. Distributed since January 1, 1883, 333,674 bales; do. do. same time last year, 219,-503 bales. Stock in Boston and New York, August 16, 1883, 92,200 bales ; do. do same time last year, 34,900 bales. Prices current August 16, 1883, according to quality, 1 15-16@21/c.; at same time last year, 21/2@21/2c., according to

WOOD PULP.-The demand for Ground Wood Pulp is still moderate and prices remain easy. The offerings of Spruce continue large and manufacturers quote at the range of 21/8@ 21/c., and Poplar at 1% @2c., according to quality and distance of shipment.

WOOD FIBRE.—Chemical Fibre is without any new feature, the demand continuing moderately active and prices fairly well held. Bleached is quoted at 41/204%c., and Unbleached at 3%@4c., as to quantity and maker.

FOREIGN RAGS AND PAPER STOCK .-There has been a little better showing of business this week, several city houses having closed contracts for some fair-sized lots, and having made considerable deliveries on old orders, but in most cases this increase of business has been at a sacrifice on the cost. Some of our city importing houses speak more hopefully of the near future of the paper-stock trade, and think that the time is close at hand when there must be some appreciation in prices. The latest advices from abroad report an advance in low and medium grades of cottons, more particularly in the Belgian market. The imports have somewhat increased this week, but the average is not large. The arrivals during the past week aggregate 4,398 bales and bags, embracing 1,203 bales Rags, 1,790 bales Old Papers, and 1,405 bales

DOMESTIC RAGS. -The small improvement previously noted in City Whites has been well istained throughout the past week, and in fact, there are some holders who are asking 2%c. for No. 2 Whites, while 2%c. is the general quotation. No. 1 Whites are about the same as last week, 41/2@45/6c., but there is considerable more inquiry, without, however, leading to any large transactions. City Seconds run in price all the way from 1%c. to 1%c. We note sales of 150 hales No. 2 City Whites at 2%c., and 80 bales No. 1 do. at 4%c.

BAGGING, &c.-The recent large auction sales of damaged Jute Butts have somewhat affected the market for Gunny Bagging, but outside of this the demand has been so feeble and the transactions have been in such small lots that it has been difficult to sustain the prices asked. Where manufacturers have sought No. 1 Manchester Gunny they have had to pay 1%c. to 2c. for it, but some goods are seeking buyers at a fractional lower price. Manilla Rope has not varied, but is steadily held at 31/4@31/4c. for Domestic, and 31/4@31/4c. for English. We note sales of 50 tons No. 1 Manchester Gunny at 11%c.; 20 tons English Manilla Rope at 3 3-16c., and 15 tons Domestic do. at 3%c.

OLD PAPERS.—This class of stock is offered so freely, and the supply is accumulating to such an extent, that prices are quite nominal, and it is difficult to establish a basis of value. It was thought that bottom prices had been reached, but Folded News, Light and Solid Book Stock, Manillas, and in fact, most all grades are still lower than the lowest prices for several months. We quote: No. 1 Manillas 4.86 @4.861/2 at 21/6@2.15c.; Ledger Stock at 2%@23/4c.; Hard White Shavings at 3%@4c.; Soft White do. at 31/231/c.; Folded News, 1%@ 1½c.; Mixed Shavings, 2½@2½c.; Solid Book Stock, 2½@2½c.; Light Book Stock, 1@1½c.; Commons, 45@50c.; Straw Board Clippings, 45@ 60c.; Bogus Manillas, 90c.@\$1, and Binders' Clippings, \$1.

STRAW.—Straw continues to meet with a fair inquiry and prices are firm. We quote No. 1 Rye at 55@60c.; No. 2 do. at 50c.; Short Rye, 40c., and Oat at 35c.

ROSINS. - The market for rosins has remained quiet during the past week, with very little change in prices. We quote f. o. b., cartage included, viz.: C Strained, \$1.80; D Good large is not so great but that most manufacturers keep fairly well employed on orders and \$2.20; G Low No. 1 at \$2.40; H No. 1 at \$2.50; I Good No. 1 at \$2.65; K Low Pale at \$3; M Pale at \$3.371/4; N Extra Pale at \$3.50@3.75, and W G at \$4.25@4.50.

CHEMICALS.—The market continues steady for most descriptions, but the demand is still of a hesitating character and confined mostly to jobbing parcels. There is no speculative feeling. better tone.

JUTE BUTTS.—There has been a fairly strong

JUTE BUTTS.—There has been a fairly strong and no disposition is shown to purchase beyond

lows: 250 cks. Bleaching Powders at \$1.90@1.95 as to brand and quantity; 375 tons Soda Ash at \$1.50@1.60; 250 drums Caustic Soda, 70 per cent., at 2.75@2.80c.; 50 tons English Bal Soda at \$1.20; 350 barrels Lump Alum, at 2c.; 375 barrels Ground do. at 21/8c.; 375 barrels Pearl do. at 25c.; 700 barrels Natrona Porous Alum at 25c.; 100 tons Aluminous Cake at \$1.45; 26 cases German Ultramarine at 23@25c.; 25 cks. Anti-chlorine at 3c.; 25 cks. Yellow Prussiate of Potash at 241/4c.; 180 barrels English Venetian Red at \$1.55; 12 cks. Brown Sugar of Lend at 6%c.; 15 cks. White do. at 12c.; 20 cks. Bichromate of Potash at 141/c.; 100 bbls. Corn Starch at 4c.; 125 bxs. Extract of Logwood at 7%/c.

CHINA CLAY.-The demand for English Clay has been quite fair, but as there has been no addition to stocks, supplies in the hands of importers are gradually shrinking. Stocks are held steadily on the basis of \$16 for prime. Sales are reported of 50 tons prime at \$16, 100 do., n. at \$14.50@15.00, and 60 tons prime at We quote prime at \$16@16.50, medium at \$15@15.50, and common at \$13@14. Southern Clay continues to meet with steady demand, and the arrivals readily disposed of at \$11.50, and no sales are being made below this figure.

COAL.-The Anthracite trade is not in a booming condition, but the companies are placing their product, and as it may be gathered from the tonnage statements, this is large each and every Saward's Coal Trade Journal says: Business is generally in very good shape for this time of year, and while orders are not entered for large blocks for delivery over a long period, they are entered for smaller contracts, and these are constantly renewed. By this method of transacting business the operator gets a better price than would otherwise be the case. The special feature of interest this week is an advance in Pittston coal to date from the 15th; ten cents on Egg, twenty cents on Stove, and fifteen cents on Chestnut. When we find so conservative an operator as the president of the Pennsylvania Coal Company venturing on an advance at a time when many are questioning the ability to continue the present production at ruling prices, there is no doubt the Anthracite coal trade of 1883 will go upon record as one of the best known for many years. The other companies will also make changes in their circulars, whether to date from to-day or the 1st of September, remains to be seen. Bituminous coals are reported in about the same condition as for some time past; a considerable tonnage moving off on contracts at very moderate prices. The increase in business done may have some element of encouragement appertaining to it, but when the price is considered there is none." Quotations of Scranton coal at Hoboken are: Lump and Grate, \$3.90; Egg, \$4.15; Stove, \$4.45, and Chestnut, \$4.55. Philadelphia and Reading Company at Port Richmond, N. J., quotes: Broken, \$3.75; Egg, \$3.90; Stove, \$4.25, and Chestnut, \$4. at Weehawke \$3.90; Egg. \$4.15; Stove, \$4.45, and Chestnut,

PRICES CURRENT.

NEW YORK MARKET.

Paper Market. Ledger and Record
Flat Caps, superfines
Flat Caps, fines
Flat Caps, engine-sized
Blotting, American
Blotting, English
Book, supersized and calender 7149 7149 6149 6149 News, No. 1.
News, rag and wood...
News, straw.
Hanging, superfine, No.
Hanging, superfine, No.
Hanging, superfine, No.
Hanging, machine satin Colored Papers, tissues, 30 × 30, \$\mathbb{V}\$ ream.
Colored Papers, tissues, 30 × 30, \$\mathbb{V}\$ ream.
White tissue, 30 × 30, \$\mathbb{V}\$ ream.
White tissue, 34 × 36, \$\mathbb{V}\$ ream.
Manillas, Flour-sack, cream.
Manillas, Flour-sack, cream.
Manillas, Rope, unbleached No. 1.
Manillas, Rope, unbleached No. 1.
Manillas, No. 1, heavy weight.
Manillas, No. 1, heavy weight.
Manillas, No. 2.
Manillas, Rogus.
Tissue Manillas, tull count, weight size, 11 × 15, other sizes in propor Hardware, light colored, No. 1. 1.50 Tissue Manillas, full count, weight and size, 11 × 15, other sizes in proportion 19 20 Hardware, light colored, No. 1 12 2 — Hardware, No. 1, glassed, tarred ... 12 2 — Hardware, No. 1, glassed ... 6 2 8 Binders' Boards, \$\psi\$ ton, No. 1 ... 80.00 690.00 Binders' Boards, \$\psi\$ ton, No. 2 ... 60.00 670.00 Straw Boards, at-dried, No. 1, \$\psi\$ ton. 85.00 6 90.00 Straw Boards, steam-dried, No. 3, \$\psi\$ ton. 85.00 6 — Straw Boards, steam-dried, No. 3, \$\psi\$ ton. 85.00 6 — Straw Boards, steam-dried, No. 3, \$\psi\$ ton. 85.00 6 — Straw Boards, steam-dried, No. 42.50 6 — Straw Boards, steam-dried, No. 42.50 6 — Straw Boards, steam-dried, No. 40.00 650.00 Straw Boards, air-dried, Penn, \$\psi\$ ton. 50.00 655.00 Straw Boards, air-dried, Penn, \$\psi\$ ton. 50.00 655.00 Straw Woards, air-dried, Penn, \$\psi\$ ton. 50.00 655.00 655.00 650.00 6

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Reds, new Shirt Mixed Softs, fre 10 Seamed Cloth... Skirted Cloth... New Cloth Clips. New Satinets, cle Satinets, old... 434 11 134 134 136 8 354 Rags, Rope and Bagging. White Shirt Cuttings, No. 1..... Mill Assorted Whites..... ew Seconds, light... ew Seconds, dark... o. 2, Whites... otton Canvas, No. 1. 416 884 296 496 534 236 196 90 336 Country Mixed, free of Seconds (City). Colors, per 100 lbs. Manilia Rope. Manilia Rope, tarred. Gunny Bagging, No. 1 Gunny Bagging, No. 1 Burlap Bagging, No. 1. Tar Shakings. Hemp Twine Stock. Jute Waste 214 136 214 454 Shavings and White Collar Cuttings, must 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 Shavings and Old Paper Pure Manillas.... Hardwares, No. 1. Bogus Manillas... English Old Papers and Sh Old Newspapers.
Broken News and Letters.
Old Blank Books.
Old Printed Books.
White and Buff Railway Sheets. 236 English Rags, &c. New Cuttings, cotton. London Fines, cotton Outshots, cotton.... 194 234 Hamburg Rags, &c. 5% 4% 4% Extra Fine Blue Linen, light color. L.F.B.... 814 486 436 2140 140 COTTONS. 234 Extra Fine Blue Cotton. Cotton Canvas..... ng rigging). Old Papers. White Shavings. 394 254 8 Ordinary Leghorn Rags Alexandria Rags. Memel Rags. 436 836 436 Trieste Rags. 874

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Muslin Cuttings, unbleached.
Canton Flannel Cuttings, unbleached.
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Lime Japans.
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Alum, pearl 226@ 256
Alum, porous 2%@ -
Alum, potash 9 24
Aluminous Cake, Blue Star 134
Aluminous Cake, Pochin's 15
Anti-Chlorine
Bi-Chromate Potash, Scotch 16 01 1714
Bi-Chromate Potash, American 16 17
Bleaching Powders
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Clay, China, English, per ton — @18.50
Clay, China, Eng., to arrive, per ton — @17.00
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Clay, Terra Alba, English, per ton 22.50 Clay, Terra Alba, American, per ton11.00 (14.00
Corn Starch 4 454
Copperas American 1 @ 114
Extract Logwood 914@ 1014
Potato Starch 5 @ 51/2
Prussian Blue, dry 82 @ 40
Prussiate Potash, American 26 @ 28
Orange Mineral 1016 1216
Rosins, No. 2, per bbl 2.50 2.75
Rosins, good, No. 2, per bbl 2.70 @ 2.87%
Rosins No. 1, per bbl
Bal Soda 1260 116
Soda Ash, caustic 134@ 174
Boda Ash, carbonated 134@ 136
Boda Ash, refined 1380 2
foluble Blue, pure dry 75 @ 90
panish Brown, dry
Sugar Lead, white
lugar Lead, brown 9% @ 1016
Aulphuric Acid. 60 degrees
Sulphuric Acid, 66 degrees 2 @ 234
Talcine Fibre, per ton
Oltramarine, blue
Fenetian Red Victoria 1140 -
Venetian Red, Victoria
Plant have
Vitriol, blue
Yellow Ochre 1 @ 31/4
-
CITTOLOO MADIZET

CHICAGO MARKET.

Plate		0	17
Super-Calendered, white and tinted	10	402	11
Fine Book, white and tinted	9	04 .	4-
No. 2 Book	3	0	
Colored Glazed Mediums	1:2	0	
Rag News No. 1	_	60.0	
Ordinary Rag News	-	0	734
Straw and Wood News		0	7
Bleached Manilla, No. 1		@	83/6
Ordinary Manilla		0	15
Bogus Manilla	5	0	0
Straw Wrapping	234	0	236
Hardware Wrapping		@ -	
Tissue Manilla, 24 × 36, full count		00 1.	.00
Tissue, white, 20 × 30	_	@ 1.	.00
Tes Papers, 14 × 20	_	400	7
Tea Papers, 13×18		0	7
Tea Papers, 12 × 16	-	@	7
Straw Boards, air-dried, W ton	-	@50.	
Straw Boards, steam-dried, \$\ ton	and the same	@45.	.00
Wood Pulp Card, middles	-	@ -	-
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MILWAUKEE MARKET.

Paper.
Plate 16 @ 21
Super-Calendered, white and tinted 11 @ 12 Fine Book, white and tinted @ 1114
Fine Book, white and tinted @ 1116
No. 2 Book 9 @ 10
Colored Glazed Mediums 4 14
Rag News, No. 1 @ 816
Ordinary Rag News 9
Straw and Wood News 6940 734
Bleached Manilla, No. 1 9 @ 10
Ordinary Manilla
Bogus Manilla
Straw Wrapping 2346 3
Hardware Wrapping
Tissue Manilla, 24 × 30, full count 1.00 (3 1.20
Tissue, white, 20 × 30 1.00 @ 1.25
Tissue, white, 20 × 20
Tea Papers, 18 × 18
Tes Papers, 12×16 736@ 9
Tea Papers, 12×16
Straw Boards, steam-dried, \$ ton50.00 @60.00
Wood Pulp Card, middles 6 -
Rags and Paper Stock.
Whites, No. 1
Whites, No. 2 — @ 3.65
Thirds and Blues
Prints
Manilla Rope 0 3
Mamilia Rope
Mixed Bagging @ 234
Wrapping Stock 0 1
Beamed Cloth @ 91/4
Wool Seams @ 294
New Clips @ 1434
Boft Wools @ .1834
Print Papers — @ 1.80
Manilla Papers @ 214
Common Papers, \$ 100 hs
Tea Paper
White Shavings — @ 314
Mixed Shavings 214
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No. 2 Book 2
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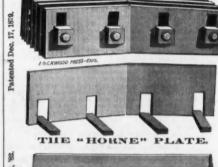
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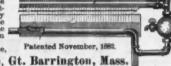


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MANUFACTURERS OF

- OF EVERY DESCRIPTION. -

Rolls Reground by the J. Morton Poole Co.'s Process.

Estimates on building or refitting Paper Mills cheerfully furnished.



MILLWRIGHT WORK A SPECIALTY.

KREIDER, CAMPBELL & CO. 1026, 1028 & 1030 Germantown Avenue,

PHILADELPHIA, PA.,

MACHINISTS & MILLWRIGHTS.

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

SHELDON, FITCHBURG, MASS.,

MILLWRIGHT & ARCHITECT.

Manufacturer of Rag Engines, Cylinder Washers, Rag Cutters, Dusters & Vats for Paper Mills.

ALSO AGENT FOR HEALD & SISCO'S CENTRIFUGAL PUMPS.



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CLEM & MORSE. MANUFACTURERS AND BUILDERS OF

Hydraulic, Steam, Belt and Hand-Power BLEVATORS Passenger and Freight

Dumb-Waiters, Automatic Hatch-Doors, &c. Sole Owners of the right to apply the HEEBNER PATENT GOVERNOR to Elevators and Hoisting Machinery.

Hearikaen's Automatic Safety Clutch does not depend on springs, and arrests fall of car should cable, belts, or any part of the machinery break.

413 CHERRY STREET, PHILADELPHIA, Pa. Branch Office, 108 Liberty Street, New York.

Rotary Hydraulic Governor for Water-Wheels.

That uniform speed is an indispensable requisite to the success of any mill is admitted: yet, it is well known to all critical observers that most mills driven by water-power, including nearly all that obtain their power from one wheel, are run at a disadvantage and loss for want of efficient control. This condition is so general, and has existed so many years, that the opinion has widely attained that it is impossible to satisfactorily control the speed of waterwheels where large variations of labor occur; and that the partial and very unsatisfactory results attained by the various ball regulators is the ultimatum in governing.

There are few machines performing so important an office, and on which so much effort has been expended by inventors, as the ball regulator, on which so little improvement has en made in its long years of service. The first device ever applied, simple in construction and direct in application, is used in many mills to-day, and giving as good speed as the latest improved machine. The accurate control of a water-wheel is a very difficult thing to accomplish, and requires an instrument of very perfect construction and accurate adjustment. Partial results have been secured with ball regulators, but satisfactory results, on all wheels, under all conditions of labor, have never yet been, and probably never can, be attained with so crude and cheap an instrument.

The rotary hydraulic governor, manufactured by the Gillespie Governor Company, and herewith illustrated, discarding the revolving balls, is constructed on new and scientific principles, and in its results is so wide a departure from other regulators, that in point of merit as an invention, it deserves to be classed with the sew ing machine, electric light and telephone. It is stated that there has been no reservation of effort or expense in the purpose of the manufacturers of this governor to solve the difficult problem of the complete control of the speed of water-wheels. Many years of unrelaxed effort and some fifty thousand dollars have been expended in the development and perfecting of this machine and many improvements have been made since the Company started its own works three years ago. The result of its efforts is a machine efficient, reliable, durable, simple, so perfect in construction and application as to sustain the large claims here made for it, and to secure to any good turbine wheel as perfect speed as can be attained with the best steam gine, under the same conditions of labor.

Power and resistance, labor on the wheel, remaining equal, speed must be uniform, other wise not. This is self-evident. To maintain se relations on any change of labor, small or large, there must he a simultaneous change of an equal amount of power. This demands not only rapid but instantaneous action of the gate. To parties accustomed to the use of ball regulators the first impression is that this is impos to accomplish on large wheels having heavy and hard-working gates. But water being sluggish in its action relative to the expansion force of steam, it can be as successfully accomplished with the gate of a water-wheel as with the valve of an engine; the strength of this governor being competent to operate the hardest working gate with ease, and being intimately connected therewith, without intervention of worm or train of gears, it will meet as large a change of labor, correct it as quick, and with a little variation of the speed as can be done with steam when adjusted to meet heavy changes it is said that it will carry the gate as far in one second as any other regulator can in one minute, and not "run by."

Its indicator or governing device is unlimited in its sensitiveness and can be adjusted to a variation of one-tenth of 1 per cent., or one turn in a thousand. As applied, it gives a positive action on a change of 1 per cent. When attached to the wheel the required speed is attained by adjusting weights to the indicator or piston, s given amount of weight always maintaining a certain rate of speed, consequently any rate of speed can be at once attained without changing ulleys or gears. These weights, just balancing the required speed, all variations are thrown on a spring balance and accurately weighed, thus indicating the change of gate required, and instantly placing it in position to meet the new condition of labor on the wheel, and without carrying it beyond the desired extent of change.

Maintaining its control over the entire range of gate, it will meet as satisfactorily the largest as the smallest changes. On the average who no two wheels governing precisely alike, it will of the entire load on the wheel without a noticeable disturbance of the speed. Changes of onehalf the load it will correct inside of fifteen sec onds with less than 5 per cent. change of speed, and it is at all times a sure protection against damage from accelerated speed resulting from breaking of belts, guars or other accidents, correcting the disturbance so quick under the heaviest possible changes as not to damage the most delicate machine. This has been several times demonstrated in large cotton mills, when belts carrying nearly three hundred horse-nower have parted without damage, and with but little disturbance of the small amount of machinery remaining on the wheel.

These claims, clearly stated and fully warranted, are very far beyond the achievements of other regulators. No patron is required to pay for a machine till its merits are tested and acknowledged on each wheel to which it is applied. The company builds thirteen varieties, each machine operating the entire gate in a given time, ranging from ten to seventy seconds. By ap plying in each case a special machine suited to the conditions to be controlled, much advantage is gained over the application of one style of machine to all conditions.

The product of every machine in a mill, and often the durability of the machine itself depends on the quality of the speed, and sometimes to the extent of determining the failure or success of the mill. So the governor, next to the water-wheel, becomes the most important machine in the mill; and in these days of sharp competition and narrow margins, should not be

No machinery can be run with economy varying speed, or produce its most profitable results without being run at its highest rate of speed, consistent with its durability and the production of a perfect fabric. No machinery can be run at its highest rate of speed when subjected to uncontrolled variations of labor. The unnecessary wear and breakage of machinery and the constant stoppage and cost of repairs are large items in the expense of running a mill, a great part of which is due to varying speed.

Fifteen years of unfailing success has demon strated, it is claimed, the capacity of this governor to secure all these results to a perfection never before approached on water wheels, and unsurpassed by any motive power. Fred. A. Green is the president and John S. Rogers treasurer and general manager of the Gillespie Gov- the statement that they have sold out their book

Accidents.

A machinist was hurt at Joseph Jordan's paper mill at Valley Forge, Pa., yesterday afternoon. He was assisting in placing some machinery in position, and while doing so his left hand was aught in a fly wheel and badly mashed.

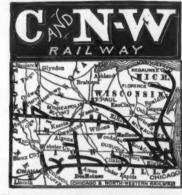
General Notes.

An attachment has been issued against E. C. Beard, printer, East Portland, Ore.

An attachment has been issued against George Bythe & Co., publishers Boomerang, Palouse City, W. T.

The Council Bluffs Water-Works will pump the muddy water of the river into their settling two 15-inch Andrews centrifugal pumps. Each pump is coupled direct to a West inghouse engine of 100 horse-power, making 300 revolutions per minute, and fitted with an adjustable cut-off in order that the speed may be varied to meet the varying heights of lift.

E. D. Irvine & Brother, Macon, Ga., correct



The Chicago & Northwestern Railway Is the OLDEST! BEST CONSTRUCTED! BEST EQUIPPED! and hence the

Leading Railway of the West and Northwest.

It is the short and best route between Chicago and all points in Northern Illinois, Iowa, Dakota, Wyoming, Nebraska, California, Oregon, Arizona, Utah, Colorado, Idaho, Montana, Nevada, and for Council Bluffs, Omaha, Denver, Leadville, Sait Lake, San Francisco, Deadwood, Sioux City, Cedar Rapids, Des Moines, Columbus, and all Points in the Territories, and the West. Also, for Milwaukee, Waukesha, Green Bay, Oshkosh, Sheboygan, Mar, quette, Fond du Lac, Watertown, Houghton, Neenah-Menasha, St. Paul, Minneapolis, Huron, Voiga, Fargo, Bismarck, Winona, La Crosse, Owatonna, and all points in Minnesota, Dakota, Wisconsin and the Northwest.

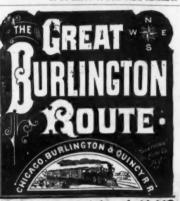
At Council Bluffs the Trains of the Chicago and Northwestern and the U. P. Railways depart from, arrive at and use the same joint Union Depot.

At Chicago, close connections are made with the Lake Shore, Michigan Central, Baltimore and Ohio, Ft. Wayne and Pennsylvania, and Chicago and Grand Trunk Railways, and the Kankakee and Pan Handle Routes. Close connections made at Junction Points. It is the Only Line running the CELERATED NORTHWESTERN DINING CARS West or Northwest of Chicago. Pullman Sleepers on all Night Trains.

Insist pon Ticket Agents selling youTickets via this Leading Railway of the West and Northwest.

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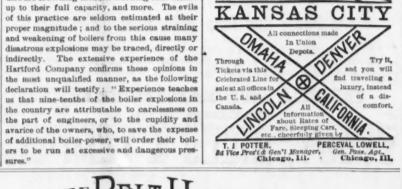
you wish the Best Traveling Accommodations will buy your Tickets by this route, FF AND LL TAKE NONE OTHER. Il Ticket Agents sell Tickets by this Line J. D. LaYNG, Gen. Sun., Chicago.

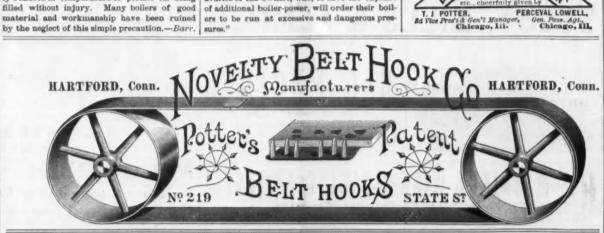


The SHORTEST, QUICKES and all One BEST line to St. J coints in Iows, Actalison, Topeka sm., Dalls sm., New Mexico, Arizona, Monther Roberts, and Texas, BEST line to St. Joseph,

CHICAGO OF PEORITA

KANSAS CITY





They have only transferred to the last-named firm their stock of "fancy books and art goods,"

and continue their printing, publishing, station ery and music business at Macon, and their

book, stationery and fancy goods business at

A dangerous practice prevails with manufac

turers at times when business is pressing and or-

ders are crowding them, of working their boilers

ROTARY HYDRAULIC GOVERNOR,

ernor Company. The company's office and | and job printing office to J. W. Burke & Co.

Bad

Eufaula, Ala.

works are at No. 49 Purchase street, Boston,

Blowing out boilers should be done at least

once a month, except in the very rare instances

in which water is used that will not form a scale.

The boiler should not be blown out until the

furnace is quite cold, as the heat retained in the

walls is likely to injure an empty boiler directly

by overheating the plates, and indirectly by

effects are likely to follow when a boiler is

emptied of its water before the side walls have

sult when cold water is pumped into an empty

boiler heated in this manner. The unequal con-

struction of the boiler is likely to produce leaky

seams in the shell, and to loosen the tubes and

remain empty until it is quite cold, or sufficient-

ly reduced in temperature to permit its being

It is a better plan to allow the boiler to

come cool; but greater injury is likely to re-

hardening the scale within the boiler.

where all of its varieties are kept in stock, and

all orders are promptly attended to.

Patented February 20, 1883, - BY -

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And manufactured by them, expressly for Suction Boxes on Fourdrinier Paper Machines, has proven itself to be the most complete and sure device for the purpose ever used. Price for each Instrument or Box, fifty dollars (\$50).

The Superintendent of the Jessup & Meore Paper Company's Augustine Mills writes concerning this Ejector as follows

Messers. Wickersham & Huston:

Gentlemen.—Referring to your Ejectors for suction-boxes, would say we have in use the first one made for this purpose, and have since fitted up all o machines with them, considering them superior to anything we have ever tried.

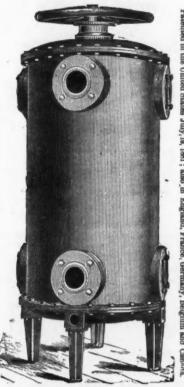
W. C. Hamilton & Soss write: "We have seven of your Ejectors in as many suction-boxes, and can say nothing but prefee. In every way we consider the superior to a pump or any other device."

Circulars, with directions, sent upon application to

WICKERSHAM & HUSTON, Wilmington, Del.

THE MOORE Filtering Machine

Extreme Height, 5 ft. 6 in.; Diameter, 32 in. Supply Pipe, 6 in., Outlet, 6 in.



HOLYOKE PAPER CO.,
HOLYOKE, MASS., Feb. 2, 1882.
The Moore Filtering Machine is in use in our mill,
gives entire satisfaction, and I can recommend it as a
practical device for use in Paper Mills, or where large
quantities of filtered water are required.
O. H. GREENLEAF, President.

HOLYOKE, MASS., Feb. 2, 1882. This is to certify that we are using one of the Moore Filtering Machines—using it all through the time when the water was the worst, giving us ample water for two engines, and I can safely say that it is the best filter for paper mill use, where a large quantity of water is wanted, than anything I have ever seen or tried yet, and can recommend it to any one wanting filtered water.

D. P. WILLIAMS,
Supt. Holyoke Paper Co.

THE ONLY FILTER

is which the principle of "control" has been perfected. Which exteriorly indicates the condition of the filtering material in it, and the precise position of the werking parts. That will give large results with a low head of water. That can always be cleansed without removing the filtering material. It will operate freely without cleansing for a longer time than any other Filter.

It is superior in its construction, operation, and in the quality and quantity of the filtrate furnished, to any other device yet invented.

Public Comparative Test Invited (in Holyoke) with any other Filter.

For information relating to the construction and peration of this machine address,

G. H. MOORE, Norwich, Conn.

F. A. Buschick, Supt. G. K. Shoenberger, Prop'r. CHICAGO STEAM BOILER WORKS,



Water, Lard and Oil Tanks and Sheet-Iron Work, 66, 68, 70, 72 Michigan St., CHICAGO.





The Most Perfect Governor Known. RUNS IN OIL. duaranteed to accurately regulate all classes of Engines. Illustrated and Descriptive Cata-ogue sent on application.

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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 DRYER FELTS,

all widths, cut to any length, at Manufacturers' Prices.
WE WARRANT EVERY FELT to work well,
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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 Finnnel 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.

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ChilledRolls

PRESSES for Baling PAPER, RAGS, &c.

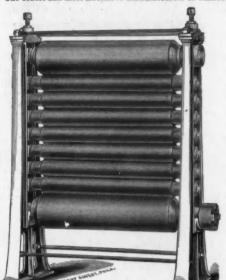


the Sole Manufacturer, JAMES N. BALSTON & SON (Successors to Ingersell & Balston.)

Greenpoint, Kings Co., N. Y.

LOBDELL CAR WHEEL COMPANY, WILMINGTON, DEL.

The Oldest and Most Extensive Manufacturers of Chilled Car Wheels in this or any other Country.



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The undersigned having examined the product herein described respectfully recom nends the same to the United States Centennial Commission for award, for the following

This exhibit contains a stack of calender ing rolls intended to be part of a complete paper machine. These rolls are of cast-iron chilled at the surface in casting, and thereby 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

(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 GEO. G. LOBDELL, Pres. W. W. LOBDELL, Sec. P. N. BRENNAN, Treas.

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Consisting of Fourdrinier and Cylinder Machines, Washing and Beating Engines, Air-Drying Machinery for Drying Sized Papers.

COLE 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. Screena, Brass and Nickel Plated, the latter warranted to wear twice as long as lirses. Bed Plates, Roll Bars, Fan and Plunger Pumps. Also, Gun Metal Covered Bolls, for Size and Press Bolls; Stevenson Water Wheels, Shafting and Mill Gearing generally.

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PROVIDENCE, R. I. Merrill & Houston Iron Works,

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Manufacturers of CYLINDER AND FOURDRINIER PAPER MACHINES.

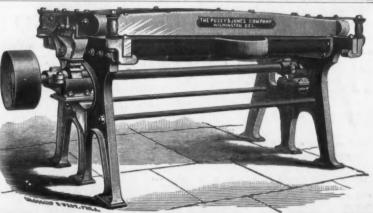
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Calenders and Press Rolls reground by special machinery.

The attention of Water-power Users desiring the highest efficiency is especially directed to the

HOUSTON TURBINE WATER WHEEL.



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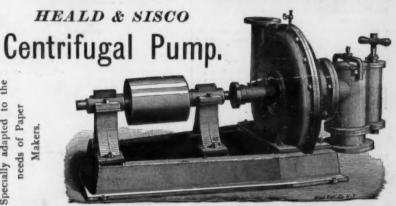
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PAPER MILL MACHINERY,

FOURDRINIER AND CYLINDER MACHINES.

GOULD'S PATENI SCREENS, EXPANDING PULLEYS, RAG ENGINES, ROTARY

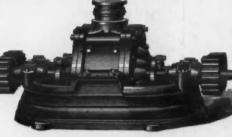


of these Pumps in use than of all other Centrifugal Pumps combined. CAUTION:—The term "OLD RELIABLE," as applied to pumps, was adopted by us sixte ars ago, Be not deceived by other manufacturers who appropriate our time-honored motto. HEALD & MORRIS (formerly Heald & Sisco Co.) Baldwinsville, N. Y., U. S. A.

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Little Giant Jurbine 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 SEND FOR NEW ILLUSTRATED WHEEL BOOK.

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THE LIGHTEST, STRONGEST.

SMOOTHEST. BEST BALANCED

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

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Extra Heavy Canvas for Dryers.

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FOR PAPER MAKERS' USE.

FREE FROM IRON AND FROM EXCESS OF ACID.

Two pounds of it will size as much Paper as three and one-fourth pounds of Lump or Ground Alum, and is 12 per cent. stronger in alumina than any other Alum offered.

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Agents: W. M. ELLICOTT & SON, Baltimore; MOREY & CO., Boston; E. L. EMBREE, New York-

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FOURDRINIER AND CYLINDER WET FELTS, PRESS FELTS AND JACKETS,
Pronounced by many equal to the best Foreign Felts, at a much lower price.

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FOUR MILLS

ON THE HUDSON RIVER.

Daily Product:

PAPER, . . 12 Tons. PULP, . . 30 "

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CONCENTRATED PEARL ALUM FOR PAPER MAKERS' USE

The Richest in Sulphate of Alumina, and 20 per cent. Stronger than the Strongest Alum in the Market 2 lbs. Pearl Alum will do as much Sizing as 3% lbs. Petash or Ammonia Alum.

CONTAINS NO FREE ACID.

Chemical Laboratory, University of Pennsylvania.

Mesers. Harrison Brothers & Co. West Philadelphia, April 18th, 1879.

Gentlemen:—The sample marked "Extra Concentrated Pearle Alum" H. B. & Co. April 17th, 1879, which I have examined for alumina as requested, contains 65 96 per cent. of neutral sulphate of alumina.

Yours very truly, (Signed,) F. A. Genth.

HARRISON BROS. & CO.

Manufacturers of Extra Concentrated PEARL ALUM, Lump and Ground Alum, ALUMINOUS CARE, Oil of Vitriol, White Lead, Colors for Paper Makers and Painters, Sugar of Lead and other Chemicals.

Offices: 35th STREET & GRAY'S FERRY ROAD and 105 SO. FRONT STREET, Philadelphia, 117 FULTON STREET, New York. Agents at Boston, E. & F. KING & CO.

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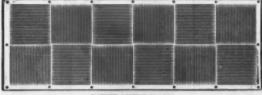
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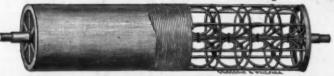
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