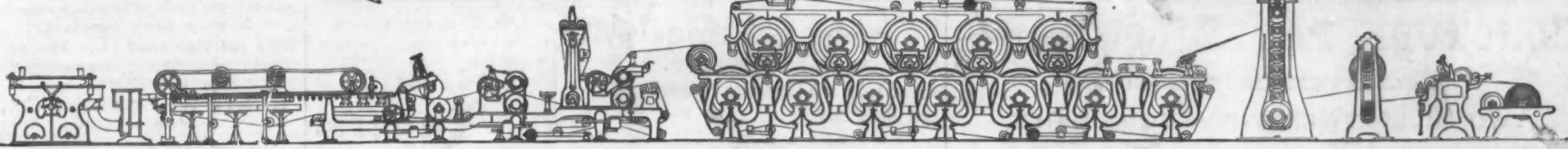


THE PAPER TRADE JOURNAL.

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

VOLUME XXVI.—NO. 45.

NEW YORK, NOVEMBER 6, 1897.

WHOLE NUMBER 1227.

HOW TO FAIL GRACEFULLY.

HERE'S A PAPER STOCK MAN WITH A NEW SCHEME.

William L. Jackey Coolly Tells His Creditors He Can't Pay Their Bills, Forms a New Company and Resumes Business at the Stand.

William L. Jackey, a paper stock man, with an office at 114 Nassau street, Room 315, recently decided that his obligations were a little more than he was able to meet, and concluded that he had better retire from the paper stock business. He forthwith sat down at his desk, and calmly wrote to his creditors as follows:

GENTLEMEN—Owing to a general depression in business and other circumstances over which I have no control, I am compelled to notify you that I will be unable to pay your bill. I have no actual assets, or other funds from which I can realize. With regret I hereby notify you that I retire from the business heretofore conducted by me at 114 Nassau street, New York. Sincerely yours,

WILLIAM L. JACKEY.

Mr. Jackey had his principal business dealings with the Italian paper stock packers of the city. When they received the above communication they were inclined to feel vexed about it. Several called upon Mr. Jackey personally and demanded an explanation. Jackey had none to offer. "The letter speaks for itself," he said, as indeed it did.

Among others who were favored with a letter similar to the one quoted above are the Wooster Paper Stock Company, 78 Marion street; Giovanni Rizzo, 17 City Hall place; Rocco Marrino, 215 William street; James Nickles, 423 West Broadway; Hughes Brothers, North Second street, Brooklyn, and Donato Petraglia, 119 Worth street.

These poor unfortunates, some of whom are "interested" in Mr. Jackey to the extent of \$200 which is a big sum to them, were at a loss what to do. They had a dim suspicion that they had been "done," but they were loath to believe it. "Jackey always paid good money; much higher than any other," they said, and it seemed hard to believe that such a "good thing" had really been lost by the board.

But when, shortly after the informal suspension, William L. Jackey celebrated his "retirement from business" by starting "The National Paper Stock Company, William L. Jackey Manager," the patient creditors suddenly awoke to a realization that such a move was not strictly to their way of thinking, and they entered vigorous protests. They waited upon Mr. Jackey at his office in Room 315, No. 114 Nassau, the same room where they had been selling him stock for nearly two years, as plain William L. Jackey, and at a price better than other paper stock men could afford to pay, and demanded that they be paid the money which he owed them. "But they are so thick," Mr. Jackey explained to a reporter for this paper yesterday. "I tried to explain the matter to them, but they wouldn't listen."

Several of the more determined creditors threatened suit. "That, gentlemen," Mr. Jackey informed them, "you are at liberty to do, but I warn you that such a step would be folly. It won't cost me a cent to defend such an action, as I have a lawyer right here who will attend to that little formality for me without cost," pointing to Cyrus C. Palmer, a lawyer, who shares the offices with him, and who, he has since assured THE JOURNAL man, is the financial backer of the new "National Paper Stock Company." And so the poor creditors have been fain to let bad enough alone, for they recognized the truth of what Mr. Jackey told them, and realized their utter helplessness in the matter. One man, to

whom Jackey owes only \$20, has since been heard to remark that he will never go again to Jackey for his money, but if the latter should ever come to him, on some pretext he will not be permitted to leave his place until he has given up the \$20 or its equivalent.

A representative of this paper called on William L. Jackey yesterday at his office, No. 114 Nassau street.

"Have you gone out of business, Mr. Jackey?" asked the reporter.

"Yes," he replied, "I've gone out of business for myself, that's all. I am now manager for this new company."

"Wasn't that a rather peremptory way to wind up your affairs—the way you chose?"

"I think not. I had no money, and so, of course, I couldn't pay anything."

"Some of your creditors seem to think you should have made an assignment, or called a meeting or something."

"There was nothing to assign."

"Then why didn't you ask to have a receiver appointed, or at least a committee to look over your books?"

"Well, I tell you. I was running on combination paper, and I couldn't kill the goose that lay the golden egg. I hope to be in a position some day to pay something of what I owe, however, and in the meantime if any of my creditors are not satisfied they've got the courts to appeal to."

WANTS MORE PAPER.

To Get It, Peter G. Thompson Obtains Control of a Mill.

An important deal was consummated the past week whereby the well-known president of the Champion Coated Paper Company, Peter G. Thompson, secured control of the Eagle Paper Company's plant at Franklin, Ohio, for a reported consideration of \$24,000. This mill is one of the finest in Franklin, and originally cost \$125,000. The mill contains two large paper machines and a full equipment, and has been idle since the collapse of the company a couple of years since.

The Eagle mill will be put in operation at once, and Franklin interests have received a boom in consequence.

Calamity croakers may deem it queer talk to say that the purchase was made by reason of exceptional conditions. The Champion Coated Paper Company, of Hamilton, has for a long time been unable to secure sufficient new stock to supply the demand, as the paper mills which have been its usual source of supply are so crowded that they have been unable to fill orders as promptly as desired. The company's new acquisition is a valuable one from an industrial point of view, while Mr. Thompson has been warmly congratulated upon his rare business tact in securing the plant at a nominal sum. Receiver C. B. Anderson sold the plant.

Failures.

A. M. Baker, assignee of the Clinton Lithographing Company, Chicago, Ill., announces that the time for receiving bids for the estate of the company has been extended to November 16, at 9 A. M.

J. & F. B. Garrett have foreclosed a mortgage of \$6,323.81 on the printing office of Charles W. Douglass, Syracuse, N. Y.

The C. W. Davis Paper Company, Pawtucket, R. I., has assigned.

The Lewiston SWS Publishing Company, Lewiston, Me., has made an assignment.

The Keuffel & Esser Company, of New York city, has been incorporated to sell artists' materials. Capital stock, \$5,000. Directors, William J. D. Keuffel and Herman Esser, of Hoboken, N. J.; Artemas B. Smith and Charles Willich, of Brooklyn.

FRESH STRAW BOARD NEWS.

IT'S MADE IN CHICAGO WHILE STOCK JOBBERS WAIT.

How the Associated Press Wires Are Being Used to Boom "A Good Thing"—The "Yellow Kid" Is Doing Bravely, Thank You!

Early this week the Associated Press wires flashed a message over the country with a Chicago date attached, which read as follows:

The formation of a strawboard trust controlling every plant in the country has just been effected, and will begin operations at once.

Those not posted on strawboard matters rubbed their eyes and read the message over once again. "Great Heavens!" they said, "has the 'Yellow Kid' given up the ghost so soon?" But their fears were groundless. They should not have been at all concerned, and doubtless they would not have been could they have known that in anticipation of some such bullish message being sent broadcast the "insiders" on the market had placed orders to buy "Strawboard," and that the stock jobbing clique had only gone into the manufacture of bull on a larger scale, that was all.

Following the above dispatch there came another announcing the formation of a new trust at Anderson, Ind. The object of all this bull talk became apparent in the feeble sport which the stock of the American Straw Board Company indulged in immediately after its publication. Since then, however, it has sagged off, and is again sadly in need of some more of the Chicago elixir.

As for the "Yellow Kid" itself, meaning the Manufacturers' Straw Board Association, it is doing about as well as could be expected under the circumstances. There is some talk of sending Secretary C. W. Bell abroad as European agent, and no new price list has been issued in two weeks.

Fires.

The Echo printing plant, Lake Charles, La., was burned out October 27. Loss, \$3,000; insured for \$2,000.

The Herald Printing Company, Warren, Mass., lost \$1,000 by fire October 31. Insurance, \$600.

F. T. Abey, stationer, Revelstoke, B. C., has been damaged by fire. Estimated loss, \$1,500; insurance, \$600.

The Marlboro Times Publishing Company, Marlboro, Mass., was burned out November 4. Loss, \$2,000; partially insured.

The Defiance Paper Mills, owned and operated by the American Straw Board Company, Defiance, Ohio, were entirely destroyed by fire October 24. The plant is situated in the south part of the city, and some distance from fire protection, and consequently the fire had gained considerable headway before the department could get any water on the flames. The Defiance mills were originally owned by a local stock company, and were sold out to the trust, so-called, some three years ago. The fire is believed to have been of incendiary origin, and caused a loss of about \$20,000. The insurance was \$14,500.

Once more the Budget office at Troy, N. Y., has been visited by fire, but this time the results were not so disastrous as on the night of July 16 last. The proprietors of the Budget had just placed an electric light dynamo in the press room of the building to furnish electric lights, and the plant was started on Wednesday for the first time. All went well for several hours, when it was discovered that the chimney into which the smoke stack from the engine is placed was

exceedingly hot. An examination was made, but at first no fire could be discovered, but in a short time the cellar began to fill with smoke and then a little blaze could be seen near the chimney. Willing hands poured pails of water upon the burning wood work, but it did not quench the flames until \$1,000 damage was done.

The old mill at New Hampton, N. Y., which for years has been occupied by the Diamond Mills Paper Company as a barn, was burned to the ground, together with its contents, consisting of hay, grain, wagons, harnesses, etc., October 28. Seven horses which were stationed in the basement of the building were saved, together with one double harness. The fire is thought to have been of incendiary origin, and being situated some distance below the paper mill it was easily kept from those buildings, but it required much hard work on the part of the bucket brigade to keep the fire from several smaller buildings nearby. The burned building was 40x60 feet, and was one of the oldest structures in that section, having been occupied for milling purposes many years ago. The loss is estimated at over \$7,000, and this is believed to be covered by insurance. The property was insured for \$4,575.

Personals.

Homer Smith, of the Smith & White Paper Company, Holyoke, Mass., has been spending a vacation in New York and vicinity.

Fred. L. Outterson, superintendent of the Mittineaque Paper Company, Mittineaque, Mass., and a son of Charles A. Outterson, of the Whiting Paper Company, Holyoke, Mass., was married October 27, in the Second Congregational Church, Holyoke, Mass., to Miss May E. Allyn. The couple were the recipients of many wedding presents.

Olin Scott, Bennington, Vt., has been in Newfoundland for some time, superintending the construction of the wood pulp mill of the Newfoundland Wood Pulp Company. He expects to return within ten days.

Several well-known gentlemen have consented to speak at the Y. M. C. A., Holyoke, Mass., at different times this winter upon the "Theory and Practice of Paper Making," including the introduction of machinery, with general outline of the different kinds of paper manufactured. Their names and their topics are as follows: Hon. William Whiting, president of the Whiting Paper Company, "The Manufacture of Ledgers and Bonds;" William McCorkindale, superintendent of the Parsons Paper Company, No. 2 mill, "The Manufacture of Fine Writing Paper;" John Stalker, superintendent of the Beebe & Holbrook Company, "The Manufacture of Book and Engine-Sized Writing Papers;" William Reardon, superintendent of the Albion Paper Company, "The Manufacture of Manila Paper;" Moses Newton, president and treasurer of the Chemical Paper Company, "The Machinery of Paper Making;" Sumner H. Whitten, with the Holyoke Machine Company, will also speak.

Sale of Patents.

N. P. Wardwell, receiver of the Globe Paper and Fibre Company, will sell at public auction at the offices of Purcell, Walker & Burns, in Watertown, N. Y., November 20, United States letters patent Nos. 517,850, 517,851, 517,852, issued to Charles Ehrlicher, Watertown, for "logging for boilers and pipe," "fireproof sheathing" and "coverings for pipes and boilers" respectively, and also No. 286,922, issued to Joshua M. Hammill for improvement in "non-conducting compounds."

THE WERNER COMPANY.

THIS LARGE HOUSE IN THE HANDS OF A RECEIVER.

The Application Made by Officers of the Company, Which Carries On an Immense Printing and Publishing Business—The Assets and Liabilities.

Paul E. Werner, president of the Werner Company, an Illinois concern doing a book publishing, lithographing and printing business at Akron, Ohio, and George T. Rowland, superintendent of the Akron plant, last Saturday filed a petition in the Common Pleas Court, asking that a receiver be appointed for the company. The petition stated that Mr. Werner owned 12,000 shares out of 35,000, for which the company is incorporated, and that he is sole surety on \$500,000 of paper, \$50,000 of which is overdue. The company is indebted to Mr. Rowland to the extent of \$50,000.

The company was incorporated in December, 1892, after the consolidation with the Peale Company, of Chicago, with a capital stock of \$3,500,000. There is now outstanding \$800,000 in notes, while the assets are \$4,000,000. Until recently there had been no difficulty in securing money, but in the next three months \$750,000 of the paper will mature, and the company cannot get the money to meet it.

The business of the company amounts to \$100,000 a month, of which \$25,000 is profits. If a receiver be not appointed, the petition went on to state, attachments and garnishments would follow, which would ruin \$500,000 in contracts now on hand, in fulfilling which \$200,000 had already been spent of the assets. The petition states that real estate amounts to \$2,000,000, accounts receivable \$1,000,000, value of goods manufactured on hand \$75,000.

Judge J. A. Kohler heard the motion and granted it, appointing Richard P. Marvin, receiver, under a bond of \$25,000. President Werner is quoted as saying:

"Our assets under the most unfavorable circumstances are very much larger than our liabilities, and not a single creditor can possibly lose a dollar."

Mr. Levinson, of Newman, Northrup & Levinson, of Chicago, attorneys for the Werner Company, said: "The trouble is due to the lack of ready cash, caused by the hard times of the past four years. The suspension will only be temporary. It is simply a shortage of ready money that brought the receivership about, and to prevent any creditors from getting preferences over others. There is a surplus of fully \$1,000,000. The Werner Company is an Illinois corporation, being chartered December 29, 1892. Substantially all its assets and property are in Akron, Ohio. This fact subjects the company to attachments as non-residents of the State of Ohio. Some of the creditors in the East were urging their claims, and if attachments had been filed would have brought about a sacrifice of the property. Mr. Werner is one of the best-known business men in Ohio, and wouldn't think of paying creditors less than 100 cents on the dollar.

"The receivership is a move first to protect the creditors and, second, the stockholders, who have a large equity in the company. From a small concern it has grown to the largest printing house west of New York.

"The Werner School Book Company is entirely separate from this receivership, and is not affected by the failure. It is incorporated separately, and has a capitalization of \$1,000,000. The Werner Company has a capital of \$3,500,000, and has a magnificent plant. It has branch offices all over the world. Six months ago the Chicago branch was changed to Akron, though the company still has offices here.

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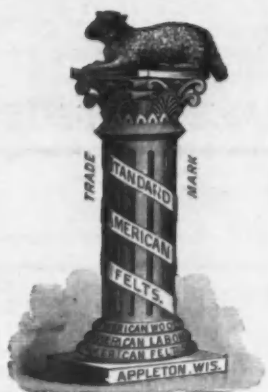
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"The Werner Company was formed December 29, 1892, by the consolidation of the Werner Company, of Akron; R. S. Peale & Co., of New York, and Belford, Clarke & Co., of Chicago. The plant of the firm was transferred to the Ohio town, with agencies in all the principal cities of the world.

"D. H. Kochersperger was at one time vice-president of the company, but is not connected with it at present in any official capacity."

Cannot be Sued Here.

In the United States Circuit Court Judge Lacombe a few days ago handed down an opinion which substantially settles the law regarding the service of process upon non-resident corporations. The question involved was whether a foreign corporation, doing no business and having no property within this judicial district, can be forced to defend a suit in New York State.

The cases in which this question came up were those of Wm. S. Brewer against the Times Printing Company, of Chattanooga, and the Union Associated Press against the Times Printing Company. These actions were for libels alleged to have been published by the defendant, a corporation organized under the laws of the State of Tennessee, in a newspaper published by it in the city of Chattanooga, Tenn.

The defendant has no property here, and has no office for the transaction of business here. The plaintiffs sought to obtain a jurisdiction by the service of a summons upon an advertising agency, on the theory that it was a managing agent.

Permission to have this service set aside was denied, but a motion was made for a re-argument, on the ground that service on an agent of a corporation is only permissible when the corporation has property in this State, or where the cause of action arose in this State.

Judge Lacombe granted the motion to set aside the service of the summons, holding that a foreign corporation doing no business within this State and having no property here cannot be sued in this judicial district for a cause of action which did not arise here.

The Philadelphia Commercial Museum has established in connection with its work a laboratory of tests and technology, the main object of which will be the examination and analysis of raw and manufactured products. Louis J. Matos has been appointed chief. The museum has issued a pamphlet in regard to this new department, giving full information in regard to it, accompanied by a schedule of the fees charged.

ELECTROLYTIC BLEACHING.

By C. E. DAHLHEIM.

[TRANSLATED ESPECIALLY FOR THE PAPER TRADE JOURNAL.]

Before discussing the chances of electrolytic bleaching in the paper industry, I shall picture to the reader an electrolytic bleaching plant, as built by Siemens & Halske, Vienna, Austria, according to Dr. Kellner's patent.

The denaturated common salt is spread on a cotton cloth stretched in a cement tub or vat over a wooden grate, and suspended at the four sides in rings. Enough water is admitted into this vat to cover the salt. The water gradually absorbs the salt, producing a uniformly strong filtered solution, which is drawn off into another, more spacious, cement vat, which serves as a reservoir. The cloth, with the impurities retained on it, is then removed and washed out, to be used again in the same way as a support for a new quantity of salt. The amount of salt used must be in a certain proportion to the volume of water available for its dissolution, and is usually measured, so that for every 100 parts of water there are 10 parts of salt, both amounts being determined by weight. It is also admissible, however, to prepare at first a completely saturated solution, and to dilute the same afterwards with pure water to the desired degree of concentration.

The electrolyzers, which are being used for the decomposition of the salt, consist of a prismatic chest built of glazed earthen or china tiles, in which a number of electrodes corresponding to the available electric power are arranged one behind the other. The electrodes consist of glass plates, covered with thin platinum-iridium wire. The electric current is admitted through the end plates, which are composed of platinum-iridium web. The hard rubber, which, up to a short time ago, had been used for the electrolyzers, failed to prove sufficiently durable in practical use; the substitution of earthen tiles, however, has rendered the apparatus in all of its parts as capable of resistance as modern science is able to make it.

The lower part of the prismatic earthen vessel has the form of a funnel, and contains the inlet opening for the salt solution to be decomposed; the outlet connection is situated near the upper edge. The vessel contains in a vertical-parallel position from six to ten of the above-mentioned glass plates covered with platinum-iridium wire, and represents as a whole a so-called electrolyzer. Siemens & Halske build these electrolyzers of two different sizes; the smaller one for a tension of 55 volts, and the larger for 110 volts. The electric current required by both types is from 100 to 140 amperes, and depends on the concentration of the salt solution to be used.

According to the capacity required, from two to ten electrolyzers are arranged over a rectangular chest built of cement. The latter holds from 3 to 6 cubic metres, and is filled, either by means of a pump or natural flow, with filtered salt solution from the reservoir already mentioned. A pump of continuous action forces the salt solution through the inlet extension into the elec-

trolyzers. The solution rises between the electrodes—in our case glass plates with platinum-iridium wire—and returns into the cement chest through the outlet extension. If now the electric current is turned on to the electrodes the decomposition of the salt begins, while the hydrogen which is developed escapes and the liquid between the electrodes effervesces. The decomposition is accompanied by a development of heat, and as heat would cause the decomposition of the hypochlorite of soda developed, constant cooling must be provided for by means of a coil arranged in the cement chest. This cooling coil is best connected directly with the water-supply system of the mill, so as to dispense with the use of a special pump. The water which has passed through the coil may be used for washing stuff or any other purpose.

The salt solution in the cement chest repeats its circuit through the electrolyzers and back into the chest until the liquid tests 1 per cent. of active chlorine. The test as to the percentage of chlorine may be made either with arsenious acid or hyposulphite of soda, the first-mentioned method being the simpler of the two.

When the desired percentage has been reached the current is cut off, and the bleaching liquid is emptied into the storage tank, whereupon the decomposing vessel under the electrolyzers is filled with new salt solution and the electric current again brought into action.

This description shows that the plant for the production of electrolytic bleaching liquid is quite simple. The entire plant, including dynamo, can be accommodated within a space of from 30 to 50 square meters.

The apparatus used by Siemens & Halske for dissolving and filtering the salt is crude and not adapted for operations on a large scale. The dissolution and filtration through the cloth is very slow, owing to the large amount of dirt eliminated from the salt and the total absence of circulation, and the frequent removal and washing of the large cloth causes too much trouble. The following proposed arrangement may probably prove more practical:

A chest of brick and cement, 3 meters long, 1 meter wide and 1 meter deep, inside measurements, is by means of a partition of 2-inch planks divided lengthwise into two unequal parts, so as to leave one division 60 centimeters and the other 40 centimeters wide. The partition, however, does not extend to the bottom, but leaves a free space of 5 centimeters beneath. The large compartment, which serves for the reception of the salt, is covered 10 centimeters above the bottom with filtering stones, while the other compartment has 50 centimeters below the upper edge a woolen filtering cloth, which is stretched on a frame and divides the compartment parallel to the bottom. On the long outer side of this compartment there are, at a distance of 40 centimeters from the top edge, three leaden outlet pipes at equal distances from each other. Above the larger compartment there are parallel to its length three shower pipes. The bottom of the cement chest is provided with a valve for cleaning purposes. The apparatus works as follows:

The division of the chest which has the filtering stones on the bottom is furnished

with salt; it holds, according to the state of aggregation of the salt, from 1,000 to 1,500 kilograms. Water is then admitted through the shower pipes; the salt sinks together and begins to melt. The solution passes through the filtering stones and, rising in the other compartment, filters through the cloth and flows off through the lead pipes 20 centimeters higher up. The slower the cloth permits the liquid to pass, the higher will be the level of the liquid in the larger compartment, and the higher pressure thus produced in turn increases the permeability of the cloth. The coarser impurities are retained on the filtering stones; small heavy particles settle on the bottom of the chest, while the light floating impurities are retained by the cloth. After all of the salt has been dissolved the flow of water from the shower pipes is continued until the liquid in the chest is no longer salty; the bottom valve is then opened and the water allowed to escape while the chest is being washed out with a hose and nozzle, the jet of water also being turned onto the upper side of the filtering cloth.

The salt solution which flows from the dissolving vessel through the lead pipes collects in a basin situated at a lower level, and is in the latter diluted either with pure water or the salt water from the stuff chests until a 10 per cent. solution is obtained, which is transferred into a larger reservoir, situated preferably on the ground floor.

The solubility of salt is such that hot water absorbs only a hardly perceptible larger quantity of it than cold water. The following table shows the parts of salt dissolved in 100 parts of water at different degrees of temperature. There are dissolved at:

Degrees C.	Parts.
0	35.52
5	35.93
9	35.74
14	35.87
25	36.13
40	36.64
60	37.25
70	37.88
80	38.22
90	38.87
100	39.91
110	40.35

Almost 36 parts of salt are therefore dissolved in 100 parts of water at ordinary temperature. The percentage of salt contained in a solution can be ascertained by the specific gravity of the latter, according to the following table:

Percentage of salt.	Specific gravity of solution.	Percentage of salt.	Specific gravity of solution.
0	1.000000	14	1.106985
1	1.007562	15	1.114807
2	1.015125	16	1.122666
3	1.022694	17	1.130564
4	1.030269	18	1.138504
5	1.037855	19	1.146489
6	1.045455	20	1.154520
7	1.053068	21	1.162601
8	1.060698	22	1.170734
9	1.068349	23	1.178921
10	1.076022	24	1.187165
11	1.083719	25	1.195469
12	1.091444	26	1.203835
13	1.099199		

The use of the electrolytic bleaching liquid has been explained in the article on "Straw Pulp Manufacture with Electrolytic Bleaching," published in No. 32 of THE PAPER TRADE JOURNAL, 1897. What has been said there regarding the bleaching is applicable with slight deviations also to all other paper stock, be it chemical fibre, esparto or rag half-stuff.

Adirondack Forest Preserve.

President Benton Turner, of the Freydenburgh Falls Paper Company, and president of the Treadwell Mills Pulp Company, of Plattsburg, N. Y., has been beaten by the State of New York in his attempts to secure lands in the Adirondack forest preserve.

Attorney-General Hancock, of New York, has just received notice of a decision by the United States Supreme Court that virtually settles the right of the State to seize lands within the forest preserve of the Adirondacks upon which there are arrearages in taxes, and to compel persons who have cut timbers from the lands, after the arrearages began, to pay the State for such timber cut. Benton Turner, a large Adirondack land owner and lumber merchant, appealed to the United States Court from a decision of seizure of his lands by the State, on the ground that chapter 488 of the laws of New York for 1885 is a contravention of the first section of the fourteenth amendment of the constitution of the United States, in that it deprives persons of property without due process of law. The court decides that the law gives ample opportunity to owners to pay their arrearages in taxes after notice is given, and that the State has a right to take the land at tax sale.

Seven thousand five hundred acres of land were involved in the case, and by the decision the State will also acquire final title and possession to thousands of acres, the ownership of which depended upon this suit. In addition to the gain of 7,500 acres the State will get a considerable sum as the price of timber cut from the land after the State bought the title at the tax sale. It was alleged in the original case that while Turner was being prosecuted he obtained some kind of a transfer deed from one John B. Riley, a former secretary of the Civil Service Commission, and later a Federal official. The Attorney-General says the settlement of the case is a great victory for those who are striving to protect the forest.

New Corporations.

The Nassau Printing Company, of New York, has been incorporated. Capital, \$15,000. Directors, Edward Greenbaum, Ferdinand Greenbaum, T. W. Timpson, Max Klein and Fred Knowles.

W. H. Gannett, publisher, Augusta, Me., has been incorporated. Capital stock, \$150,000. The officers are: President, Sadie E. Gannett, and treasurer, W. H. Gannett.

The Virginia Newspaper Company, Norfolk, Va., has been incorporated. Capital stock, \$25,000.

Mrs. Keturah Miles has sued the strawboard company at Carthage, Ind., for \$2,000 damages, and an injunction to restrain them from dumping the refuse from their factory into the reservoir built to receive it. The company formerly dumped into the river, but Fish Commissioner Sweeney got after them. Now Mrs. Miles wants to enjoin them from using the reservoir, because it raises such a stench and breeds so many mosquitoes.

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NEW YORK, SATURDAY, NOVEMBER 6, 1879

In another column will be found an article on electrolytic bleaching, by C. E. Dahlheim. It is a translation from the German, and gives an idea of what is being done across the water in this line. It will be of interest to every paper and pulp maker, especially to those who have considered the matter of electrolytic bleaching.

A JAPANESE house has sent an order for somewhat over 100 tons of paper to a Canadian mill, the order being addressed to Ontario, U. S. A. He evidently knew where good paper was made, and it, without doubt, was his intention to buy American product. His lack of knowledge of geographical distinctions, however, caused him to send the order across the line. Meantime the Canadian papers are taking to themselves considerable consolation out of the matter.

In the last issue of THE JOURNAL there appeared, by a trick of the types, under the heading of "Personals," this statement: "The grand jury of Cumberland, Md., has the Eureka Paper Company, of Fulton, N. Y." As is self-evident, this is an error. The grand jury does not possess the Eureka Paper Company, and there is no reason why the latter should be possessed by the former. In attempting to make a correction, the printer misplaced the linotype slug, and so, instead of righting a wrong, made two wrongs.

Now that the elections are over people can again settle down to business, and in most cases there is business to be done. The number of men in employment has increased very materially, and manufacturing plants which have been idle have started up. In the paper line reports from mills indicate a fair volume of business, and in many cases product is not being shipped rapidly enough to keep consumers from making complaints for non-delivery. There is a general widening of the demand, and in almost every respect trade has improved to an extent which has caused some manufac-

turers to add to their equipment, much to the delight of the machine-building fraternity.

THE Board of General Appraisers has just made its annual report, in which it is stated that since the board was organized on August 1, 1890, 204,499 protests have been placed before it. Of this number it has decided 155,393, leaving 49,106 undisposed of, 40,000 of which are on the "suspended files," action being delayed on them at the request of the importers, pending court decisions in cases involving the same questions. This shows the great amount of work which has been constantly before the board, but it is a noticeable fact that that work is growing lighter, the number of protests filed being considerably less than formerly. For instance, in the first sixty days after the passage of the act of August 28, 1894, 2,896 protests were filed, while in the same period following the passage of the present act only 739 protests were filed, while the number of those during the past year—14,544—is the smallest in any year of the board's existence. These facts would seem to show a condition of affairs much more pleasant to importers than those existing heretofore. While considered as a whole the work of the board has been satisfactory, it is hoped that the recent changes made as to its method of conducting business will make it of more value and service to the business community.

THE opposite way of transacting business is illustrated by a case which came under our observation this week. A young man, who started in the paper and paper stock business only a comparatively short time ago, has informed his creditors that he has no assets wherewith to satisfy them, adding thereto a formal notification that he has retired from business. At a later date he appears as the manager of a newly organized company in the same line of business. Just why stress is placed on the fact that he has retired from business we are at a loss to understand. Possibly the creditors are expected to console themselves with the fact that while there is no money or other assets with which to pay them, their claims will not be increased, for the reason that the debtor has indeed retired from business under his own name. Wiping out claims by retiring from business seems to be an entirely new plan.

THIS week a receiver was appointed for a large Western printing and publishing house, and the movement has of course attracted considerable attention in the trade, as the concern is a large buyer of paper. It is stated that the course indicated was taken owing to a lack of ready cash, and because it was deemed the best way to protect the interests of both creditors and stockholders. It is stated that there are ample assets to pay all claims in full, and that the house has work enough on hand to tax its full capacity for six months. It would seem that the right course had been taken, and it is refreshing to see a concern acknowledging its position promptly and satisfactorily, and protecting its creditors, rather than scrambling along and using up its resources in a useless way, its entanglements continually growing greater at every step. It is to be hoped that the affairs of the company referred to will be quickly adjusted, to the profit of both itself and those who have sold it merchandise.

ONE of the points upon which the daily papers in commenting upon the twenty-fifth anniversary number of THE JOURNAL seem to place stress is the vast increase which has been made in the last twenty-five years in the paper mills in the United States. A comparison of figures seems to startle them and call forth many expressions of surprise, and so it ought. While the number of mills has not been increased to a very large extent the production of each of them has been enlarged enormously, and what would be considered a small mill

to-day was a large mill then. During the last five or ten years particularly the advance of the trade has been very marked, and on the presumption that the next five years will see only equal progress, a man who should drop out of trade circles would find at the end of that time that he had much to learn in order to catch up. The progress made in paper making has been fully as great as that made in any line, and considerably more than that made in many, although all manufacturing interests have been speeding along at a rapid gait. The production of paper has outstripped the consumption, and one has only to compare the growth of the former with that of population to get a rough and possibly extreme idea of the whole case. A very interesting question is as to what the outcome of the next decade is to be in the paper manufacturing trade. By way of answer one can get all sorts of guesses, many of which are somewhat startling.

Watermarks.

BY DANDY.

So far as the paper trade was concerned Akron was a mighty big place on the map this week, and those who had accounts there—and some of those accounts are big—had a goose-flesh sensation at first. However, that has passed, and all accounts agree that everybody will be paid eventually. I certainly hope they will, for the sake of everybody concerned.

The sulphite man has his troubles just the same as anyone else. He has not only patent suits to look after, but he has difficulties with his neighbors. For instance, here is one man who had a dispute with one of his neighbors over the question of flooding his land. The dispute waxed rather warm, and finally the sulphite maker was staggered by a letter which he received from the man at the other end of the case. The letter is as follows:

"I Dont want you to pass no Water on to me neather wone way or the other. Dont want you to pass your Water on to ether Brook i Dont Want my hay Drowned out and What Wood i have i cant hay every year and i expect cut more and to clear it up and if you Doo pass your Water you will pay Damage and big to."

Does the gentle reader wonder that the sulphite man immediately prepared for the worst that this man, who was so modest that he used a small "i," could do?

There is a fine row on in Philadelphia over the paper and other supplies which have been furnished to the public schools. The dissatisfied have not only been complaining as to the quality of the paper, but also as to the price. They have been submitting samples to various houses in the trade, and getting quotations which they have been using as clubs with which to cudgel the contractor.

The contractor says he did not select the quality of the paper, that it was asked for by a committee of the board of education, and that therefore the committee should be rounded up.

A Wisconsin paper tells of seven cars filled with paper, which passed through Janesville a few days ago. It says that the paper was going to California, and that the freight was \$350 a car. That's a pretty stiff rate.

A well-known bookseller, says an exchange, sent a bill to a customer recently, and received the following reply: "I never ordered the book; if I did you did not send it; if I got it, I paid for it; if I didn't, I won't." Very likely this man bought his books by bulk to fill a given space, and didn't mind the titles. His answer is almost as mixed as the doctor's, who said, when asked if a certain disease was typhoid fever, that it hadn't been yet, and it wasn't now, but still it might be.

It is claimed by leading Argentine shippers that rope and twine of American make are meeting with very great success in that market. Good; if this continues we'll soon have the whole South American Republic "on a string."

"Did you see the play last night?" I asked a Holyoke man in a Nassau street paper broker's office. I knew he had intended going.

"Well," he answered, sententiously, "it may have been 'play' for the girl with the

big hat in front, but it was hard work for me, I can tell you."

The diminutive paper stock man is in trouble. First of all, the election didn't go his way. Then to add to his disgruntlement he wandered into his office the day after the "ball was over," and carelessly banged one of his plate-glass doors against a projecting piece of furniture, and smashed it to smithereens. The glazier who viewed the wreck said it would cost the price of several tons of coal to repair the damage. The paper stock man says the election has cost him several pains.

Changes, Removals and New Firms.

I. B. Manning has opened a stationery store at Wolfsboro, N. H.

A. J. Kellogg has sold the *Express*, Durand, Mich., to the *Express Publishing Company*.

H. T. Rain, publisher, McDade, Tex., has sold out.

William Peck, publisher, Vergennes, Vt., has sold out to D. C. Peck.

The Progress Publishing Company, Charlottesville, Va., has sold out.

A. M. Todd, publisher, Clinton, Ont., has sold out.

The Arbutnot Brothers Company, printer, Toronto, Ont., is offering to compromise.

The B. A. Mead Company, publisher, Augusta, Me., has sold out.

F. T. Drebert, publisher, Chatfield, Minn., has been succeeded by Drebert & Woodcock.

Paul S. Ware, publisher, Thief River Falls, Minn., has been succeeded by H. Mussey.

Trabue Van Culin, stationer, Denver, Col., has sold out to the Bancroft Book and Stationery Company.

W. T. Roach has succeeded to the business of the *Seymour Democrat*, Seymour, Ind.

H. N. Gaines, publisher, Abilene, Kan., has been succeeded by Grant Gaines.

A. D. McCroskey, stationer, Stewartsville, Mo., has sold out to George A. Gregory.

Elifritz & Shoemaker, printers, Springfield, Ohio, have been succeeded by John W. Shoemaker.

R. B. Quinn, publisher, Hardisty, Okla., has been succeeded by George L. Drummond.

Nicholas V. Cantasano & Brother, dealers in paper stock, New York, have removed from 43 Duane street to 190½ and 191 South street.

OBITUARY.

WILLIS H. HADLEY.

Willis H. Hadley, secretary and treasurer of the Love-Hadley Publishing Company, St. Louis, Mo., died suddenly October 26 at his home, 3891 Demar Boulevard, in the city named. He was thirty-two years of age. A few years ago he married Edith Behr. Her death as a bride was particularly sad and touching.

Mr. Hadley was marked by consumption for several years. He traveled all over the country in search of health, which he was unable to find. For a year he lived in New Mexico, and returned to St. Louis to pass the summer.

It was his intention, had he lived, to leave in a few days for San Antonio, Texas, near which city he had purchased a ranch, where he proposed to pass the remainder of his life.

ROSWELL M. FAIRFIELD.

Roswell M. Fairfield, of Holyoke, died at the city hospital, in that city, Wednesday morning, of heart failure. He had been ill at his rooms at the Windsor Hotel for a week or more, and it was thought best to remove him to the hospital where he could receive better treatment, but he died shortly after his removal to that institution.

Mr. Fairfield was a native of Holyoke, and was born on his father's farm, in the suburbs, in 1847. He was educated in the public schools and began his business career in the office of the old Hampden Mill.

In 1874 he entered the employ of the Whiting Paper Company as a bookkeeper. He was promoted to paymaster, and then to office manager and agent of the Collins Manufacturing Company. He resigned his position in 1887 and went to Europe for the benefit of his health. Returning a year later he bought the plant of the Salmon Falls Paper Company, at Russell. On assuming control, Mr. Fairfield demolished the old mill and built a new one. He also put in a new dam, and changed the name to the Fairfield Paper Company. The mill was stocked with new machinery, including two large Fourdrinier machines, and employment was given to 250 hands. Mr. Fairfield was successful with the mill until a year ago, when the financial pressure became too great, and the company succumbed. The mill passed into new hands, and is now known as the Woronoco Paper Company. The reverses sustained by Mr. Fairfield finally brought about his death, nervous prostration being followed by heart failure. Mr. Fairfield had a wide circle of friends. He was whole souled, genial and staunch in his friendships. He possessed large business ability, and was a hard worker. The funeral arrangements have not been made.

SENECA SANFORD.

Seneca Sanford, of the firm of Estes & Lauriat, Boston, Mass., died at his home on Waban Hill October 29, after a long illness.

Mr. Sanford was well known in business and social circles in Boston, having been identified with the firm of Estes & Lauriat since its formation twenty-five years ago, and having been a partner for the last ten years. He was also very prominent in Masonic circles, a member of St. Omer Commandery, K. T., the Mystic Shrine, etc.

He left a widow and two children, who have the sincere sympathy of a wide circle of friends and acquaintances.

William A. Elwell for twenty years in the employ of S. D. Warren & Co., Cumberland Mills, Me., dropped dead of apoplexy in the paper mills October 26. He was a veteran of the war, and leaves a widow and one son.

Word was recently received of the death of Henry B. Tucker, son of Henry O'R. Tucker, proprietor of the *Press*, Troy, N. Y., in the Klondike region last September. He was twenty-four years of age, a graduate of Yale College, and had worked on the *Press* as compositor, reporter and finally as associate editor.

Jacob Bunn, who was largely instrumental in establishing the *Inter Ocean*, Chicago, Ill., having contributed to the original stock, is dead, at the age of 83 years. He was at one time associated with the late Charles A. Dana on the *Chicago Republican*, which was the predecessor of the *Inter-Ocean*. He had been engaged in the grocery and banking business, and at the time of his death was president of the Illinois Watch Company.

Henry George, twice nominated for mayor of New York, died suddenly from a stroke of apoplexy at his campaign headquarters in the Union Square Hotel, October 29. The funeral services were held October 31, from the Grand Central Palace, and it is said the assemblage of citizens there has not been exceeded since the death of Grant. Mr. George was born in Philadelphia, Pa., September 2, 1839. He was the son of R. S. H. George, a small publisher, and when 19 years old went to California, where he became successively a printer, reporter, editor and founder of several newspapers, and subsequently in England a newspaper correspondent for several American journals. He was the author of "Progress and Poverty," "Social Problems," "Protection or Free Trade," "The Land Question," and "Property in Land," which have been published by the author under the style of Henry George & Co. He is survived by his widow, who was a Miss Fox, and three children, the name of one of whom, Henry, the elder son, was substituted for his father's on the mayoralty ticket. The burial was in Greenwood Cemetery.

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Correspondence.

MIAMI VALLEY.

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, November 4, 1897.

The battle of the ballots is over and peace once more reigns. Fortunately, this fall's election was not as harmful to business interests as was anticipated. It is the national contest that makes the average manufacturer "shake in his boots." Trade disturbances were lacking this year.

Business continues to show marked improvement, and a true era of prosperity seems to have dawned.

Not a few valley manufacturers paid their respects to President McKinley at Cincinnati on Saturday, and heard his magnificent tribute to labor and industry. He predicted renewed activity in industrial circles, and pledged his best efforts in bringing about a condition so much to be desired.

The motion of the Harding Paper Company for the appointment of an expert accountant to examine the accounts of the Louis Snider's Sons Paper Company was overruled by the court this week. This application was made in the matter of the assignment of the Louis Snider's Sons Company to F. S. Heath, trustee. There were other names to the petition.

A big commercial transaction involving a large Dayton concern, which has been supplying the paper and machinery trade for several years, was closed this week when representatives of an Eastern syndicate purchased the American Stoker Company for \$220,000. About two years ago the Stoddard Manufacturing Company introduced a coal stoker for use under steam boilers, which effected an economical saving in coal, and greatly mitigated the smoke nuisance. At that time the article gave promise of revolutionizing this feature of factory machinery, and it has fulfilled its promise. The stoker was brought to the notice of Eastern capitalists, who sent their representatives, Royal C. Peabody and Frank H. Field, of Brooklyn, to this city to investigate. They reported favorably, and made the purchase for the amount above stated—\$150,000 in cash and \$70,000 in stock of the new company, which will be organized in the East.

The Stoddard Manufacturing Company will continue to manufacture the stokers under contract with the new company for the Western trade. The company was originally organized with a capital of \$50,000, with John W. Stoddard as president, C. G. Stoddard vice-president and treasurer, and H. W. Fullerton general manager.

Accidents—Frank Wilson, employed at the Gardner Paper Mills, at Middletown, had his right hand and arm badly burned by a blaze from the furnace; N. O. Shelby suffered the loss of two fingers at the Niles Tool Works; Harry Gausman, employed at the Wardlow-Thomas Paper Mills, was caught in the belt and sustained a crushed thumb, which necessitated amputation at the second joint; James Emmins fell from a stepladder at the Amanda Mill and received a broken right arm; Charles Parent, of the Tytus-Gardner mill, had his right arm and hand crushed in a machine, requiring the amputation of his index finger.

The machinery was placed in position at the Harding Paper Company's mill at Excello, this week. The improvements on this mill and at the already completed plant at Franklin will involve an expenditure, it is said, of \$75,000. The old machinery has been removed from Excello to Franklin, and it will almost double the capacity of the latter mill. The Excello plant is a dream of perfection, mechanically, and is one of the most complete in this neighborhood, and Dayton concerns contributed liberally to the machinery equipment.

Col. Alexander Gordon writes his friends from Moscow that he will return to America shortly. His mission in Russia is strictly of a business character.

B. B. Thresher, of the Seybold Machine Company, has returned from New York.

C. D. Mead will be at his desk shortly, after an extended sojourn at Mount Clemens, Mich., for the benefit of his health.

George E. Easton, of the Easton Printing and Manufacturing Company, and the Easton-Reynolds Company, who was severely injured in a wreck some time since near Dayton, is gradually improving, and will be able to attend to business in a few weeks. Mr. Easton was among the more seriously injured. Out of a list of ten or twelve injured only one fatality resulted, however.

Dayton creditors were notified this week of the appointment of Richard P. Marvin as receiver of the Werner Printing and Lithographing Company, which was incorporated under the laws of Illinois, to pub-

lish and manufacture books and to do a general printing and lithographing business, in 1892, with a capital stock of \$3,500,000.

As the situation is understood here the application for a receiver was made by P. E. Werner and George S. Rowland, superintendent of the Akron (Ohio) plant. The petitioners allege that the action is brought for the benefit of themselves and creditors, who are so generally scattered that it was impossible to get them to join in the petition. Mr. Werner, of Akron, is the owner of 12,000 shares, of the par value of \$1,200,000. He claims to be the sole surety on notes aggregating \$500,000, and that of this amount \$50,000 is now overdue.

The notes now outstanding amount to \$800,000, though the assets are estimated to be over \$4,000,000. It is said that until recently the company encountered no difficulty in meeting all obligations, and that arrangements were made only a short time since for a loan of \$1,000,000. This money was to be secured from Eastern and Western banks in installments, and it was figured that the profits from the manufacture and sale of product would net \$150,000 each month, which would be paid upon the outstanding indebtedness of \$800,000. There is now due \$50,000, and the rest will become due as follows: In November, \$200,000; in December, \$200,000; in January, \$200,000; and in February, \$100,000. The company will not be able to meet the obligations, and it was consequently deemed prudent, in order to protect all creditors, to place the property in the hands of a receiver. Monthly receipts are accredited as being over \$100,000, with profits exceeding \$25,000. The company has contracts for \$500,000 worth of work, and more than \$200,000 has been expended in fulfilling the same.

President Werner has given out the following statement: "We have accepted during the last nine months an enormous amount of orders, some of our contracts being the largest ever undertaken in our line of business in this or any other country. We required an extraordinary amount of money to conduct our business, much of which had to be borrowed.

"Recently a number of creditors have been pressing us for payments, and demands were made for money faster than we were able to procure it. Under these circumstances, and taking into consideration the large magnitude of our affairs, we feared that some creditors might endeavor to secure advantage over others, and desiring to meet all alike and to protect the property for all interested parties, we decided to take this precautionary measure.

"Our assets under the most unfavorable circumstances are very much larger than our liabilities, and not a single creditor can possibly lose a single dollar. Our factory in Akron, and, in fact, our entire business, will be continued without interruption.

"We have sufficient orders on hand to operate our plant to its utmost capacity for six months. We employ about 1,200 people in Akron, and the daily output of our factory is from three to four carloads of books and other products in different departments.

"The bulk of our indebtedness is held in the East. Advices which I have already received satisfy me that the receivership will be only temporary, and the company's affairs will be quickly adjusted."

The president's announcement has given satisfaction to Dayton creditors, and doubtless it will be similarly received in other sections.

The assets are, as nearly as can be ascertained, as follows: Accounts receivable, \$1,100,000; material and goods, \$750,000; real estate, \$2,000,000.

Liabilities, on notes, \$800,000.

M. V.

GREAT BRITAIN.

[FROM OUR REGULAR CORRESPONDENT.]

LONDON OFFICE PAPER TRADE JOURNAL,
1 Mitre Court, Fleet Street,
LONDON, England, October 28, 1897.

Cross & Bevan's discoveries relating to cellulose are attracting as much attention here as pegamoid did when it first came out. Some of the cellulose products, in fact, closely resemble pegamoid in their properties. For instance, what Mr. Cross calls viscose can be used to coat or film paper on one side only, or on both sides, or again the paper can be indurated with the cellulose by passing it through a bath of the viscose and removing the excess by squeezing rollers. Paper can also be engine-sized or treated in the pulp with viscose. I have seen samples of these papers, and the result reminds me very much of pegamoided paper, but these are only a few of the uses that have been suggested for viscose, that is to say, cellulose in solution. Mr. Cross explained the manufacture, and detailed all the uses that had been suggested in a Cantor lecture, and I note that this is being published in *Invention*, a weekly paper,

something after the style of the *Scientific American*.

The drop in wood pulp prices, or rather the want of firmness in the market, is thus explained by *Wood Pulp*, a paper which is in a position to know what it is talking about. Scandinavian sellers, says this journal, are now beginning to realize that the American competition is no bogey scare. There is certainly a tendency to accept somewhat lower prices than have been prevailing. At the same time it cannot be overlooked that freights are hardening, and therefore buyers cannot look for any considerable fall. Business in sulphite has remained unchanged since last month, but American shipments are certainly falling off, owing no doubt to the improvement in trade there. American exchanges still speak of a big export business, but we think there is little foundation for their reports. Until American manufacturers realize the fact that to sell here pulp must be properly packed, their competition will not amount to much. Some shipments of Canadian sulphite are being made, and several contracts have been effected for this pulp.

The old portion of the Otley Paper Mills has been seriously damaged by fire. These Yorkshire works, owned by Peter Garnett & Sons, are among the oldest in the country. Five engines were soon on hand after the alarm was given, and the flames were restricted to the older blocks of buildings, and happily the modern portion—which is kept running night and day—remains perfectly intact, so that there will be no very large number of hands thrown out of work as a consequence. The Otley Paper Mill has been in existence for a century or more. The portion of the premises where the outbreak occurred is known as the Old Mill, a square, two-story block, which is close to the river side, adjoining the damstones. It contained a quantity of loose waste paper, etc., and some sixty tons of sulphite pulp, the latter valued at between \$50 and \$55 per ton. All this was destroyed, a circumstance which indicates how fiercely the flames from the loose material and wood-work raged, inasmuch as the sulphite pulp is not of an inflammable nature, being closely packed in bales of about 4 cwt. each. It so happened that none of the principals were at home. W. H. T. Garnett and Percy Garnett—who have the practical management of the concern—were both spending Wednesday night at Harrogate, where their father (Jeremiah Garnett) resides, and it was not until nearly 3 o'clock in the morning that they were acquainted with the unfortunate occurrence. They at once rode off on their bicycles for Otley. At the fire there was a large concourse of spectators, and throughout the day the scene was visited by hundreds of people.

Alexander Cowan & Sons, of Penicuik, owe, or do not owe, the North British Railway Company a nice little bill for freight. They say they don't, and to prove it they have refused to settle up ever since January, 1893. So now that the respectable sum of \$39,500 is in dispute the matter has got into the Scottish courts. The dispute is concerning a charge of 5s. per ton which the railway company exacts for the conveyance of esparto grass from the harbors of Leith and Granton to the sidings at Penicuik. The paper makers submit that the charge is excessive, and that an undue preference is being shown to other traders. They further object to the increase in incidental charges, and they claim a considerable rebate on the collected and delivered rates at Balkeith and Penicuik, and also on the station to station rates; and they conclude by stating that since January, 1893, they have withheld payment of their account from the company. The railway company, in its answers, denies the allegation of undue preference, and points out that the rate was formerly 5s. 4d., and was reduced to 5s. on the representation of the paper makers themselves. It denies that the applicants are entitled to the rebate claimed, and submits that if they do not accept the group rates now exacted they must pay such rates within the maximum as the railway company decide to charge, and with a view of having this settled the railway company now asks the court to fix these charges. The case is not yet concluded.

At a meeting of the workmen of the Darwen Paper Mill Mr. Squire, the late manager, was presented with a marble timepiece and ornaments as a mark of the good feeling which had prevailed during the time he was with them. Joseph Squire resigned the management of the Darwen Mills to take the management of the North of Ireland Paper Mills. They wished him every success in his new undertaking. Mr. Squire, in thanking them for their kindness, wished them and the Darwen Paper Company every success.

At a special meeting of the Culter Mills Paper Company, Limited, it was formally resolved that the capital of the company be increased from \$312,500 to \$437,500.

Earlier in the month a special memorial service was held in Caldercruix Parish Church on the occasion of the unveiling of a handsome tablet to the memory of the late Robert Craig, of Caldercruix & Moffatt Paper Works.

The first annual dinner of the British Wood Pulp Association will be held at the Hotel Cecil next week. The president, Edward Partington, will be in the chair if his engagements permit.

Bentley & Jackson, of Bury, paper-makers' engineers, have been affected by the engineers' strike. They engaged some non-unionist pattern makers, whereupon in the old sweet way the union pattern makers sent in their notice.

The old firm of Waterlow & Sons has been registered as a limited company, with a nominal capital of \$6,750,000. This firm prints either the whole or the greater part of the railway tickets used in England.

There was a fire at the Inverkeithing Paper Mills, belonging to Caldwell & Co., last week. This was distinctly traced to the electric light, and points out a danger. The globe of an electric lamp in the machine room burst, and sparks fell upon some loose paper, which instantly sprang into a blaze. Before the night staff at the works could get the fire under control, which they managed to do with their own appliances, the flames spread to the finishing room. Most of the damage was done by water, and it is estimated that \$1,200 will cover it.

Ide & Christie, in their last report, note that the esparto market during the past four weeks has been dull, with brief revivals of inquiry, chiefly for Spanish esparto, for winter and spring shipment, the prices of which have been firmly quoted at an advance. In other descriptions, only a very limited demand has been experienced, notwithstanding the readiness evinced by sellers to make contracts and to modify prices. Imports for September have been heavy, particularly of Tunisian shipments, and the record for the three-quarters of this year has been larger than in any similar period since 1891. The comparative figures for twelve months also show a material increase in the receipts, but it must be noted that a considerable portion of the imports from Tunis last month was temporarily stored at docks, and did not pass at once into consumers' hands. Otherwise the arrivals were fully required for contract engagements, and, indeed, in more than one large mill stocks had run inconveniently low, and replenishment was anxiously awaited. Steamers available for charter have been scarce, and for moderate-sized boats high rates had to be paid. It is probable that this condition of the freight market will be reflected in diminished receipts during the current month.

ALFA.

FOX RIVER VALLEY.

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., November 2, 1897.

A tour of the mills reveals the fact that so far as the amount of business being done is concerned everything is very satisfactory. The Thilmany Pulp and Paper Mills, of Kaukauna, report that they shipped more paper during the month of October than during any other single month since the mill was built. The Western Paper Bag Company also reports that it shipped more paper during October than during any other single month since the mill has been under the present management. Orders are very brisk, almost all the mills have had to run Sundays during the past month, a full complement of help is employed, and if prices would only take an upward turn the paper manufacturer's cup of happiness would be full.

An item of news that your correspondent has been nursing for two or three weeks until the proper time should arrive for giving it out is that the proprietors of the mill of the Plover Paper Company, on the Wisconsin River, are on the point of making some important improvements, not the least of which will be the addition of another large paper machine, making two instead of one, as at present. This machine will be employed in making the regular line of fine book and flat papers for which the Plover is already well known. George A. Whiting, of Menasha, is the moving spirit in this concern.

Your correspondent is informed that the Fox River Paper Company, of Appleton, will commence next month making the loft-dried flat papers for which the Lincoln mill has been preparing for some little time past. There is still quite a little work to be done to get the additional apparatus in readiness. The heating and ventilation is now being attended to.

The Thilmany Paper and Pulp Mills have ordered another stack of calenders, which is expected to be delivered this week, and will be added to a machine that is al-

ready provided with two stacks. The calenders will have heavy 9-inch rolls. The machine for which they are intended is making the fibre paper for which the Thilmany Mill is so well known, and will permit of putting on an especially fine finish and bringing the papers up to the highest standard of excellence.

It is expected that a decision will be rendered this week by the United States Supreme Court in the Kaukauna water-power cases, which will make it known whether or not the Kaukauna Water Power Company will be able to use water power from its canal on the south side of the river. At least two important matters are hanging on this issue. N. H. Brokaw, of the Kaukauna Fibre Company, has decided that he will not increase the capacity of his plant, as has been announced, unless he gets the water power to run the establishment with. Then, also, the utilization of the site of the burned mill of the Badger Paper Company will depend upon the same condition. It is hoped in Kaukauna that the decision of the Supreme Court will be of such a character as to provide a ground for a compromise between the Green Bay and Mississippi Canal Company, which is now in absolute possession of the field, and the Kaukauna Water Power Company, whereby both sides of the river may be permitted to use a certain percentage of the water power.

Just at present there is quite a flurry in Kaukauna over the building of a new dam, which has just been completed across the river just below the tail race of the Thilmany mills. The dam, which is about 3 feet high, has been built by the Green Bay and Mississippi Canal Company, for the purpose of carrying out the order of the Wisconsin Supreme Court adjudging that a certain percentage of the water must be delivered down what is known as the Meade and Edwards channel of the river, to be used by two or three pulp mills located thereon. It results that the building of the dam backs the water up nearly 3 feet toward the wheels of the Thilmany mill, and the Thilmany people yesterday served notice upon the Canal Company that they should hold them responsible for damages. The Thilmany people claim that the order of the court might be complied with in such a way as to injure nobody's power, and that is the way it will have to be done. What the result will be remains to be seen.

The mill of the Kaukauna Fibre Company has been repainted a dark red color.

The Badger Paper Company, of Kaukauna, maintains its office in its regular office building, which escaped the fire. All the office work connected with the business of the Quinnesec Falls Company is transacted from Kaukauna, and this is sufficient to keep the force from idleness.

The S. A. Cook Manufacturing Company, Menasha, which was referred to last week, has been incorporated within the last few days. The capital stock is placed at \$60,000, divided into 600 shares. The articles of incorporation are signed by S. A. Cook, M. H. Ballou, Watson Yule and H. H. Cook, who constitute the company.

It is expected that navigation on this river will close about the 15th of this month. The stage of water is especially good for this season of the year, the water being up to the crest of the Menasha dam. According to the recent order the water may be drawn 6 inches below the crest, but this leeway has not yet been needed, in spite of the fact that very little steam power, comparatively, is being used. The Government is about to commence the work of replanking the main dam at Kaukauna. Four-inch plank will be used.

Wenzel Plier, employed in one of the paper mills, was quite seriously, though not dangerously, injured last week by being caught by a belt. He suffered cuts on the head and bruises on the body.

Two new railway side tracks are being put in at the plant of the Riverside Fibre Company, in this city.

N. H. Brokaw, of the Kaukauna Fibre Company, is expected home to-night from Boston, whither he went to attend the meeting of the sulphite manufacturers. James Conley was the only other representative of this valley at the meeting.

J. Stillwell Vilas, of the Badger Paper Company, departed this morning on his annual deer hunting expedition to the Northern woods.

C. B. Pride, the Appleton architect, is also absent at present on a deer hunt.

C. E. Escott, of Kimberly, has returned from his vacation trip to the East.

Superintendent J. H. McLaughlin, of the Marinette and Menominee Paper Company, was in this valley last week, visiting friends.

A. M. Meineke, of Boston, is calling on the trade here.

Herman Welk, formerly with the Badger Paper Company, has removed his family to Jackson, Mich., where he has secured employment in a paper mill.

FOX RIVER.

HOLYOKE.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., November 4, 1897.

The changes in the condition of trade of late have not been very important, one way or the other. Most of the mills are doing a fair business, but any of the manufacturers will admit that they could accommodate considerably more business without any effort. What is true of one mill will apply to all, although, of course, some are better off than others.

Although the manufacturers here have felt the strain of the hard times as much and perhaps more than those in other places, I have seldom heard less murmuring than has been the case in Holyoke. All through the four years of financial strain our manufacturers have kept up a brave front, and have tried to take things as they came. Of course, there have been some exceptions to this rule, but not very many.

The mills, as a rule, are fairly well supplied with orders. At any rate, they have enough to last for a time, and the supply is likely to increase as the days go by.

There is quite a fair demand for book papers of a good grade, and the medium grades are also moving well. Fine writings are also well in hand, as regards orders, and the volume of business is quite sizable.

The death of Roswell R. Fairfield, which occurred at the City Hospital this afternoon, was a great surprise to his many friends here, as it was not thought that his illness was critical. A little party of us saw Mr. Fairfield removed from the Windsor Hotel this morning about 11 o'clock, but we little thought that inside of two hours he would be dead. Mr. Fairfield had hosts of friends in this city, and his sudden death will cause general regret.

William McCarthy, John Ross and Henry Strain, the three men who were injured late last week in the elevator accident at the Whiting No. 2 mill, are all doing well. McCarthy was hurt the worst, his right arm being terribly bruised. The others both received a bad shaking up, but fortunately no bones were broken. No cause has been given for the breaking of the cable. It was put in only a few months ago, and appeared to be all right.

The friends of the Connecticut River navigation scheme are working with considerable zeal in the interest of the plan to open the river to navigation. They claim that the scheme, if pushed through, means a saving to the people mainly interested of \$1,000,000 a year in freight bills. It is estimated that at least 400,000 tons of freight a year could be received, and about 200,000 shipped. This would be a percentage of about 40 to come by water.

The Young Men's Christian Association of this city has arranged for some very interesting talks from manufacturers in the near future on the theory and practice of paper making. William Whiting will open the course with a talk on "The Manufacture of Ledgers and Bonds"; Wm. McCorkindale, superintendent of the Parsons No. 2 mill, will follow on "The Manufacture of Fine Writing Paper." The next speaker will be John Stalker, superintendent of the Beebe & Holbrook Mill, and his subject will be "The Manufacture of Book and Engine-Sized Paper." William Reardon, superintendent of the Albion Mill, will tell what he knows about "The Manufacture of Book and Flat Papers." Moses Newton, of the Chemical Paper Company, will speak on "Manilla and Similar Papers," and Sumner H. Whitten, of the Holyoke Machine Company, will close the course with a talk on "The Machinery of Paper Making."

Charles Hardick, the printer who was killed in Brooklyn last week under such tragic circumstances, spent most of his youth and early manhood in this city. He was employed at one time or another in most of the local job offices, and was con-

sidered a bright young fellow. He had a very erratic temperament, and he could not content himself very long in one place. His mother resides here, and the funeral took place in this city.

The Linden Paper Company's mill has started up after a brief shut down.

A. E. Hemphill, who is well known to stock dealers who use his storehouses, was elected to the State Legislature yesterday. Mr. Hemphill has been there before, and was always a well-posted and valuable man.

J. E. Randall has sufficiently recovered from the operation for appendicitis to be discharged from the hospital. H.

WATERTOWN.

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., November 4, 1897.

Election day brought at least some consolation to the paper manufacturers of this vicinity. Whether their candidates won or lost did not interfere with the joy of seeing it rain. Quite a fall of rain came down between Monday afternoon and Wednesday, and in consequence the river is full. This, of course, will only last for a few days; but these few days are being seized upon by the pulp makers, who are trying to make a harvest while the water lasts. Wood pulp is selling on the cars at the mills at three or four dollars advance over prices in August.

A fire at the house of Hon. George A. Bagley, president of the Bagley & Sewall Company, started by a lace curtain being blown against a gas jet, caused quite an excitement in this city on Monday night about 9:30. It was quickly subdued, but not until some damage to carpets, furniture, etc., had been done. This is the second fire at Mr. Bagley's in a couple of years.

Edward W. Remington, treasurer of the Watertown Paper Company, is an ex-alderman now. Another paper man beat him in the general Republican slump of Tuesday. The successful candidate was George B. Kemp, president of the Glen Tablet Company.

The damage caused at the Glen Tablet Company's plant last week by the explosion of the glue tank has been repaired, and all is merry again. The man and girl who were injured are fast recovering from their burns.

John H. Neutze, superintendent of the Bagley & Sewall Company, returned Monday from a trip in the Western States.

At the organization meeting for incorporating the new St. Paul's Church, in this city, held last Monday evening, Hon. George A. Bagley, president of the Bagley & Sewall Company, Stewart D. Lansing, secretary of the same company, and James L. Newton, treasurer of the Newton Falls Paper Company, were chosen vestrymen.

Welcome news to the trade of this section is the information that the State has over 100 men at work on the great dam on the Beaver River. Thousands of barrels of cement have been put into new masonry, and the job is about completed. The news is encouraging, as the fall rains must soon commence, and the trade want the big reservoir full for protection in the winter months, when the water is liable to be as low as in summer, and which is a much more serious problem, for low water in winter means a general freezing in flumes and wheel pits and tail races, which causes no end of annoyance and damage.

Louis Lansing, general manager of the Frontenac Paper Company, of Dexter, N. Y., who lives in this city, makes daily trips between his home and the mill. On Wednesday evening, returning about 7:30, he met with an accident, which terminated rather fortunately for him and his horse. Coffeen street, from Cedar to Hewitt

street, is being repaired. The centre of the road has been filled with large stones, over which it is almost impossible to drive, while on the south side of the street an excavation for a sewer is being made. The only place to drive on this thoroughfare is on the north side, and the road is only wide enough for one team. A board has been placed in position at the ends of the sewer ditch to obstruct teams, but no obstruction was placed in front of the stones in the centre of the road. On the evening in question Mr. Lansing had reached a point near where the sewer commences. A team was in front of him, going slower than he cared to drive, and he therefore reined his horse one side and started at a good rate of speed. In a moment his horse fell into the sewer ditch. The buggy toppled over, and Mr. Lansing fell partly under the horse. Fortunately the horse was quieted, and Mr. Lansing pulled out without serious injury. When he arrived at home he almost required identification before the servants would let him in. The damage to horse and buggy will probably not exceed \$100, but the escape of Mr. Lansing was miraculous.

C. W. Lyman, secretary of the American Paper and Pulp Association, and general manager of the Herkimer Paper Company, of Herkimer, N. Y., is staying a couple of days here visiting the various members of the association in the Black River district.

W. P. Herring is to build a paper mill in connection with his pulp mill, 3 miles below Carthage. The walls are already well started. The machine will be a 100-inch one, and the paper will be used for boxes, which, it is reported, will also be made at this mill. This new industry will give work to a large force of men and women, and when Mr. Herring erects thirty dwelling houses in that section, as he expects to do, there will be quite a village there. F. M.

THE NEW ENGLAND CIRCUIT.

[FROM OUR REGULAR CORRESPONDENT.]

SPRINGFIELD, Mass., November 4, 1897.

Leaving the Hub early in the week very little time has developed since my last communication for local events to mention, and so the news of the week from Boston must lay over until "our next."

What the two days' travel bring, in light in connection with the paper business proper is very limited from a "news" point of view.

Although spending a day in Holyoke, the far-famed paper city of the country, nothing of special trade interest came to notice. And since that field is so well covered by your regular Holyoke correspondent anything that I might report from the paper manufacturing end would come only as a repetition of what he will report this week. While several paper manufacturers were seen and the situation talked over, the interviews, as the treasurer of one mill remarked, "were for general conversation, and not for publication." If the present condition of business can be maintained until the holiday season is over paper manufacturers will be fairly well satisfied, but they hope for a much better business with the early days of the coming new year, now only two months distant.

Among those furnishing the mills with supplies some improvement in orders is reported. This is the condition with the "wire" makers of Holyoke.

Mr. Brown, of Brown & Sellers, stated that his looms were running full time at present, the improvement dating back a couple of months, and orders were coming to hand more encouragingly from mills in the various localities.

Mr. Smith, of C. H. Smith & Co., whose specialty is dandy rolls, is fairly busy and at times much rushed. The "rush" he says is because when a dandy is ordered one day it is wanted the next, owing to the new pol-

icy of ordering nothing until it is wanted for immediate use.

Business with the Buchanan & Bolt Wire Company, as per reports of Mr. Bolt, is good, the factory running full. This company is having quite a run on its new wire among book mills, since paper made on this particular wire is free from "wire marks." Samples of super calendered paper, which was made on this wire, were shown, containing several half-tone prints, and the views print up very handsomely. "Where the absence of wire marks is desired, that result can be obtained by the use of this new wire," said Mr. Bolt, and the book paper presented for inspection seems to substantiate the statement—there were no wire marks in it.

With the Norwood Engineering Company, of Florence, Mass., where I called yesterday, business is very good. Mr. Stevenson, the manager, stated that the shops were full of orders, running full every day, and with an increased force of men. In company with Mr. Stevenson I went over the plant, and some of the jobs in hand were pointed out. A full rag duster outfit for the Mead Paper Company, of Dayton, Ohio, was under construction, a thrasher for the Bryant Paper Company, of Kalamazoo, Mich., and one for the Shattuck & Babcock Company, of De Pere, Wis. These rag thrashers contain quite a number of improvements, and are designed especially to take dust and dirt out of the rags as they come from the bale before they go to the cutter. A new feature in these thrashers is an adjustable screen under the cylinder, which can be raised close to the points of the pins, thereby making it an efficient machine for opening short as well as long stock. There are other features of merit in these improved rag thrashers that add considerable to the value of the machine. Quite a number of orders for friction calenders were also receiving attention, one order for five calenders, it was stated, having been received from one mill.

The Norwood Engineering Company is doing a pretty good business also in its "Wilson" filter plants. One plant of 1,500,000 gallons daily capacity was just recently set up for the Toronto Paper Manufacturing Company, at Cornwall, Ont., and it is said to be giving the best of results. A 2,500,000-gallon plant is now being constructed for the Canada Paper Company, which will be completed within four or five weeks. Although very little has heretofore been said about the "Wilson" filter plants which the Norwood Engineering Company controls, the company is evidently getting them to the notice of paper manufacturers.

visiting the Northampton Emery Wheel Company, at Leeds, Mass., attention was called to the company's new "automatic" knife grinder, a machine that should interest manufacturers who have heavy knives to grind.

Mr. Otis, treasurer of the company, in explaining the merits of this new knife grinder, said: "In designing these machines we have eliminated radical defects in other makes of machines now on the market. Our emery wheels are run at their normal speed; and the travel of the knife bar is made comparatively slow. By this means the life of the emery wheel is greatly prolonged; its cutting properties increased; and the tendency to heat the work greatly lessened. We place all the cross feed on the knife bar carriage. This enables us to bolt the emery wheel firmly to a solid base as it should be. The feed mechanism is controlled by either one or two handles, as desired. As the emery wheel is not moved there is no necessity for lengthening or shortening the main and feed belts, as in some other makes of machines, where the wheel is moved to the work. Aside from these points, our machines are built high, thus making them easy and convenient to handle, and the best of work and material is put into them. The bases are wide and heavy, insuring steadiness in running and

accuracy of work. We build these machines, either for plain or cup wheels, and for any shape or length of knife."

Parties interested are at liberty to address the company for further particulars.

Did time permit these lines could be extended, but as the mail for New York will soon close for the night these lines must also close. DELESERNIER.

Japan Buys Canadian Paper.

The statement made through *The Globe* by Mr. George Anderson, the Dominion Trade Commissioner to Japan, that Canada might have the trade of that country, appears to be borne out to some extent by a fact that came to the knowledge of *The Globe*. Messrs. Taylor Brothers, of the Don Paper Mills, received an order from a Japanese importing firm of high standing at Yokohama for 110 tons of paper, the firm being prepared to put up a cash deposit of half the value of the order if Messrs. Taylor Brothers decide to fill it. This shows that paper may be added to the list of articles in which it is desirable to build up a trade with the island empire. It may be added that the envelope containing the order bore evidence of the need for enlightenment of the commercial people of Japan in regard to matters Canadian, in the fact that the address located Toronto in Ontario, U. S. A.—*The Globe, Toronto, Ont.*

A very handsome and voluminous edition of THE PAPER TRADE JOURNAL has just been received, and both for its beauty as a masterpiece of the printer's art and for the mass of valuable matter it contains the book deserves special mention. THE PAPER TRADE JOURNAL is published in New York city by the Howard Lockwood Publishing Company, 143 Bleecker street, and the firm takes this method of celebrating the silver anniversary of the publication's existence. Twenty-five years ago it was established by the late Howard Lockwood, who managed it until his death, five years ago. The present souvenir number contains a host of beautiful illustrations, and among other interesting things a review of the paper trade since Dr. Rittenhouse erected the first American paper mill in Philadelphia in 1690. The *Commercial List* extends congratulations and thanks.—*Commercial List and Price Current, Philadelphia, Pa.*

The paper trade in this city, as well as elsewhere throughout this country, are just now exploiting their praise of the twenty-fifth anniversary number of THE PAPER TRADE JOURNAL, which has just made its appearance. This publication is issued by the Howard Lockwood Publishing Company, of New York, and is the representative journal of the pulp and paper trade in North America. The anniversary number is a production that is typographically artistic, and cannot but be of the deepest interest to paper and pulp manufacturers from the comprehensive way it has compiled readable and authentic articles on the growth of the trade with its various arteries in this country. In addition, the book is highly illustrated with portraits of prominent men in the business. Niagara Falls is singularly honored with articles by J. C. Morgan, of the Niagara Falls Paper Company, and the Hon. Arthur C. Hastings, of the Cliff Paper Company, and mayor of the city. Portraits are presented of both these gentlemen, and Mr. W. E. Tuttle, the representative in this State of THE JOURNAL. Mr. Morgan wrote a very interesting article on Niagara Falls as a paper-making locality, while Mr. Hastings graphically described the running of paper machines by electricity. Every branch of the trade is covered by articles written by experts, which fact in itself will make this book very valuable and preserved as a book of reference for time to come.—*Niagara Falls Gazette.*



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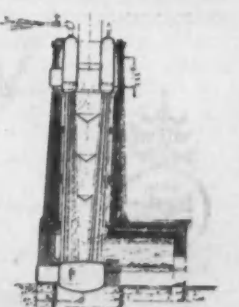
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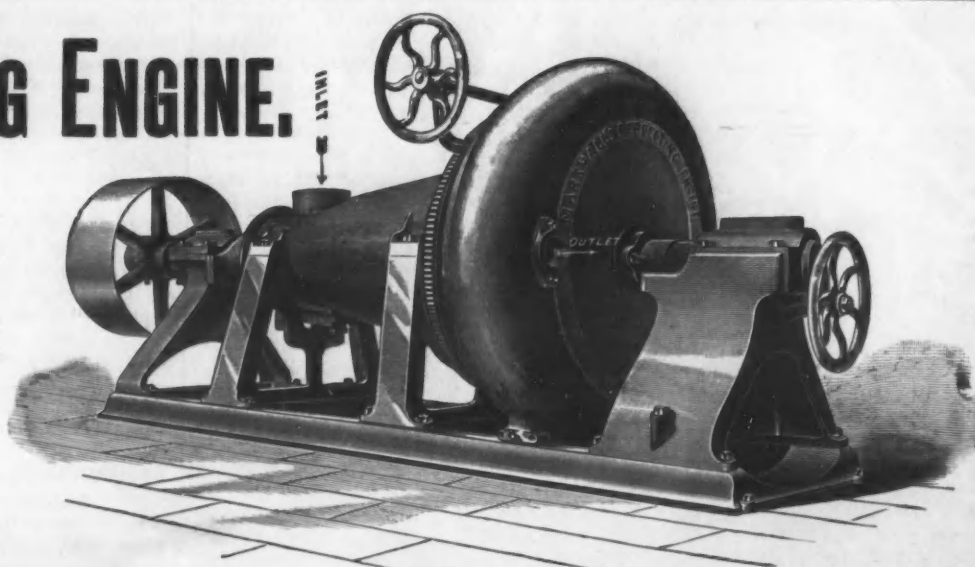
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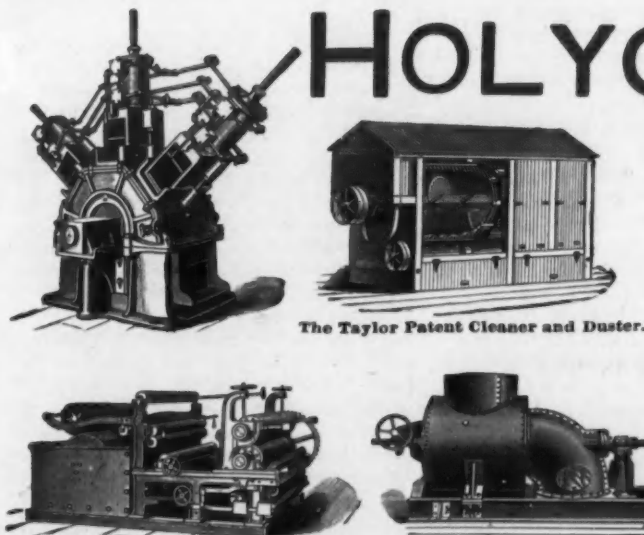
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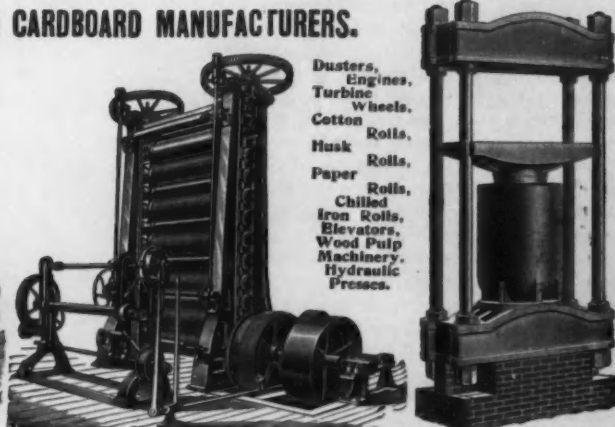
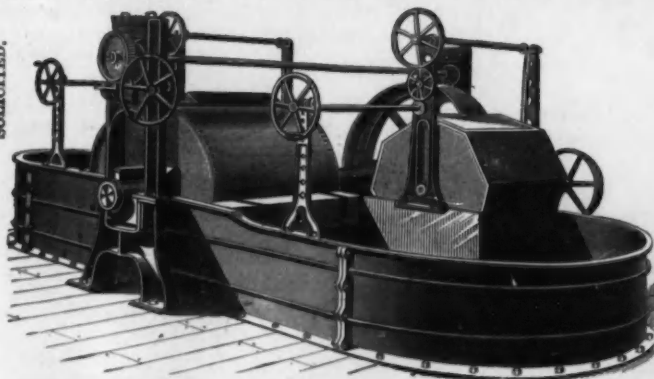
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The machine saves from 10 to 15 per cent. of good wood over ordinary methods.

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Manufacturing News.

EASTERN STATES.

The Winnipisaukee Paper Company, Franklin, N. H., has built a large water tank at No. 1 pulp mill to supply water for automatic sprinklers in the mill. The company's large machine at No. 1 paper mill, which has not been in operation the past year, has been started up.

Two million feet of logs have been shingled into the lagoon above the falls, at Rumford Falls, Me. Since May the paper and sulphite mills there have converted over 14,000,000 feet of spruce into pulp and paper, and it is thought that they will use another million feet before the river freezes.

The Haverhill Paper Company, Haverhill, Mass., has shut down its mill temporarily.

The Roaring Brook Paper Manufacturing Company, East Glastonbury, Conn., reports that business is improving. The mill is running full time, with plenty of orders ahead.

Twelve or fifteen men are at work about the ruins of the Peter Adams Paper Company's mill, Buckland, Conn. They are clearing up the debris and taking down the machinery. The paper machines and calenders are very heavy, and it will be a long task to remove them. The insurance on the mill has been adjusted to the satisfaction of the Pickles brothers, and this fact, in connection with the activity about the ruins, gives hope that they will rebuild in the spring. The members of the company decline to make any promises for next year, and only say they will not begin to rebuild this fall.

The pulp mill crew has finished piling logs in South Gardiner, Me. There are 63,000 logs in the pile, which is said to be the largest on the Kennebec River.

The Eaton, May & Robbins Company, Lee, Mass., will make some changes in machinery.

Work on the mill of Eaton, Dikeman & Co., Lee, Mass., is in full blast. The big flume has been torn away, and a large force of men is preparing the timbers for the new flume and frame for the new buildings.

MIDDLE STATES.

W. C. Geer, of Troy, N. Y., has purchased the property of the Ondawa Paper Company, including mill, machinery and water power, at Middle Falls, Washington

County, N. Y., which was sold by H. W. C. Hill, as referee, for \$17,250. The property was sold under foreclosure of a mortgage of \$40,000, of which C. H. Garrison, of Troy, was trustee. The property recently went into the hands of R. H. Van Alstyne as receiver, and originally cost \$130,000. The trustees were represented by T. S. Fagan and Jeremiah Long, of Troy. Mr. Geer expects to sell the mill at an early date.

George A. Wood, assignee of Margaret P. Heyser, has sold at public sale the remaining part of the assigned estate, consisting of 127 acres and the large paper manufacturing establishment called Hollywell along the Conococheague Creek about a mile from Chambersburg, Pa. Frank Lindsey was the purchaser, and the price paid was \$7,135.

One of the paper machines in the upper machine room of the Glens Falls (N. Y.) Paper Mill Company is being repaired with new parts, shafting, etc. A cement floor will be laid in that machine room.

The Oswego Machine Works, Oswego, N. Y., has opened a store at 329 Dearborn street, Chicago, Ill., which is in charge of J. M. Ives, and where a full line of the Brown & Carver cutters will be carried. The company has recently made sales of these cutters to Leslie & McAfee, Minneapolis, Minn.; Brooklyn (N. Y.) Daily Eagle; Armour & Co., and S. D. Childs, Chicago, Ill.; Pigott & French, Spokane, Wash., and the Maryland Lithographic Company, Baltimore, Md.

The Noble & Johnston Machine Company, Hoosick Falls, N. Y., has received an order from the Jessup & Moore Paper Company, Wilmington, Del., for one Stevens double-roll beating and mixing engine, of 1,200 pounds capacity, and from H. H. Childs, for the Childsdale Straw Board Mills, Rockford, Mich., for one Monarch Jordan engine.

WESTERN STATES.

Eastern parties have been in Rochester, Minn., negotiating for starting a linen paper factory there. They have leased the large building in North Rochester now in use by the Flax Fibre Company, and will at once begin to put the rooms in shape for the manufacture of this paper.

SOUTHERN STATES.

A delegation of paper manufacturers from New York, Rhode Island, Massachusetts,

Connecticut, New Jersey and other Eastern States will spend the first two weeks of November in Randolph, Tucker and Preston Counties, W. Va., on the great tract recently purchased by the Vanderbilt syndicate with the view of locating large plants along the streams.

CANADA.

Mr. McDougall, president of the Montreal Quarry Company, representing a Montreal (Que.) syndicate, has purchased the Pont Rouge Pulp Mill from James Reid. The mill will be improved and enlarged at an expenditure of between \$40,000 and \$50,000.

A High Compliment.

The following letter fully explains itself:

KIMBERLY & CLARK COMPANY, }
NEENAH, WIS., October 1, 1897.

Hyatt Roller Bearing Company, Harrison, N. J.:

DEAR SIRS—Your inquiry regarding the success of your Hyatt roller bearings in connection with the machinery of our Telulah Mill is at hand, and I beg to say in reply that we fitted up eight rag engines, part washers and part beaters, and one 50-foot line shaft running in seven boxes, and the two stacks of calenders of our machines with your roller bearings.

We first experimented with one, as you know, and were so well satisfied with it that we installed all of our rag engines with roller bearings. Then came the line shaft, and after that, as we were changing our calenders, we placed them on top and bottom rolls of the calenders.

Everything has worked satisfactorily, and while, as we were at that time running with water, we did not materially notice the difference in the amount of power taken, yet we knew we were saving very materially by the way the engines were running; but when we came to hitch on to our steam engine a short time ago (owing to the water supply being low and others having priority in our race) we found the same engine would handle our entire mill with a great saving of power, and while in former years we have been forced to crowd the engine to its utmost, she now goes along with the greatest ease.

In conversation with our superintendent to-day I asked him for his estimate of the saving in power over the old-fashioned bearings on the entire outfit, and he read-

ily said he was satisfied that we were saving 25 per cent. As you know, this is not a scientific test in any way. It is simply taken from the actual working of the machinery from day to day, as it was before and after we placed the roller bearings on the engines and line shaft.

To demonstrate the saving on the first engine we tested (which converted us to the use of the roller bearings), I will say that we ran our engine with an 18-inch six-ply belt, and were forced to keep it very taut to have the engine do its work well. This, of course, produced an extra amount of friction on the bearings. After we put the roller bearings on this engine we found we could drive it readily with a 10-inch four-ply belt, running very slack and loose since the first day we put it on, and the work has never been done better than it is being done at the present time.

I have received quite a number of inquiries from different parties for information as to this engine and the work that it has done, and I am satisfied that no one will make a mistake in changing any of their machinery or shafting from the old-fashioned babbitt bearings to the roller bearings, as the saving will more than compensate for all the expense in a short time.

I am only waiting a little slack time to install a number of our mills with your bearings, and trust we shall be able to make the change early in the year, and that they will be as satisfactory as at the Telulah Mill.

Wishing you success in this new enterprise, I remain, very truly yours,
(Signed) J. A. KIMBERLY, President.

Tariff Decision.

The decision in the following case has been handed down by the Board of United States General Appraisers:

On protest of the Graham Paper Company against the decision of the surveyor at St. Louis as to the assessment of 35 per cent. duty under paragraph 307, act of 1894, on silver paper entered February 4, 1896. The importers claimed that the merchandise was dutiable as surface-coated paper at 30 per cent. under paragraph 308. The protest was sustained.

The Reformed Publishing Company, Dayton, Ohio, has been incorporated under the laws of West Virginia. Capital stock, \$25,000.

Mortgages, Etc.

[In the appended list R. signifies a renewal of a pre-existing mortgage; B. S., bill of sale; T. D., trust deed; T., trust mortgage; F., foreclosure; K., a mortgage on real estate; C., conveyance realty; Pr., printer; P., publisher; W. P., wall paper; N., news; M., music; P. D., paper dealer; P. C., playing cards.]

EASTERN STATES.

Mortgagor. Amount.
Frederick A. Kehew (P.), Chelsea, Mass. 1,600

SOUTHERN STATES.

Herald Printing Company, Middleboro, Ky. 400
W. F. Noble (P.), Weatherford, Tex. (B. S.) 1,000

WESTERN STATES.

Upton Brothers (Prs.), San Francisco, Cal., 900
Thomas R. Upton 1,350
C. Ricketts (Pr.), Boulder, Col. 400
Temple Press Society, Denver, Col. (R.) 400
A. J. McDonald (P.), Moscow, Idaho (B. S.) 500
Charles De Witt Brown (Pr.), Chicago, Ill. 140
Walter S. Parker (Pr.), Chicago, Ill. 110
J. B. Drake (B. & S.), Peoria, Ill. (C.) 4,500
E. A. Graham (Pr.), Earl Park, Ind. 200
D. R. Mann (S.), Baxter, Ia. 600
Moore & Winter (P.), Peru, Ind. 600
D. R. Mann (S.), Baxter, Ia. 200
A. B. Carroll (P.), Fairfield, Ia. 650
C. B. Montgomery (P.), Fort Madison, Ia. (F.) 600
Newton Record Publishing Company, Newton, Ia. (B. S.) 3,500
Thomas W. Morgan (P.), Eureka, Ia. 1,000
Thomas W. Morgan (P.), Eureka, Ia. (Real) 1,400
Olson & Larson (P.), Muskegon, Mich., 800
Olaf Olson, one-half interest (B. S.) 900
C. W. Mattice (Pr.), Minneapolis, Minn. 82
I. L. A. Broderson & Co. (M.), St. Paul, Minn., I. L. A. Broderson 337
A. E. Campbell (N.), St. Paul, Minn. (B. S.) 300
Joseph Victor (Pr.), St. Louis, Mo. 3,000
L. G. Blair Printing Company, Cincinnati, Ohio, Louis G. Blair 850
Dick & Son (P. D.), Fremont, Ohio 500
Ferdinand Wolf (Pr.), Toledo, Ohio 1,800

CANADA.

H. H. Lennie & Co. (S.), New Westminster, B. C. 1,000

LIENS DISCHARGED.

Curtiss & O'Neal (B. & S.), Orlando, Fla., 1,800
M. R. O'Neal 1,400
Thomas W. Morgan (P.), Eureka, Ia. 1,400
Thomas W. Morgan (P.), Eureka, Ia. (Real) 1,000
A. G. Moore & Co. (Prs.), Boston, Mass. 300
A. T. Jennings (Pr.), Charleston, S. C. 114

JUDGMENTS.

John Dolph (P.), Brighton, Ia. 132
Wimar Wall Paper Company, St. Louis, Mo. 1,500
Carpenter & Baker (W. P.), Auburn, N. Y., 4,000
Edward R. Carpenter 6,200
Carpenter & Baker (W. P.), Auburn, N. Y. 216
Kossuth Spates (N.), St. Paul, Minn. 1,345
Samuel Solomon (P.), New York, N. Y. 615.57
Merchants' Lithograph Company, New York, N. Y. 1,047.70
Reynolds Card Manufacturing Company (P. C.), New York, N. Y. 104
Sportsman's Magazine Company, New York, N. Y. 576.88
Robert H. Merriam (P.), New York, N. Y. 131
Sawfield Publishing Company, New York, N. Y. 131

IN HOSE

as in men, most trouble comes from the inside. So long as the stomach keeps sound the owner keeps useful. Just so with hose, and the fact that it has a rubber stomach doesn't alter the principle. Water hose is all right so long as the rubber tube remains tight, but once break its surface with a pin hole or crack, and what happens? The water leaks through into the plies of duck and rots one after another until the strength of those remaining is unequal to the pressure—then there is a burst. **What causes pin holes?** Particles of foreign matter in cheap, heavily adulterated rubber. The high-grade rubber which we use in **1846 Para, Double Diamond and Carbon Hose** contains so small a percentage of foreign matter that the chance of pin holes is practically wiped out. **What causes cracks?** Poor rubber again—inelastic rubber—rubber that does not respond to the bending, stretching and twisting which hose receives in service. **1846 Para, Double Diamond and Carbon** rubber is full of life and elasticity—bending, stretching and twisting does not rupture it. Ask for our brands.

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- Steam Hose
- Fire Hose
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don't always want to buy high priced imported Felts, nor do they want to experiment with inferior grades of domestic ones. The "Hamilton" answers their requirements in every respect.

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IRON OR WOOD TUBS, LAID OR STEEL BARS AND KNIVES, BED PLATES AND JORDAN FILLINGS OF EVERY DESCRIPTION A SPECIALTY. Correspondence solicited.

WOOD PULP GRINDER.

A patent has been granted for an improvement in wood pulp grinders. In the present invention the followers that act upon the blocks of wood are at opposite sides of the grinder, and equal pressure is applied to those followers, so that one pressure resists the other pressure and but little strain is thrown upon the shaft or bearings for the

In the drawings, Fig. 1 is a side elevation, partially in section, showing the improved grinder. Fig. 2 is an end view, partially in cross section, at the line 3-3, showing the device for dressing the stone to keep it true, and Figs. 3 and 4 show the valve for admitting pressure to the cylinder.

A represents the grindstone on a shaft B, and this is supported in bearings C, of any suitable character, that rest upon the side

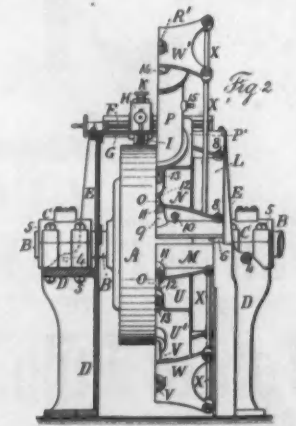
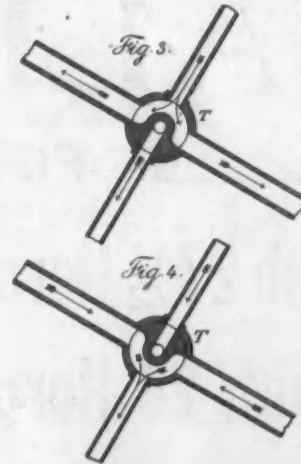
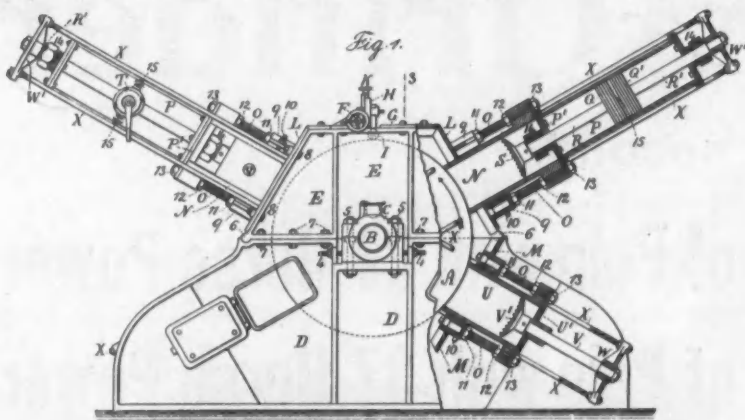
between the side plates is approximately hexagonal, there being plates L, that are bolted at 8 to the edges of the upper side plate E, and plates M, that pass in between the lower side plates D, are connected by flanges and bolts to such side plates D, and the devices connected to the plates L are similar, and hence it is only necessary to describe one set of such devices. The pocket N passes through an opening in the plate L, and such pocket has ears upon it, through which pass bolts O, that enter into sockets 9 upon the plates L, there being heads on the inner ends of these bolts and holding the nuts 11, and there are nuts 12 13 upon the bolts O, by which the pocket can be adjusted toward the grinding stone, so that the inner end of the pocket may be brought closely adjacent to the grinding stone as the latter wears away.

The hydraulic cylinder P has a head P', which is held by the nuts 13 and bolts O, so that the parts are firmly connected, and in the cylinder are pistons Q Q', with rods R R' extending in opposite directions through packing boxes or glands 14, and the rod R is provided with a follower S within the pocket N, adapted to press the block of wood toward the grinding stone, and there are represented screw stops 15 as passing through the hydraulic cylinder and coming between the pistons to prevent them approaching too close to each other, and at T is a valve or four-way cock, of any suitable construction, and water under pressure is supplied by a pipe to one side of this cock, and a pipe at the other side carries away the waste water. When this valve T is turned in one position, the water pressure acts between the two pistons to force them apart, the waste water escaping from the outer ends of the hydraulic cylinder P. When the valve T is turned in the other direction, the water pressure acts against the outer surface of the pistons to move them toward each other and the waste water passes away from between the two pistons.

Upon the plates M are pockets U, constructed similarly to the pockets N and provided with similar attaching and adjusting

screws and nuts, and upon the pocket U is a head U', with a central opening for the passage of the rod V for the follower V', and upon this rod V is a cross-head W, and upon the piston-rod R' is a similar cross-head W', and these cross-heads are connected by rods X, that cross over and advantageously pass through inside of the side plates and the grinder, and it will be ob-

posite follower V' to press such follower and the block of wood against the opposite side of the grinder with precisely the same force as the other block of wood in the pair is being pressed in the other direction. Hence the pressure of the blocks upon the grinder is balanced at opposite sides and there is little or no lateral strain, pressure, or wear of the shaft of the grinder in its



same. In this manner the grinding is effected with but little friction and the machine rendered more durable.

In carrying out this invention the follower at one side is connected to a cross-head and adjustable rods that extend to the other side of the machine, and the power is applied to move one follower in one direction and the other in the other direction. It is preferable to employ hydraulic power, the fluid-pressure acting in opposite directions against pistons in a cylinder to separate them and give motion to the followers and the blocks of wood, and when the blocks have been ground the water pressure is employed to move the pistons toward each other and draw back the followers. The parts are constructed in such a manner that they can be adjusted toward the axis of the grinder as the stone wears away.

plates D, and can be adjusted by the screws 4 and held in position by the bolts 5. The upper side plates E are separable from the side plates D upon the horizontal line of the axis, and there are knuckles 6 at the corners of the upper side plates, resting in similar recesses in the lower side plates, to facilitate the bringing of the parts to the proper positions, and bolts 7 secure the parts together.

Above the grindstone A a cross-screw F is supported near its ends upon the top plate G of the grinder, and this cross-screw F can be revolved by a hand wheel or otherwise, and it gives motion to a slide rest H, which carries an adjustable bur or dresser I, which can be moved toward or from the stone by the screw and hand-wheel K, so as to dress off the surface of the stone, as the same may become necessary, from time to time. The peripheral inclosure around the stone and

served in Fig. 2 that the plane in which one set of rods is contained is farther from the central line of the machine than the plane in which the other set of rods is contained, so that these rods pass clear of each other where they cross, and these rods X are provided with long screw threads, so that adjustments can be made with facility, as the pockets may be brought nearer to the axis of the grandstone as the surface thereof is worn away.

The aforesaid devices being connected up in pairs, as represented, there are four pockets, and the pressure in the hydraulic cylinder of one pair acts upon the pistons to force the block of wood by one follower S directly against the surface of the grinder, and the same pressure acts against the other piston and through its piston rod, cross head, and cross rods upon the cross head of the op-

bearings, and one pair of followers and blocks may be in operation while the followers in the other pair are being drawn back and fresh blocks introduced, it being understood that the action upon one pair is independent of the action upon the other pair, each pair being balanced in its action at opposite sides of the grinder. The bur or dresser I can be brought into action whenever desired, whether the other parts of the machine are in action at the same time or not. Access can be had to the grindstone for inserting another or for repairs to any part of the machine when necessary by disconnecting the cross-rods X at one or both ends and lifting the hydraulic cylinders and the upper side plates and connected parts from off the grinder. Screws may be provided at 10 to clamp the pockets and prevent vibration.

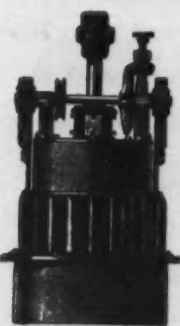
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Sprinkler.. Simplest Construction. Most Sensitive to Heat. More Accessible to Sudden Fire. The Most Effective Distributor of Water, whether used Upright or Pendent.

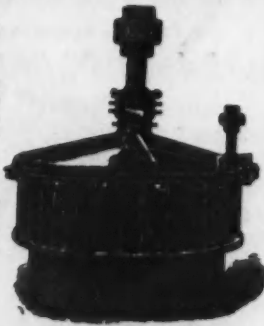
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The McCormick Turbine gives more power per diameter with a higher percentage of useful effect from the water used than any other water wheel heretofore made. All sizes, both right and left hand, tested in the Holyoke testing flume.

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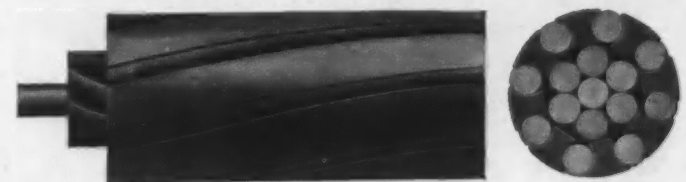
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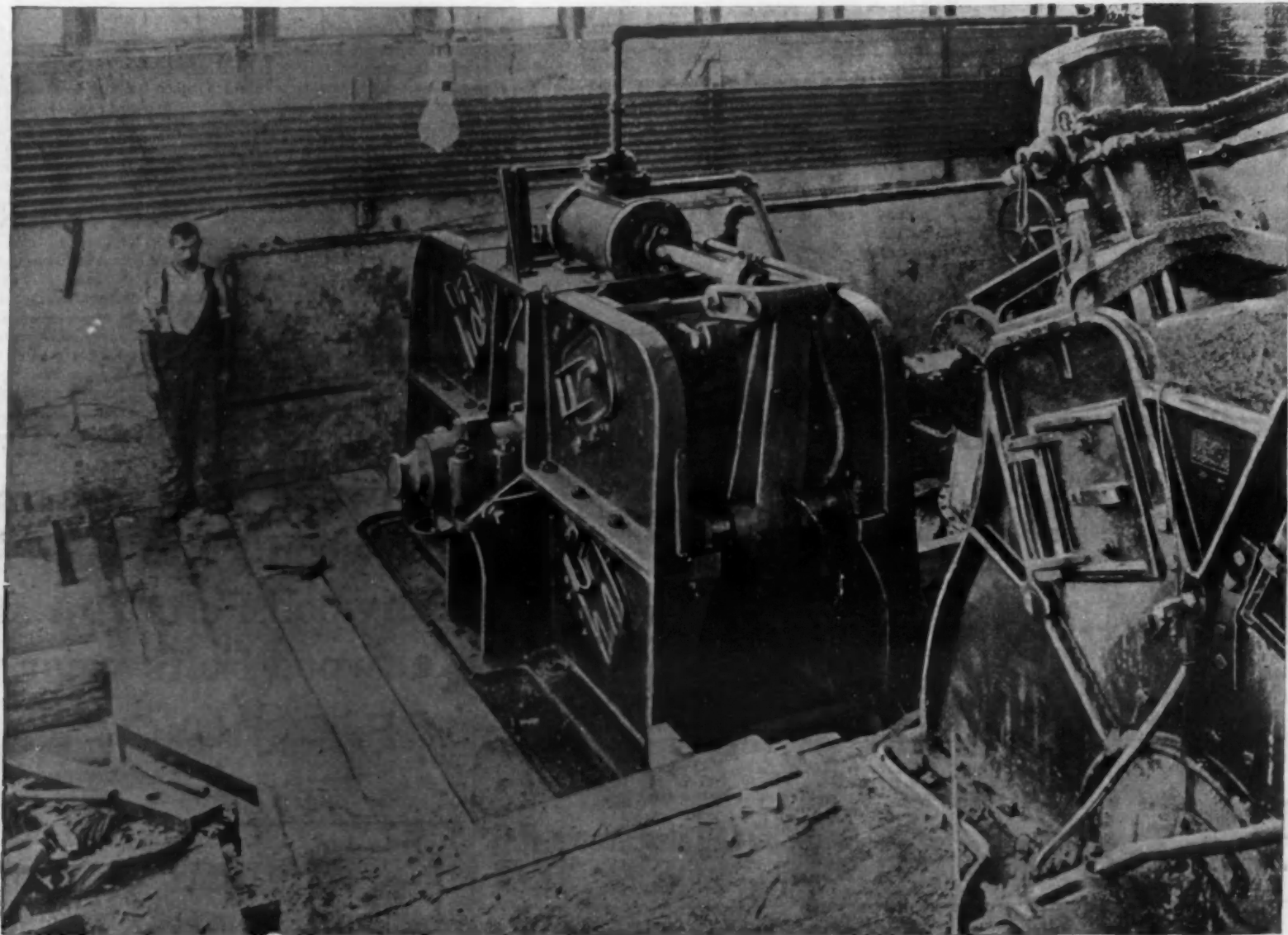
— Is FIRST. There is no second.

A Ton of Pulp with 27½ Horse Power.

A Ton of Pulp with 29 Horse Power.

A Ton of Pulp with 28 Horse Power.

A Ton of Pulp with 37 Horse Power.



Report of Test made December 23 and 24, in Pulp Mill of Genesee Paper Co., Rochester, N. Y.

1896.	Diameter of Wheel.	Working Head of Wheel in feet.	Tabled Power of Wheel.	Revolutions of Wheel per Minute.	Diameter of Cylinder.	Pounds Pressure on Gauge.	Total lbs. Hydraulic Pressure against Stone increased by average of 29 per cent.	Time in min. Grinding half cord 24 in. Rossed Wood.	Cords Ground in 24 hours.	Pounds Pulp in Cord Rossed Wood.	Tons Pulp in 24 Hours.	Horse Power per Ton.	Challenge Grinder.	
December 23.	33 in.	28 ft.	263	230	16 in.	85	20,669	117	6½	2,375	7½	37	Horse Power per ton.	Test No. 1.
December 23.	33 "	28 "	263		16 "	105	25,532							
December 23.	33 "	28 "	263	180	10 "	85	20,028						The wheel driving Three Cylinder Machine stopped dead at this pressure, and the machine could not grind a pound of pulp, while Challenge Grinder was running out Test No. 1. An absolute demonstration of the great saving of power in our machine.	Three Cylinder Machine. Test No. 1.
December 23.	33 "	28 "	263		10 "	105	24,740	0	0	0	0	0		
December 23.	33 "	28 "	263											
December 23.	33 "	28 "	263											
December 23.	33 "	28 "	263											
December 23.	33 "	28 "	263	220	16 in.	80	19,453	89	8	2,375	9½	28	Horse Power per ton.	Challenge Grinder. Test No. 2.
December 23.	33 "	28 "	263	240	16 "	80	19,453							
December 23.	33 "	28 "	263	232	16 "	80	19,453							
December 24.	33 "	27 "	248	90	16 "	90	21,884	100	7½	2,375	8½	29	Horse Power per ton.	Test No. 3.
December 24.	33 "	27 "	248	90	16 "	90	21,884	94	7½	2,375	9	27½	Horse Power per ton.	Test No. 4.

S. M. HALL, Superintendent of Pulp Mill of the Lake George Paper Co.

W. J. CREELMAN, Consulting Engineer.

CHALLENGE GRINDER CO., - - Rochester, N. Y.

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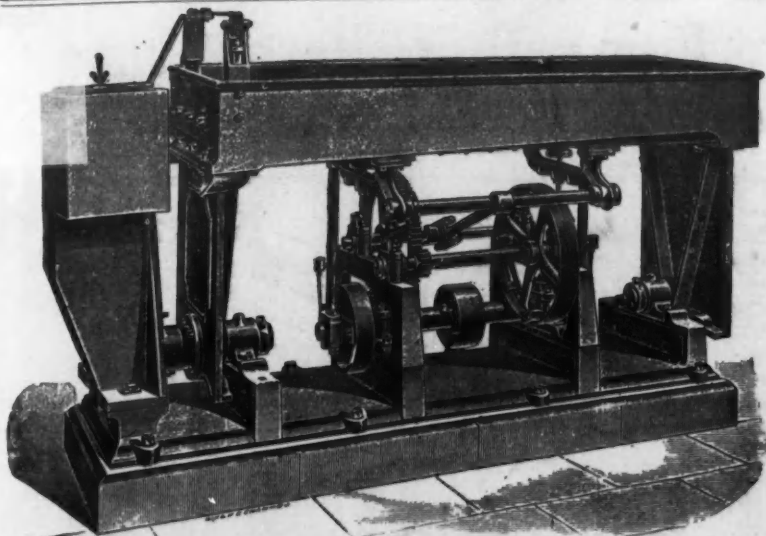
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Chicago, 14 North Clark St.
Boston, 98 Commercial St.

Aniline Colors of all Shades.

SAMPLES MATCHED.

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"WHITE'S" PATENT OSCILLATING STRAINER OR SCREEN.

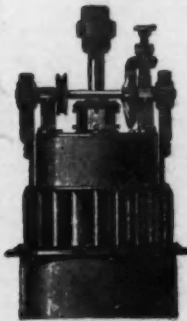
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—MANUFACTURERS OF—

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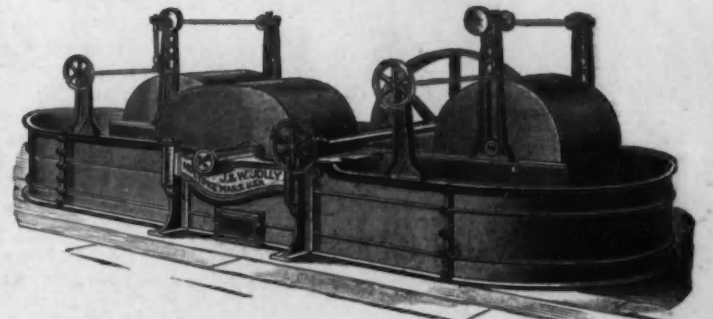
PAPER MILL MACHINERY.

Both Vertical and Horizontal



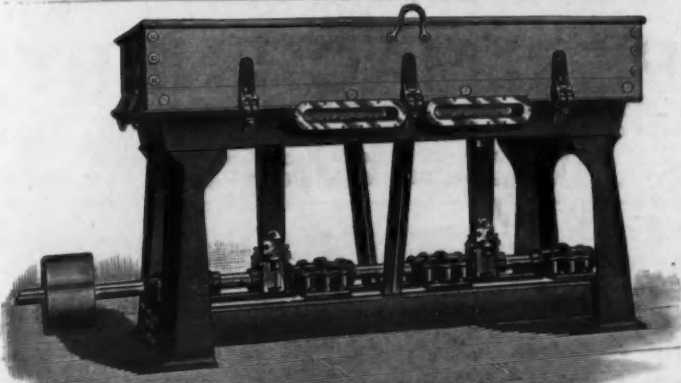
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ALLEN'S "Blue Spot" Preventive. Screens and Vats for Paper Machines. Rag Engines and Jordan Engines made and refilled. Bleach Boilers, Fan Dusters, Ferry's Patent Star Dusters. Paper Calendar Rolls made and repaired. Chilled Rolls, Sheet, Super and Web Calenders. Power Suction Pumps, Stuff Pumps, Power Boiler Pumps, Suction Boxes and Plates, Pulleys, Shafting, Gearing, &c.



For Construction, Durability or Working Capacity there is nothing superior to our BEATING ENGINE, which we make either of wood or iron.

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Wood Chippers, Knot Borers, Sulphur Burners, Vacuum, Acid and Stock Pumps, Bronze Blow-off Valves, Bronze and Lead Pipe for Sulphite Mills, Wet Machines and Light Running Diaphragm Screens for all kinds of Stock, Bronze Digester Castings.

Agents for the *Brokaw Patent Acid Plant* for Sulphite Mills, which makes as much acid in hot as in cold weather and always makes a uniform acid, which insures a uniform quality of pulp, and is simple to operate.

Rag Dusters, Pulleys, Shafting, Gearing
Friction Cut-off Couplings and
Friction Pulleys.

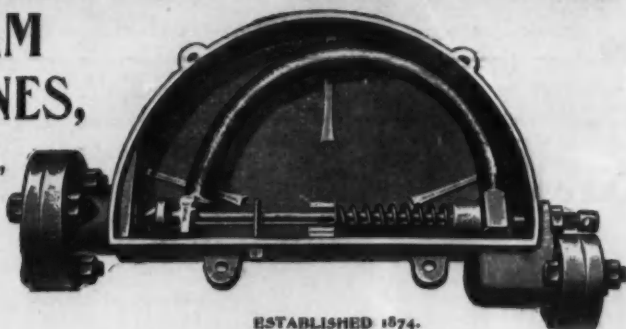
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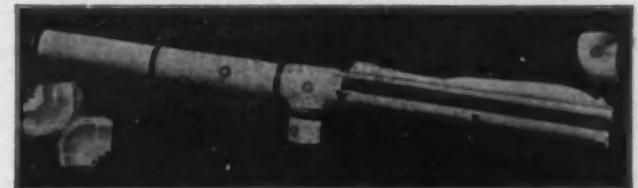
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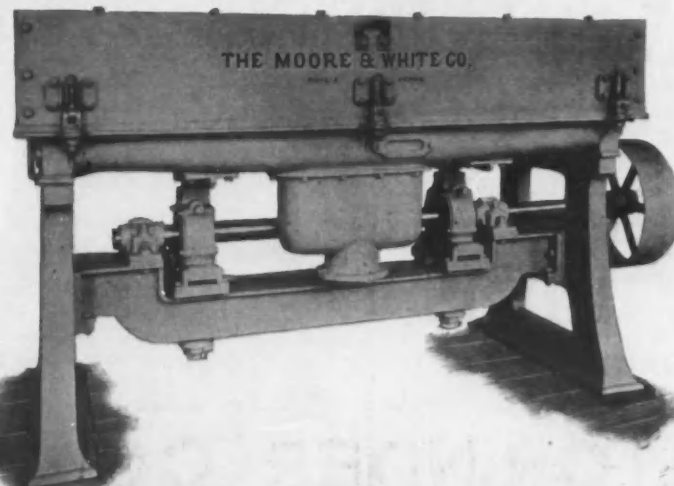
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A Screen designed to avoid the annoyance of repairs and loss of time, and to sell at a very reasonable price.

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No Rubber or Leather Diaphragms or Packing to Wear Out.

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Extra Heavy and Well Built.

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THE LARGEST MANUFACTURERS OF

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CHILLED AND DRY SAND ROLLS

FOR ALL PURPOSES.

Rolls Bored for Steam or Cast Hollow.

COMPLETE CALENDERS.

Gift Rods operated by wheels above for raising any number of the rolls. Housings so made that the rolls may be taken out endwise through frame.

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High Grade in Every Respect, Embodying All Late Improvements.

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&c., &c., &c.

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PRESS FELTS AND JACKETS FOR ALL KINDS OF PAPER.

Try our Special Five X Jackets; they have no equal.



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Pressure Pumps

FOR WOOD PULP GRINDERS.

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CONTENTS.

INTRODUCTION.

General Laws of Chemistry; Principles of Chemical Physics; Chemical Arithmetic.

PART I.

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

PART II.

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

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

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

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

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

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

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

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

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

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

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

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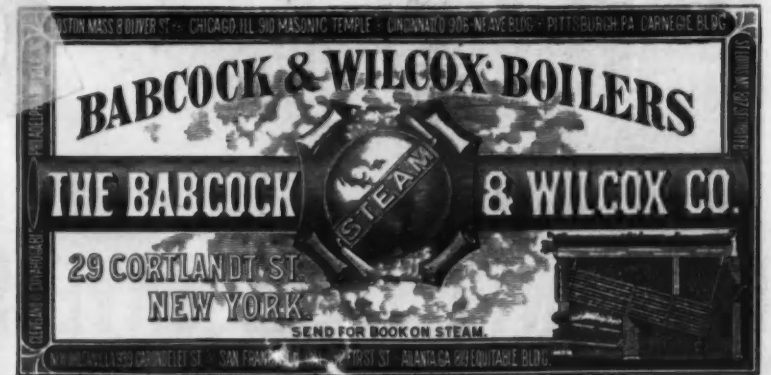
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Imports and Exports.

IMPORTS AT NEW YORK.

FOR THE WEEK ENDED OCTOBER 29, 1897.

Table listing various import items such as Alum, Aluminum Cake, Aniline Colors, Bleaching Powders, Books, Clay, Engravings, Jute Butts, etc., with their respective quantities and values.

IMPORTS OF PAPER STOCK AT NEW YORK.

FROM JANUARY 1 TO NOVEMBER 3, 1897.

Table showing paper stock imports from various ports including Antwerp, Amsterdam, Barcelona, Bordeaux, Bremen, Bristol, Buenos Ayres, Calais, Calcutta, Catania, Central America, Christiania, Colon, Copenhagen, Dublin, Dundee, Genoa, Glasgow, Gothenburg, Hamburg, Havre, Hull, Kobe, Leghorn, Leith, Lisbon, Liverpool, London, Maracaibo, Marseilles, Newcastle, Rotterdam, and Stettin.

NEW YORK IMPORTS.

FROM OCTOBER 27 TO NOVEMBER 3, 1897.

Table listing specific importers and their goods, such as F. Salomon & Co., Train, Smith & Co., James Pirnie, A. Katzenstein, O. G. Hempstead & Co., Train, Smith & Co., J. W. Mason & Co., R. F. Downing & Co., Levy Brothers Company, F. Salomon & Co., Bertuch & Co., J. W. Mason & Co., Darmstadt & Scott, O. G. Hempstead & Co., Horace Dutton & Co., Levy Brothers Company, Casell Publishing Company, Baldwin Brothers, Hughes & Fawcett, Kaufmann Brothers, Kupfer Brothers, W. H. S. Lloyd, F. Beck & Co., Robert Graves & Co., G. Gennet, L. De Jonge & Co., Dinkelstedt & Co., Knauth, Nachod & Kuhne, J. Dickerson & Co., John Glenn & Co., W. Seyd, Knauth, Nachod & Kuhne, American Tobacco Company, and Peter A. Frasse.

Text listing various importers and their goods, including G. A. & E. Meyer, Lubric & Elkus, L. De Jonge & Co., Wells, Fargo & Co., Hug & Boskowitz, J. Dickinson & Co., John Glenn & Co., Dennison Manufacturing Company, E. Kimpton, R. F. Downing & Co., L. De Jonge & Co., E. & H. T. Anthony & Co., G. W. Sheldon & Co., Fuerst Brothers & Co., A. Klipstein, J. L. & D. S. Riker, R. Crooks & Co., Edward Hill's Son & Co., and J. L. & D. S. Riker.

IMPORTS OF Rags and other Paper Stock at the Port of New York for the month ended October 31, 1897.

Table showing rags and paper stock imports from ports like Antwerp, Bordeaux, Bristol, Calcutta, Central America, Copenhagen, Dundee, Genoa, Glasgow, Gothenburg, Hamburg, Havre, Hull, Leghorn, Liverpool, London, Newcastle, Rotterdam, and Stettin.

Special List of Imports of Paper Stock at the Port of New York for the month ended October 31, 1897.

Table listing specific importers and their goods, including Bertuch, F. & Co., Biddell, E. R., Carroll, R. W., Castle & Gottheil, Darmstadt & Scott, Davy, W. O., Downing, R. F., Dutton, Horace, Franklin, R., Hampton, Geo., Hampton, J. W., Harley, Chas., Hempstead, O. G., Henderson Bros., Jessup & Moore, Katzenstein, A., Lewy Bros. Co., Liebmann, J., Mason, J. W., Perkins, Goodwin & Co., Pirnie, Jas., Ralli Bros., Ryder, E. S., Salomon, F., Small, J. B., Smith, C. E., Stratford, George, Train, Smith & Co., and various other firms.

BOSTON IMPORTS.

FROM OCTOBER 28 TO NOVEMBER 3, 1897, INCLUSIVE.

Table listing specific importers and their goods in Boston, including T. P. Smith Printing Company, W. H. Guild & Co., The G. C. Whitney Company, Carter, Rice & Co., Train, Smith & Co., T. F. Ring, E. Butterworth & Co., Horace Dutton & Co., Train, Smith & Co., The George Wheelwright Paper Company, Darmstadt & Scott, and Castle & Gottheil.

Text listing various importers and their goods, including Schulz & Ruckgaber, Train, Smith & Co., Jerome Marble, Wing & Evans, Jerome Marble, Linder & Meyer, and Philadelpha Imports.

PHILADELPHIA IMPORTS.

FOR THE WEEK ENDED OCTOBER 27, 1897.

Table showing Philadelphia imports from various ports including Brown Brothers & Co., J. L. & D. S. Riker, and Order, Maine.

EXPORTS FROM NEW YORK.

FROM OCTOBER 26 TO NOVEMBER 2, 1897.

Table showing exports from New York to various destinations including Brazil, Bremen, British West Indies, Denmark, Japan, Mexico, Siam, and Venezuela.

Special List of Exports of Paper Stock from New York for the month ended October 31, 1897.

Table listing specific exporters and their goods, including Bertuch, F. & Co., Biddell, E. R., Carroll, R. W., Castle & Gottheil, Darmstadt & Scott, Davy, W. O., Downing, R. F., Dutton, Horace, Franklin, R., Hampton, Geo., Hampton, J. W., Harley, Chas., Hempstead, O. G., Henderson Bros., Jessup & Moore, Katzenstein, A., Lewy Bros. Co., Liebmann, J., Mason, J. W., Perkins, Goodwin & Co., Pirnie, Jas., Ralli Bros., Ryder, E. S., Salomon, F., Small, J. B., Smith, C. E., Stratford, George, Train, Smith & Co., and various other firms.

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PROCESS OF MAKING PAPER.

An invention which has just been patented relates to improvements in the process of manufacturing paper, and more particularly to improvements in the process of manufacturing paper from waste paper. In the manufacture of paper from this material heretofore quantities of metallic particles, pieces of parchment, rubber, and other foreign substances found their way into the finished sheet, causing rust spots and a great many imperfections in the said finished sheet of paper, and there is also much needless wear and tear on the machinery in grinding the bits of metal referred to which pass into the finished sheet. These foreign substances referred to are in the raw material as tacks or staples for holding the sheets together and also mixed with the same as waste.

The objects of the invention are therefore to provide an improved and effective method to remove all of this foreign matter during manufacture and before the pulp is ground, and to save wear and tear on the grinding machinery, and to produce a superior article of manufacture as a consequence. These objects are accomplished by the method, process, and means described in the following specification.

In the manufacture of paper from waste paper the raw material is carefully and thoroughly sorted by hand and all foreign matter removed in that way that it is possible and practical to detect, though great care in sorting is not absolutely essential. The paper is then thoroughly dusted, then submitted to a boiling in alkali mixture to loosen all ink, oils, and other material. The material is then passed through a washer, where it is thoroughly washed and soaked and reduced to a coarse pulp, avoiding any grinding action. This coarse pulp is then passed through a pulp screen having elongated slits, comparatively coarse, to allow a free passage of the pulp in its coarse condition, but of such a dimension as to engage the heads of pins and articles of that character. When this coarse pulp is drawn through this screen, there will be found in the screen a great quantity of foreign matter, consisting principally of numerous bookbinder staples, tacks, pins, pieces of rubber, pieces of parchmentized paper, and parchment, all entangled with a sufficient quantity of the coarse pulp to retain them securely upon the screen.

The screen used is a screen which has suction devices below the screen plate, which draw the pulp through with great force. The pulp could be forced through by other means. The pulp is so coarse that some force is required other than its weight. The pulp which has been screened is then passed to the beaters and to the Jordan, and then to the paper-making machine, where the pulp is passed through a fine screen before going to the machine, which has the effect of completely screening out all foreign material left, leaving the sheet of paper as it comes from the machine free from blemishes and imper-

fections of a character due to the presence of foreign material in the pulp.

The screening of the pulp as it passes into the paper machine is not new, but it is the means heretofore depended upon to remove all foreign matter from the pulp, which it did not successfully accomplish, owing to the fact that the foreign material had been disintegrated and ground until there were particles so fine that they passed readily through the screen, causing an injury to the paper and the blemishes referred to. The present invention consists, mainly, in the discovery of the fact that all this foreign substance can be practically removed by screening the coarse pulp before it passes to the beater and before it is ground. By screening the pulp at this time the coarse pulp entangles itself around the objects, as has been indicated, and the clear pulp passes on to the beaters and Jordan.

It will be seen from this that the improved method and process saves the wear and tear on the Jordan and beating engine occasioned by grinding these foreign substances, which consist principally of small pieces of metal, and also removes the foreign substance before it has been ground so fine that it will pass through a screen and before the pulp has been disintegrated to such an extent that it will not tangle the same to retain them with certainty upon the screen. The use of screens in paper making is not new, and the inventor does not wish to be understood as claiming the screen, broadly, as his invention.

The invention consists of the process and in the discovery that the screening is effectual in the early stages of the manufacture before the pulp has been disintegrated, so that it will not serve as an entangling means for engaging the foreign substances and in that way assisting in the removal. Further, the process removes these foreign substances from the pulp before they have become so far disintegrated and pulverized that they will pass any screen that is intended to exclude them.

The International Carbon Paper Company, of New York, has been incorporated. Capital stock, \$3,000. Directors, Albert Ernst, John Sommer and Clara Sommer, of New York.

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY, November 5, 1897.

THE MONEY MARKET.—The stock market was weak, and the general list suffered a marked decline. Call loans on stock collateral were steady at 2@2½ per cent., with a fair inquiry. The close was at about 2¼@2½ per cent. The inquiry was better owing to the call of \$13,000,000 by the Union Pacific syndicate. Banks in New York quote 2½ per cent. for loans on call. Time contracts on good Stock Exchange collateral are quoted at 2½ per cent. for sixty days, 3 per cent. for ninety days, 3½

per cent. for four and 3½@4 per cent. for five to six months. Money continues to be offered on exchange collateral at 2½ per cent. for sixty to ninety days, less a commission. There is a good inquiry for commercial paper, with a moderate supply, and rates are 4@4½ per cent. for sixty to ninety-day endorsed bills receivable, 4¼@4¾ per cent. for first class and 5@6 per cent. for good four to six months' single names. Foreign exchange was dull and steady in tone. Posted rates were \$4.83½ for sixty days, and \$4.86½ for sight. Actual rates were \$4.82½@4.83 for sixty days, and \$4.85½@4.85¾ for sight.

THE PAPER TRADE.—The mills are fairly busy. Most manufacturers say they are full of orders, but all are agreed that prices are no better.

JUTE BUTTS.—The market for jute butts may be characterized as unsettled and weak. The nominal price is 90c.

WOOD PULP.—The good demand for Ground Wood continues. The price is \$13 to \$20, f. o. b. at the pulp mill.

WOOD FIBRE.—There was little business doing in Foreign Sulphites. The Domestic article was in good demand. We quote: Foreign Sulphite, Bleached, No. 1, 3.25@3.30c.; No. 2, Soda Fibre, Bleached, is quoted at 2.90c.; Unbleached, No. 1, 2¼c.; No. 2, 2c. Domestic Sulphite, Unbleached, is quoted at 2@2¼c.; Domestic Soda, Bleached, 1¼@2c., delivered. There were 15 tons of chemical fibre imported at New York from Hull this week.

FOREIGN RAGS AND PAPER STOCK.—The business doing in Foreign Rags was fair. We note sale 100 tons German Colored Cottons to arrive at 1c. We quote: German Blue Cottons, 1.22@1.25c.; Dutch Blues, 1¼@1.30c.; Light Prints, 1.15@1.20c., according to quality; New Cuttings, 2¾@2½c. The imports for the week aggregated 3,848 bales and 15 tons, being 1,987 bs. rags, 286 bs. old papers, 15 tons Chemical Fibre and 1,575 bs. Manillas. The ports of shipment and quantities were as follows: Antwerp, 788 bs. rags, 173 bs. manillas; Bristol, 513 bs. manillas; Hamburg, 357 bs. rags, 247 bs. manillas; Hull, 15 tons chemical fibre, 267 bs. manillas; Leghorn, 256 bs. rags; Liverpool, 114 bs. manillas; London, 58 bs. rags, 286 bs. old papers, 97 bs. manillas; Newcastle, 125 bs. manillas; Rotterdam, 134 bs. rags; Stettin, 400 bs. rags, 39 bs. manillas.

DOMESTIC RAGS.—The market closed off a trifle in the demand. Prices hold their own. We quote: Rag Muss, 20@25c.; Satinets, 30@45c.; Common Dark Seconds, 25@40c.; Mixed Cottons, 50@75c.; Thirds and Blues, 1¼@1¾c.; Thirds and Blues (street), 1@1¼c.; House Soiled Whites, 1¼@2c.; Street Soiled Whites, 1¼@1¾c.; No. 1 Whites, 2¼@3c.; New Black Cottons, 50c.; New Common Dark Seconds, 37½@50c.; New Dark Cottons, 75@1¼c.; New Blue Cottons, 1¼@2¼c.; New Light Seconds, 2¼@3¼c.; New White

Shirt Cuttings, No. 2, 3@3½c.; New White Cuttings, No. 1, 4@4½c.

BAGGING, ETC.—The market for Gunny was very weak. The nominal price is 70c. Bright Burlaps are quoted as selling at 85c.; Manilla Rope at 1.70c.; No. 1 Mixed Bagging at .60c., and Heavy Wool Tares at .92½c. The manilla stock imports for the week aggregated 1,575 bales, being 173 bs. from Antwerp, 513 bs. from Bristol, 247 bs. from Hamburg, 267 bs. from Hull, 114 bs. from Liverpool, 97 bs. from London, 125 bs. from Newcastle and 39 bs. from Stettin.

OLD PAPERS.—There was a very active demand. Certain grades show a daily advance. Stock is limited. We quote: No. 1 Hard White Shavings, 1.85@2.50c.; No. 1 Soft White do., strictly free from Wood, 1.50@1.62½c.; Soft White do., Ordinary, 1.45c.; Ledgers, 1.15@1.25c.; Solid Printed Books, .85@1c.; Mixed Shavings, No. 1, 75@1c.; Mixed Shavings, No. 2, .60@.70c.; Extra No. 1 Manillas, .85@.95c.; No. 1 Manillas, Ordinary, .60@.70c.; No. 2 Manillas, .50c.; Folded News, .60c.; Folded News (over issues), .65c.; Mixed Papers, .30@.40c.; Commons, .20@.25c.; Straw Clippings, .35@.37½c.; Binders' do., .40@.45c.

STRAW.—The demand was moderate, and the market continued weak. We quote: Long Rye, .40@.60c.; Short Rye, .35@.40c.; Oat, .30@.35c.

ROSINS.—All descriptions were dull, with values barely steady. We quote: Common to Good Strained, \$1.65@1.70; E, \$.95@1.2; F, \$.205; G, \$.210; H, \$.215; I, \$.215; K, \$.230; M, \$.250; N, \$.280; W. G., \$.330.

CHEMICALS.—The market for paper makers' chemicals was unchanged. Under date of October 19 J. P. Brunner & Co. write from Liverpool: "There is a moderate trade going on in chemicals, but the market is not active. For some lines, however, buyers find difficulty in placing prompt orders, owing to short supply. Soda Ash is in moderate compass, both for Ammonia Alkali and Leblanc Ash. In one case, manufacturers are refusing orders for Alkali for balance of this year, being fully sold, while Leblanc Ash is almost unobtainable for prompt delivery, and higher prices quoted. Quotations for tierces, as to market, may be nominally quoted about as follows: Leblanc Ash, 48 per cent., £4 5s. to £4 10s. per ton; 58 per cent., £4 15s. to £5 per ton; net cash. Ammonia Ash, 48 per cent., £4 to £4 2s. 6d. per ton; 58 per cent., £4 5s. to £4 7s. 6d. per ton; net cash; bags, 2s. per ton under prices for tierces. Soda Crystals find a fairly ready sale, and quotations for barrels vary from £2 7s. 6d. to £2 17s. 6d. per ton, less 5 per cent. as to market, and 7s. less for bags. Special terms for American business. Caustic Soda, although not active, is in fair request and firmly held. We quote spot range, as to market, about as follows: 60 per cent., £6

5s. to £6 10s. per ton; 70 per cent., £7 5s. to £7 10s. per ton; net cash. 74 per cent., £8 2s. 6d. to £8 5s. per ton; 76 per cent., £8 15s. to £9 per ton; net cash. Bleaching Powder is rather flat; £6 7s. 6d. to £6 12s. 6d. per ton, net cash, represents about spot range for hardwood packages, as to market." In the local market Caustic Soda and Alkali were quiet, and Bleach continued scarce. There is some Bleach due on Monday, but it is all sold. The price last quoted was \$1.95.

CHINA CLAY.—Arrivals have been large, but most of the stock was deliverable upon contracts made some time since, and market values have not been affected. Current orders are small, and there is very little demand for forward delivery. Quotations at the close were somewhat nominal at \$15@17 for the higher grades, \$13@14 for medium and \$10@12.50 for the poorer kinds, according to quality and quantity. In domestic trade is quiet, and prices are nominal at \$9@9.50, as to quantity and quality.

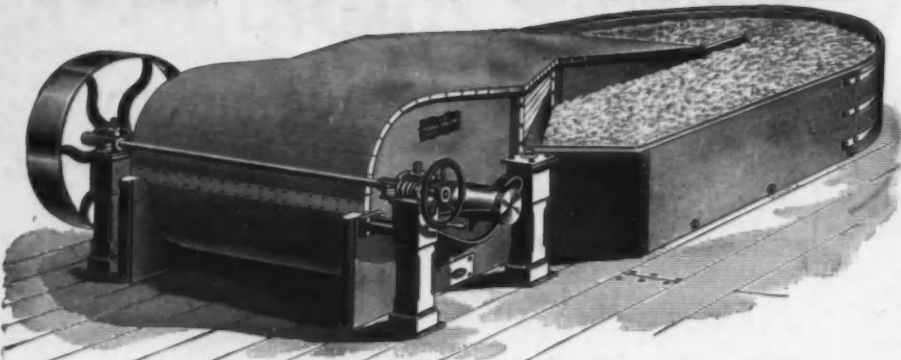
TWINES.—The business doing was fair, and prices were firmly held. We quote: Sisal Hay, 4½@5c.; Sisal Lath Yarn, 4¼c.; Jute Rope, 4½@5½c.; Twines—Jute, 18, 10½c.; 24, 10½c.; 36, 10c.; Jute and Hemp, 18, 13@14c.; 24, 12½@13½c.; 36, 12@13c.; Hemp, 18, 16c.; 24, 15½c.; 36, 15c.; Marlines, Jute, 4½, 7s.; 6, 7c.; 7, 6½c.; Jute and Hemp, 6, 9@11c.; 8, 8@10c.; American Hemp, 4½, 11c.; 6, 11c.; 8, 10c.; Russian Hemp, 4½, 11c.; 6, 11c.; 8, 10c.

COAL.—Prices are still lower for Anthracite. The cutting is admitted to be general.

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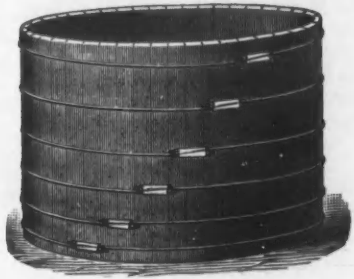
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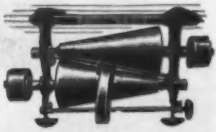
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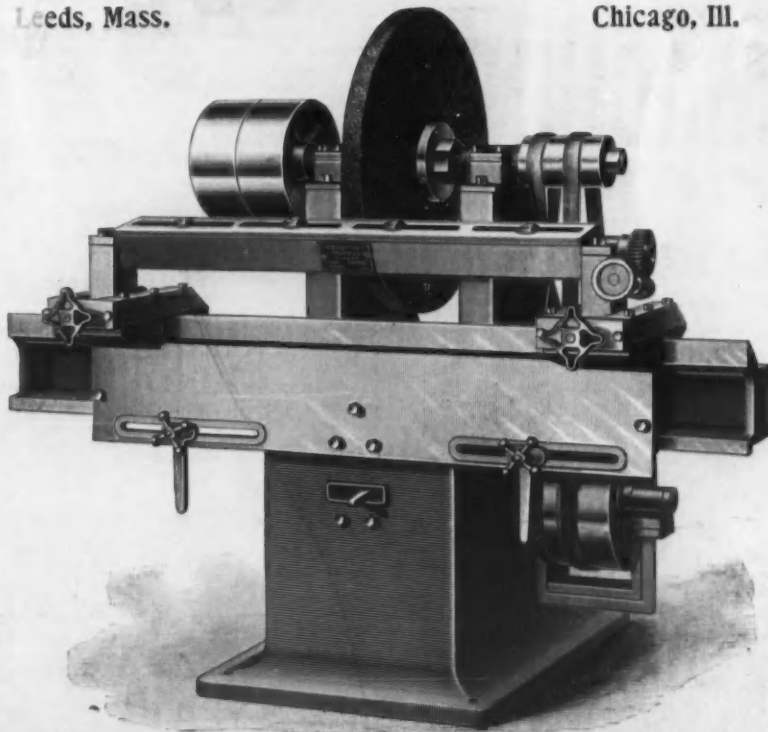
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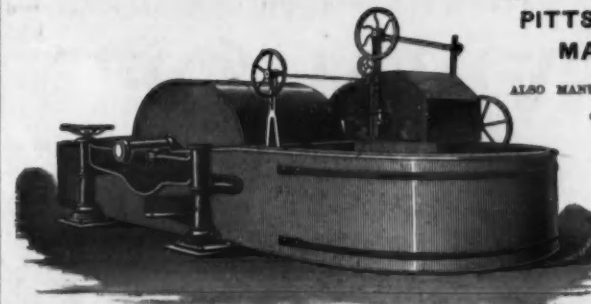
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Gate Open.	Head	Rev. Per Min.	Cu. Ft. Per Sec.	Horse Power.	Per Cent.	Gate Open.	Head	Rev. Per Min.	Cu. Ft. Per Sec.	Horse Power.	Per Cent.
Full	15.00	144.00	173.69	240.97	82.03	Full	15.30	194.25	102.02	143.44	81.06
3/4	15.04	136.12	155.93	223.51	84.55	3/4	15.30	187.75	92.15	146.73	84.78
1/2	15.11	127.67	133.34	191.06	83.58	1/2	17.33	178.50	83.95	138.49	83.88
1/4	15.88	131.50	119.65	168.80	80.25	1/4	17.54	176.40	68.82	109.64	80.09
1/8	16.47	126.87	90.04	127.73	75.95	1/8	17.68	168.50	57.69	88.14	76.39

Average efficiency 3/4 to full gate, 81.29 per cent. Average efficiency 1/4 to full gate, 81.30 per cent.

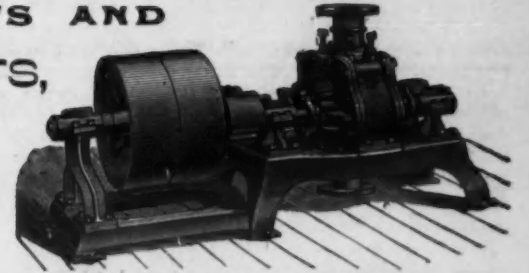
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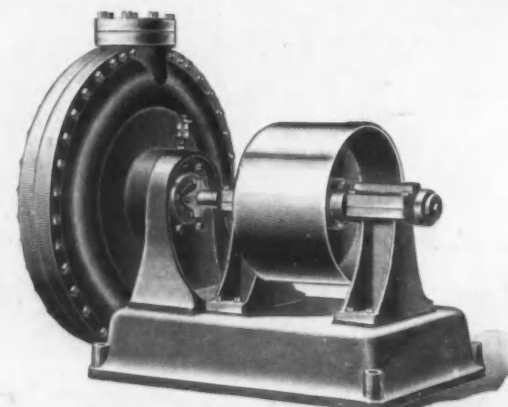
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THE HARMON MACHINE CO.,
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WOOD-PULP-MAKING MACHINE.

A patent has been granted for a wood-pulp-making machine of that class in which the reduction is accomplished by the impact of beaters co-operating with fixed portions of the machine, and is an improvement in certain particulars upon the machine forming the subject-matter of an application for letters patent filed July 9, 1896, Serial No. 598,544.

The objects of the invention are to provide for the reduction of the material from the block form to the chip form in connection with the pulverizing mechanism; to better provide for the agitation of the pulp within the reducing chamber, and to prevent the clogging of the discharging screen.

With these objects in view it consists in so constructing and arranging the machine that it is provided with a cutting or chipping device at the mouth of a hopper adapted to receive the material in block form, and which feeds the reducing mill; in so forming the inclosing case that it is provided with a large chamber above the beaters, into which the pulp is thrown from the beaters by centrifugal action, the wall of this chamber against which the pulp is so discharged being so curved that the material is thrown forwardly, so that it may descend by the action of gravity among the beater arms, and in so forming the ribs or bars of the discharging screen that the agitation of the pulp will tend to dislodge from the screen aperture any large particles which may gather therein.

In the drawings, Fig. 1 is a front elevation of the machine. Fig. 2 is a transverse vertical section thereof upon the line 2-2 of Fig. 1. Fig. 3 is a longitudinal vertical section upon the line 3-3 of Fig. 2.

The shell or casing of the machine *A* is oblong rectangular in its general contour, and is horizontally divided into two sections, the lower one, *a*, forming the bottom of the casing, and being apertured to receive the discharging screen, which is curved in form, the arc of curvature having the axis of the beater shaft as its centre. This shaft *C* is journaled longitudinally within the casing *A*, and upon it are mounted a plurality of disks, *D*, having radiating arms *d*, as shown, eight in number. These disks are spaced apart by means of rings, *F*, which, together with the disks, are keyed upon the shaft. The disks

D are so set upon the shaft that the beater blades *d* are arranged in spiral form, the spiral running from the middle of the machine to its sides, in one direction taking the form of a right screw thread and in the other a left screw thread, so that as the beaters revolve they tend to move the pulp continuously toward the sides of the machine. A plurality of blades *E* are fixed in one of the side walls of the casing *A* and project inwardly, intermeshing with the beater blades and terminating beyond their bases, the inner ends of these blades being thickened, as indicated at *e*, so as to bear against the surface of adjacent disks *D*. The blades *E* are held in this machine in the same manner as in the earlier machine above referred to, being set within a recess formed between the attaching flanges of the upper and lower sections of the casing, and being locked in place by means of a rib, *a'*, engaging transverse notches in the blades, the blades being spaced apart by the introduction of suitable blocks *e'*.

The screen consists of the two slotted plates *G H*, the former being the inner one, being in fixed relation with the bottom *a* of the casing, and the outer one being adapted to slide upon its companion, and being held in frictional contact therewith by means of the curved bars *J*, pivoted at *j* to one side of the bottom *a* of the casing and secured by means of bolts *j'* to the other side thereof, the outer ends of the bars *J* being united by means of the plates *F*. The inner faces of the bars of the screen *G* are beveled, so as to present an inclined face to the pulp as it is carried forward by the action of the beaters, so that the inner face of the screen presents the appearance of a series of grooves having an abrupt and an inclined wall, thereby forming an abutment over which the pulp is precipitated, and preventing slivers of wood from being driven into the interstices of the screen, and allowing any particles which may seek lodgement therein to be quickly washed out by the agitation of the material.

The adjustment of the screen, as in the case of an earlier machine, is accomplished by means of a crank handle, *K*, fixed upon a rock shaft, *k*, journaled within the bars *J*, and having fingers, *k'*, engaging suitable sockets in the bands *k''*, secured to the outer plate *H* of the screen.

The casing *A* extends upwardly above the beaters, so as to form a suitable cham-

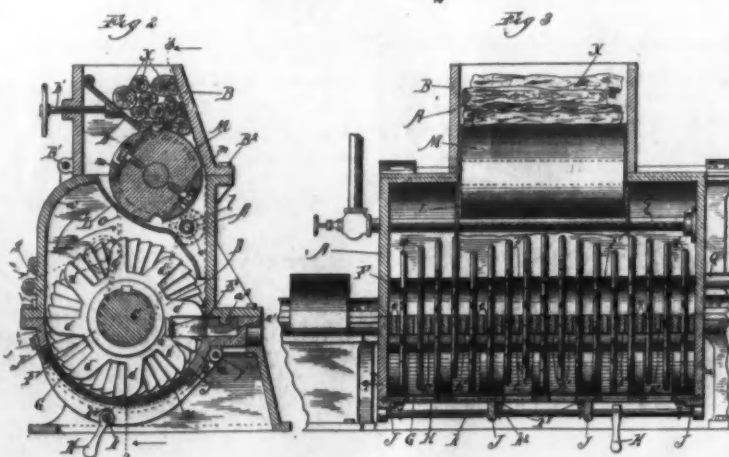
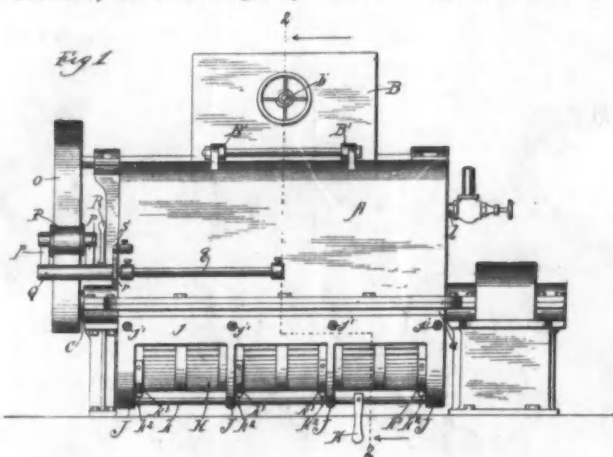
ber into which the pulp is discharged from the beaters by centrifugal action. That wall of the casing along which the pulp is thus discharged is curved inwardly at its upper end, as indicated at *a'*, so that the pulp is thrown forwardly and descends upon the beaters by the action of gravity.

to receive the material, and an apron, *L*, extends from one side of this aperture obliquely downwardly, so as to receive the impact of the pulp, then upwardly from the beaters, and terminates a sufficient distance from the side wall of the casing *A* to permit the entry of fresh material. The top

cylinder, *M*, carrying the cutting blades *m m*. The wood to be operated upon is introduced into the hopper in the form of blocks *X*, which fall upon the face of the cylinder *M*, so that the cutting blades gradually reduce them by chipping, the chips being carried downwardly and delivered into the reducing chamber. A horizontal pipe, *l*, extends longitudinally through the casing immediately below the cylinder *M*, and is provided throughout its length with small discharge apertures, by which means a suitable quantity of water may be delivered to the machine with the chips. The cylinder *M* is driven from the shaft *C* by means of a belt, *O*, upon suitable pulleys upon this shaft and the shaft of the cylinder. A belt tightener in the form of an idle pulley, *P*, co-operates with the belt, being suitably journaled in the arms *p p*, projecting from a sleeve, *Q*, mounted upon a shaft, *q*, secured in brackets attached to one of the sides of the casing *A*. The sleeve *Q* is controlled by a handle bar, *R*, and is locked in an advanced position by means of a ratchet wheel, *r*, and a pawl, *S*. By this means a loose belt may be employed, so that when desired the cutting cylinder *M* may be stopped without interfering with the action of the beaters, so that if the chips are fed to the pulverizer too rapidly the clogging of the machine may be prevented.

The upper edges of the blades *E* are inclined, as shown in Fig. 2, downwardly from the wall of the casing, so that by impact of the chips upon these blades they are thrown toward the centre of the beater cylinder and prevented while in this larger form from being thrown directly against the screen. After the material has become finely subdivided, this inclined form of the upper edge of the blades ceases in great measure to divert them to the centre, so that the effect of thus forming the plate is measurably to assort the coarser from the finer material, leaving the latter free to seek by the centrifugal action to escape through the screen. Near their inner ends the top edges of the blades are given an upward inclination, so as to prevent the material from being carried too far to the centre and into the space between the disks *D*.

The plate *b*, forming one of the walls of the hopper, is mounted upon a pivot, as shown, so that the capacity of the hopper may be varied to adapt the machine to the



WOOD-PULP-MAKING MACHINE.

By this means the pulp is returned to the inner portions of the beaters, the centrifugal action tending at all times to carry it to their outer ends. A casing, *B*, of less length than the casing *A*, is superimposed upon the latter and is secured thereto by the hinge *B'* at one side and by bolts *B''* at the other side. Within the casing *B* the top of the casing *A* is apertured

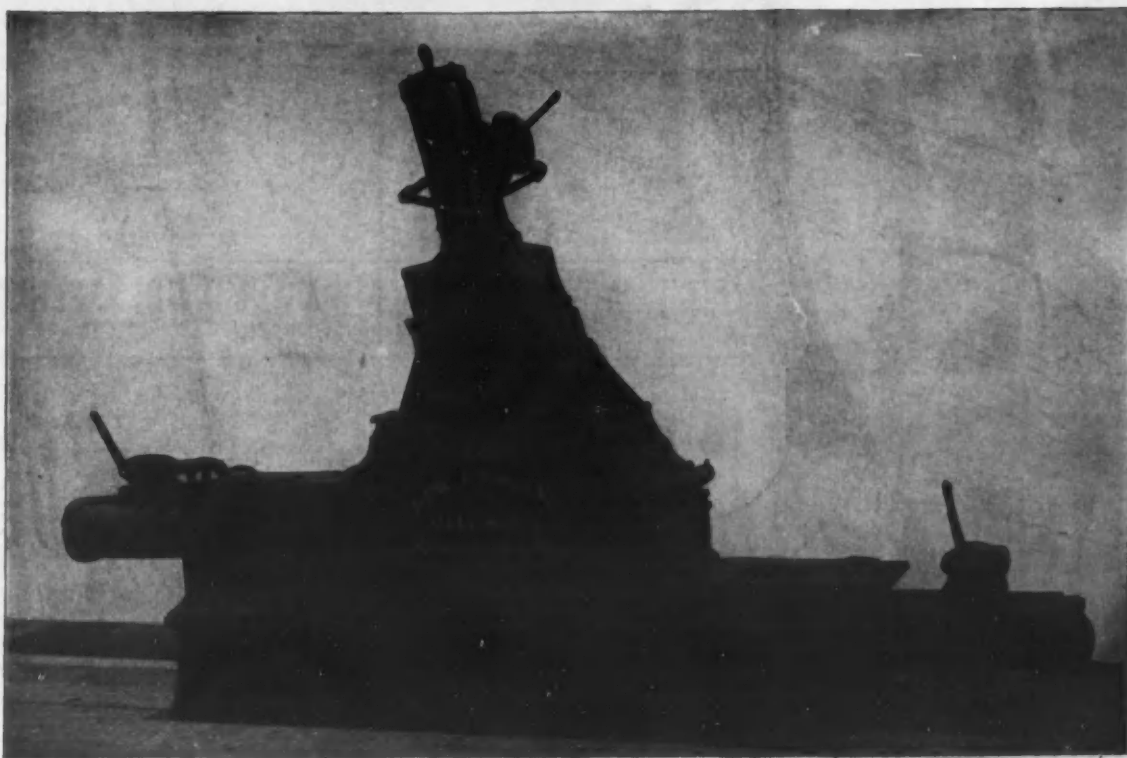
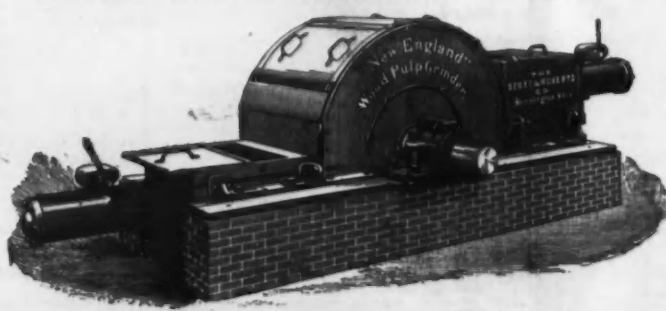
of the casing *B* is open, serving as the mouth of a hopper, which consists in part of the walls of the casing and in part of a swinging plate, *b*, pivoted within the casing and supported by a screw-threaded rod, *b'*, projecting through the casing wall, and being provided with a hand wheel. Between the mouth of the hopper thus formed and the apron *L* is journaled a horizontal

PULP GRINDERS ARE SUBJECT TO THAT LAW OF EVOLUTION,

"THE SURVIVAL OF THE FITTEST."

THIS cut illustrates The New England Grinder as first made and put on the market in the spring of 1888, fitted to use stone 48 inches diameter, 26 inches thick, to grind wood 24 inches long, having two pockets, one on each side of the stone, placed as low under the stone as practicable, and designed to use from 100 to 125 horse power. This arrangement of the pockets causes the stone to be partially lifted off its bearings when the feed pressure is applied, thereby reducing the loss of power by friction about 8 horse, whereas pockets placed on top of the stone in the usual way increase the friction from 4 to 6 horse power each, as shown by actual tests. Of these machines about 200 were sold, most of which are in use to-day, and have never been excelled in quantity or quality of pulp made, in proportion to the power used. The same machine was also made to use stone 18 inches thick, to grind wood 16 inches long. A third pocket placed on top of the stone was afterward added, so that the machine could be used as a regular three-pocket machine, all parts being made heavier and stronger and adapted to use 250 horse power, thus increasing the capacity of the machine; the hydraulic cylinders being at the same time made larger. Next, an adaptation of pipes and valves was added, so arranged that the three pockets might be used independently, as is usually done on a three-pocket machine; or, by closing a valve, the lower horizontal pockets could be used as a two-pocket machine and the top pocket used as a regulator of speed, the valves and pipes being so constructed that whenever the feed pressure was thrown off from either horizontal pocket the same pressure was turned into the cylinder of the top pocket, thus bringing the top pocket into action during the time the horizontal pocket was backed off to be filled, and when the pressure was again turned on to the horizontal pocket it was cut off from the top pocket; the arrangement being such that when the feed pressure was transferred from one pocket to another the second pocket was always brought into action before the first pocket was released, thus insuring that two pockets should always be at work, a feature possessed by no other pulp grinder. The machine has been modified and improved from time to time, during the past nine years, fourteen times, developing in 1896 into a machine as shown in the cut below, retaining all the desirable features and remedying every known defect.

The machine represented below is now offered on the market, greatly strengthened in all the working parts, to take stone 54 inches diameter, to grind 24-inch wood, weighs 9 tons and embodies the following points: The pockets can be conveniently adjusted and kept within 1-100 of an inch of the stone, SO THAT NO SLIVERS CAN BE MADE. The follower is always moved with the cylinder and works up close to the stone at all times, but cannot touch



it. Has brass-lined hydraulic cylinders, brass valves and stuffing boxes, steel piston rods, hammered shafts from 6 1/2 inches to 8 1/2 inches diameter, according to power used, can wear stone down to 40 inches diameter, and can take in wood 18 inches diameter without splitting. Can operate without throwing a drop of water or pulp out of the machine. Can furnish machines, two-pocket or three-pocket, to grind wood 16 inches, 20 inches, 24 inches, or 28 inches long, at prices ranging from \$400.00 to \$700.00, using hydraulic cylinders ranging from 8-inch to 16-inch diameter, according to power used. They are simplest, most conveniently accessible in all parts, most easily and cheaply operated, of any grinder on the market. The pockets being larger than on any other machine, can use more power and make a greater product. About 500 of these machines have been built, which are used in about 100 mills, a number greater than that of any other grinder in the world.

As figures are confusing, I make the following offers in plain English: Will sell a heavy two-pocket grinder for \$550.00, guaranteed to make more pulp of good quality with greater economy of power and at less cost for operating expenses than can be done by any other machine on the market. Will sell three-pocket machine with the above guaranty, adding a stipulation to make a greater aggregate production, using any power from 100 horse up to the maximum which a pulp grindstone can safely stand. Will furnish grinders to be run in a competitive test of from 15 to 30 days, with any other grinder on the market, under the above warranty. Will furnish complete outfit of pulp machinery, all of the best, including grinders, screens, wet machines, hydraulic pump, stuff and water pumps, wood-preparing machinery, log haul, shafting and pulleys, all guaranteed to make 10 tons of air-dry pulp in 24 hours, of spruce wood suitable for good news paper, at a cost not exceeding \$3.00 per ton, for \$5,000.00, or will furnish outfits for larger mills at prices in proportion.

No Pay Required Until You Get All You Bargain For.

Write for further information. No charge for reliable estimates. Can make designs, furnish plans and specifications for mills to be located anywhere in the United States or Foreign Countries.

OLIN SCOTT, Bennington, VERMONT.

Wants and For Sale.

Twenty-five words or less, one dollar each insertion. Over twenty-five words, four cents a word each insertion, up to eighty words. Cash should accompany order.

Answers can come in our care and will be promptly forwarded without extra charge.

WANTED—A POSITION AS SUPERINTENDENT or foreman, book, news or manilla mill. Can give good references. Address H. M., care Journal.

WANTED—A PAPER SALESMAN WHO IS thoroughly acquainted with the Chicago consuming trade, to look after the interests of a large Eastern mill making fine writings, bonds, linens and ledger papers. State age and experience. Address Box 3008, Holyoke, Mass.

A SALESMAN NOW TRAVELING AND has for the last fifteen years visited regularly all the territory west of Buffalo and has a valuable acquaintance with the dealers and consumers, is looking for a connection with a good mill making lines used by the printing and stationery trades. Unquestionable references. Address SALESMAN, care Paper Trade Journal.

WANTED—BY A PRACTICAL MAN, SITUATION as superintendent of mill making card, book or flats from rag or wood stock. Address C. M., care of Journal.

POSITION AS SUPERINTENDENT OR FOREMAN on news, book or manilla; all colors; large practical experience. Address PRACTICAL, care Paper Trade Journal.

WANTED—SODA-PULP MACHINE CAPABLE of putting through 15 tons in 24 hours. With dryers complete. Also second-hand Paper Machine from 72 inches upward. Address ROYAL PAPER MILLS CO., East Anson, P. Q., stating size of machine, number of dryers and price.

SMART LONDON AGENT WITH FIRST-CLASS connections and long experience wishes to represent American mill; news, printings and writings. Apply X., care MORRIS, 1 Mitre Court, Fleet Street, London.

FOR SALE.

300 tons prime jute baggings, 200 tons colored cottons, and 50 tons white linens.

Best German packings. For particulars address D. B., care of the Paper Trade Journal.

FOR SALE.

One gun-metal Couch Roll, 20x120 inches. One 72-inch Fourdrinier Machine. One 76-inch Fourdrinier Machine. One 88-inch Fourdrinier part for 40-foot wire. Eight Doctors complete for 90-inch face calendars. One seamless Dryer, new, 48x90 inches. All in first-class condition.

BLACK & CLAWSON CO., Hamilton, Ohio.

PAPER MILL RUNNING ON SPECIALTIES, orders in hand, good will and property for sale to quick buyer; illness of owner reason for selling. Address Q., care Journal.

TO LET—TWO LARGE LIGHT LOFT BUILDINGS suitable for manufacturing purposes. Will put in power to extent required. 20,000 square feet in building opposite Fulton Ferry, Brooklyn, and 12,000 square feet in building near Broadway Ferry, Brooklyn. Apply to F. X. SÄDLER, 583 West 55th St., New York City.

FOR SALE—THE HANMER & FORBES CO.'S paper mill at Burnside, Conn. C. F. Hanmer, Sec'y.

FOR SALE—AT A SACRIFICE, PAPER-MILL machinery. The entire paper-mill machinery, in first-class order, contained in our mill will be sold cheap or leased with the property.

D. W. SIMONS, Detroit, Mich.

FOR SALE.

One gun-metal Couch Roll, 20x120 inches. One 88-inch Fourdrinier part for 40-foot wire. Eight Doctors complete for 90-inch face calendars. One seamless Dryer, new, 48x90 inches. All in first-class condition.

BLACK & CLAWSON CO., Hamilton, Ohio.

PAPER MILL FOR SALE.

Best Location in the West, best water power in the West. In one of the best towns of the West. Best market of the West. Now running on book and news. The right party can secure a 1 plant for a small cash investment. Address B., care of Paper Trade Journal.

OWEN PAPER MILLS,

Housatonic, Mass.,

FOR SALE OR RENT. Address DR. THEO. GEDDINGS, Housatonic, Mass.

FOR SALE OR EXCHANGE.

One 82-inch special Leffel Water Wheel with 8-foot Core Wheel, Pinion, etc. Also one Marshall Engine in good order, in use at present. Would take stack of 82 or 84-inch Calendar Rolls. Also Two Jordan Engines in good repair. Address EXCHANGE, care Paper Trade Journal.

FINE PAPER MILL

FOR SALE OR RENT. Steam and water power, near New York; 6,000 lbs. daily; good order; now running. Address C. D. B., care Paper Trade Journal.

FOR SALE!

Beaters: One Umpherson; one 1800 Iron Side Holland and many others. Rollers: Six 4 1/2 x 17 ft.; four 5 ft. x 16 ft.; five 4 ft. x 16 ft. Calenders: Two stacks 96 inch; one 3 roll board. Cylinder Moulds: One 20 x 66, newly covered. Cutters: One 44-inch Stevens; one 72-inch Black & Clawson; one 88-inch Smith & Winchester. Dryers: Four 28 x 88. Jordans: Twenty-eight Jordans, all makes. Fifty Tons Pulleys. Pumps: Three Corliss, double power, 6-inch plungers; one steam boiler 18, 1 1/2 suction; six 5-inch stuff pumps. Keel: One 26-inch wood and steel. Plate: One 66-inch 5 roll revolving; one 67-inch 12 roll revolving. Screen Plates: Eight 12 x 40. Steam Engines: One 14 x 40 Geo. Corliss; one 16 x 20 Geo. Corliss; one 20 x 40; one 26 x 60; one 14 x 14 Upright Putnam. Stevens Digester: One. Washers: Seven cylinder washers. Sturtevant Blowers: Two No. 5. One 88-inch Double Cylinder Machine Complete.

EMERSON MANUFACTURING CO., Lawrence, Mass.

THE BLACK & CLAWSON CO.,

HAMILTON, OHIO.

MANUFACTURERS OF LATEST IMPROVED...

Paper and Pulp Mill Machinery.



F. H. DAVIS & CO.

FIRE ADJUSTERS, DEALERS IN PAPER MACHINERY, ENGINES, BOILERS, SHAFTING, PULLEYS, ETC.

Exchange Building, Boston, Mass.

JAMES GASKELL,

FIRE ADJUSTER.

DEALER IN Paper Mill Machinery and Mill Property,

249 Front St., NEW YORK.

I HAVE FOR SALE

Two National pressure filters that will filter 500 gallons water per minute, with pump valves and pipe, that has only been used about six months; one 66-inch Fourdrinier with 23 feet 3 inch wire, with gun metal couch and press rolls. Dimension of dryers 26 inches, with one stack of calendars, reel cutters and Manning winder; one 44-inch cylinder machine; three molds, thirteen dryers, seven bottom six top, with reel and calendars, just right for making strawboard lining paper; one strawboard mill complete, and one Jager liner; fifteen dryers 24x36. Black & Clawson's make; seventeen 24x36 dryers; eight 24x36 dryers, iron frame and boxes complete; two heating engines, 45-inch roller; one Jordan engine, three Kingland engines, one rotary bleach, and one large size Foote grinder; one binder's board mill complete, including one hydraulic press, one set 42-inch board calendars 15 inches in diameter; two wet machines, one 76, one 44 inch, and 120 New Haven plate; one Otis elevator, two shapers and one planer, also number of lathes, three steam boilers, one 120 horse power, built for the Russian Government, pressure 200 pounds.

Entire contents of the Dupont Paper Mills, consisting in part of one 88-inch and one 76-inch Fourdrinier paper machine, complete, with fifteen dryers and Marshall drive to each; six 1,000-pound beaters; four Scott's New England grinders; one 150 H. K. Green tandem compound engine; shafting, pulleys, rotaries; one 14-foot Globe rotary; three Horne beaters, 1,000 pound; three Emerson beaters, 1,000 pound; four Jones beaters, 1,200-pound; one 88-inch Black & Clawson friction cutter; one 88-inch Finlay cutter; five Jordans; rag cutters and dusters; one 76-inch double cylinder machine, with gun metal press rolls; ten iron dryers, 50 x 72 inches; calendars, reel, cutters and winders complete; one 15 x 48-inch George H. Corliss engine; two Success screens; fifty iron dryers from 44-inch to 96-inch face; one stack of calendars; eleven rolls, 84-inch face; two Globe rotaries; one 7 1/2 x 23 foot horizontal rotary; one 11-roll stack of calendars, 85-inch face; one Emerson Jordan.

It has the Indorsement of Leading Bankers, Chemists and Experts.

USE It has never been successfully altered since its introduction in 1876.

COMMERCIAL SAFETY PAPER,

TO PREVENT THE "RAISING" OF CHECKS, DRAFTS, ETC.

It is the ONLY PAPER, when once written upon, from which the INK cannot be removed, thereby preventing the "raising" of Checks, Drafts, &c.

MOUNT HOLLY PAPER COMPANY, MOUNT HOLLY SPRINGS, PA., U. S. A.

Also manufacture a Tub Bial and Loft Dried Map Paper that will not shrink or distort, especially adapted for Printing in Colors, as well as Flat and Foiled Ruled Papers of every description.

NOTICE OF SALE.

SUPREME COURT, COUNTY OF JEFFERSON.

THE PEOPLE OF THE STATE OF NEW YORK

THE GLOBE PAPER AND FIBRE COMPANY.

In pursuance and by virtue of an order of the Supreme Court duly made at a Special Term thereof held at the Court House in the City of Watertown, N. Y., October 27, 1897, and entered in Jefferson County Clerk's office on the same day, I, the undersigned, receiver of all the property and effects of the said Globe Paper and Fibre Company, will sell at public auction at the law offices of Purcell, Walker & Burns, 15 Washington St., Watertown, N. Y., on the 29th day of November, 1897, at ten o'clock in the forenoon of that day, four letters patent of the United States of America, numbered respectively 517,850, 517,851, 517,852 and 288,922, the first three of which were issued to Charles Ehrlicher, of Watertown, N. Y., and bear date April 13, 1894, and were respectively for improvements in "lagging for boilers and pipe," "fire-proof sheeting," "coverings for pipes and boilers," and the fourth of which was issued to Joshua M. Hammill, bearing date October 16, 1883, for improvement in "non-conducting compounds." Said patents will be sold for cash.

Dated October 27, 1897. PURCELL, WALKER & BURNS, Attorneys for Receiver, 15 Washington St., Watertown, N. Y.

N. P. WARDWELL, Receiver.

Receiver's Sale OF A PAPER MILL.

By virtue of an order from the Superior Court of Hartford, Conn., I, Charles J. Barnard, Receiver offer the following property at private sale till the first day of December, 1897. Sale subject to the approval of the court.

Description of Property.

Paper Mill known as THE FRANKLIN PAPER MILL; also as THE AMERICAN COPYING PAPER COMPANY. Mill property consists of four acres of land, more or less, located in the town of Suffield, Conn., on what is known as Stony Brook, two and one-half miles from Windsor Locks, one and one-fourth miles from Wood's Station on N. Y., N. H. and H. R. R. Water and Steam Power; stone dam with 26 feet fall. Brick Mill in good condition. Main Building, 86x80, three and one-half stories high, shingled roof. Machine Room, 26x80, slate roof and basement. Steam Engine Room, 18x25, gabled roof. Boiler House, 15x23, slate roof. Chemical Room, 18x23, gabled roof. Also three tenements, in the best condition; one tenement in good condition, and including about one acre of land.

Description of Machinery.

One Corliss Steam Engine, nearly new, 125 horse power. One Buckeye Steam Engine, 40 horse power. Two Steam Boilers of 60 horse power each. One Leffel Water Wheel set in iron case. Shafting all put in three years ago, all in good condition. Two Stuff Chests, nearly new. One Fourdrinier Machine, 62-inch, 33-foot wire, made by Rice, Barton & Fales; Seven 96-inch Dryers; Stack of chilled calendars. One Marshall Refining Engine. Two 400 lb. Beating Engines. One 600-lb. Washing Engine. One Rotary, 6x18. One Rag Cutter. One Duster. One 31-inch under-cut Cutter. All Belted; MILL READY TO START WITH BUT LITTLE OUTLAY.

Price low; terms cash. For further particulars, inquire of

C. J. BARNARD, Receiver, Windsor Locks, Conn.

Box 12. Or at the mill.

CLARK & SPENCER, LEE, MASS.



Revolving Paper Cutters, Rag Cutters, Cylinder Machines, Washing and Beating Engines, Chilled Iron Calenders, Fan and Stuff Pumps, Engine Roll Bars.

PAPER MILL FOR SALE, Southford, Conn.

DESCRIPTION.

BUILDINGS. This mill, erected in 1882, is constructed entirely of brick and stone with slate roof. There are six frame dwelling houses, containing eight tenements, two commodious storehouses, one large barn, one machine shop, one blacksmith shop, coal sheds, etc.

MACHINERY. One Smith & Winchester 72-inch four cylinder machine, with sixteen 36-inch dryers, and one eleven and one six roll stack of calendars; one 1,200, three 900 pound beating engines and two Jordan refining engines; one 7 x 16 foot rotary boiler, one rag cutter and duster, one 80 horse power Fitchburg horizontal steam engine, one condenser, one 25 horse power upright steam engine, three 75 horse power horizontal steam boilers, one large Acme paper cutter, three power elevators, three sets Fairbanks stationary scales, two portable scales, one Crocker rotary fire pump, automatic sprinklers, fire hose, hydrants, etc.; steam heating; one Herring Champion Safe, large size; lamps, belting, trucks, office furniture, etc.; machine shop contains upright power drill, planer, full set of small tools, 10 horse power upright steam engine, piping, tools, etc.

REAL ESTATE. Eighty acres of meadow and wood land, including two mill privileges at outlet of Lake Quassapaug.

WATER POWER. Mill is run by four 15-inch National water wheels under 94 feet head. Lake Quassapaug, located five miles above mill, is the source of water supply. It covers an area of 274 acres and contains 2,600,000,000 gallons of water. The privileges at the outlet of this beautiful lake are owned absolutely by this mill property, thereby controlling its waters. Eight Mile Brook connects this lake with mill pond five miles below. This brook drains a large watershed. The quantity and quality of this water supply are unsurpassed.

Mill is in complete running order. Location for freight will compare favorably with any mill in New England.

Property open for inspection at all times by appointment.

Address, HEIRS OF L. C. WHITE, WATERBURY, CONN.

CHAS. M. JARVIS, President. GEO. H. SADE, Secretary.

BURR K. FIELD, Vice-Pres't. F. L. WILCOX, Treasurer.

THE BERLIN IRON BRIDGE CO., Engineers, Architects and Builders of Iron and Steel Structures. SEND FOR ILLUSTRATED CATALOGUE.



THE above illustration, taken direct from a photograph, shows the construction of an Iron Truss Bridge, designed and built by us at Massena, St. Lawrence County, N. Y., consisting of one span of 235 feet with a roadway 16 feet wide in the clear.

OFFICE AND WORKS: EAST BERLIN, CONN.

WOOD-PULP-MAKING MACHINE.

A patent has been granted for a wood-pulp-making machine of that class in which the reduction is accomplished by the impact of beaters co-operating with fixed portions of the machine, and is an improvement in certain particulars upon the machine forming the subject-matter of an application for letters patent filed July 9, 1896, Serial No. 598,544.

The objects of the invention are to provide for the reduction of the material from the block form to the chip form in connection with the pulverizing mechanism; to better provide for the agitation of the pulp within the reducing chamber, and to prevent the clogging of the discharging screen.

With these objects in view it consists in so constructing and arranging the machine that it is provided with a cutting or chipping device at the mouth of a hopper adapted to receive the material in block form, and which feeds the reducing mill; in so forming the inclosing case that it is provided with a large chamber above the beaters, into which the pulp is thrown from the beaters by centrifugal action, the wall of this chamber against which the pulp is so discharged being so curved that the material is thrown forwardly, so that it may descend by the action of gravity among the beater arms, and in so forming the ribs or bars of the discharging screen that the agitation of the pulp will tend to dislodge from the screen aperture any large particles which may gather therein.

In the drawings, Fig. 1 is a front elevation of the machine. Fig. 2 is a transverse vertical section thereof upon the line 2-2 of Fig. 1. Fig. 3 is a longitudinal vertical section upon the line 3-3 of Fig. 2.

The shell or casing of the machine *A* is oblong rectangular in its general contour, and is horizontally divided into two sections, the lower one, *a*, forming the bottom of the casing, and being apertured to receive the discharging screen, which is curved in form, the arc of curvature having the axis of the beater shaft as its centre. This shaft *C* is journaled longitudinally within the casing *A*, and upon it are mounted a plurality of disks, *D*, having radiating arms *d*, as shown, eight in number. These disks are spaced apart by means of rings, *F*, which, together with the disks, are keyed upon the shaft. The disks

D are so set upon the shaft that the beater blades *d* are arranged in spiral form, the spiral running from the middle of the machine to its sides, in one direction taking the form of a right screw thread and in the other a left screw thread, so that as the beaters revolve they tend to move the pulp continuously toward the sides of the machine. A plurality of blades *E* are fixed in one of the side walls of the casing *A* and project inwardly, intermeshing with the beater blades and terminating beyond their bases, the inner ends of these blades being thickened, as indicated at *e*, so as to bear against the surface of adjacent disks *D*. The blades *E* are held in this machine in the same manner as in the earlier machine above referred to, being set within a recess formed between the attaching flanges of the upper and lower sections of the casing, and being locked in place by means of a rib, *a'*, engaging transverse notches in the blades, the blades being spaced apart by the introduction of suitable blocks *e'*.

The screen consists of the two slotted plates *G H*, the former being the inner one, being in fixed relation with the bottom *a* of the casing, and the outer one being adapted to slide upon its companion, and being held in frictional contact therewith by means of the curved bars *J*, pivoted at *j* to one side of the bottom *a* of the casing and secured by means of bolts *j'* to the other side thereof, the outer ends of the bars *J* being united by means of the plates *P*. The inner faces of the bars of the screen *G* are beveled, so as to present an inclined face to the pulp as it is carried forward by the action of the beaters, so that the inner face of the screen presents the appearance of a series of grooves having an abrupt and an inclined wall, thereby forming an abutment over which the pulp is precipitated, and preventing slivers of wood from being driven into the interstices of the screen, and allowing any particles which may seek lodgement therein to be quickly washed out by the agitation of the material.

The adjustment of the screen, as in the case of an earlier machine, is accomplished by means of a crank handle, *K*, fixed upon a rock shaft, *k*, journaled within the bars *J*, and having fingers, *K'*, engaging suitable sockets in the bands *k'*, secured to the outer plate *H* of the screen.

The casing *A* extends upwardly above the beaters, so as to form a suitable cham-

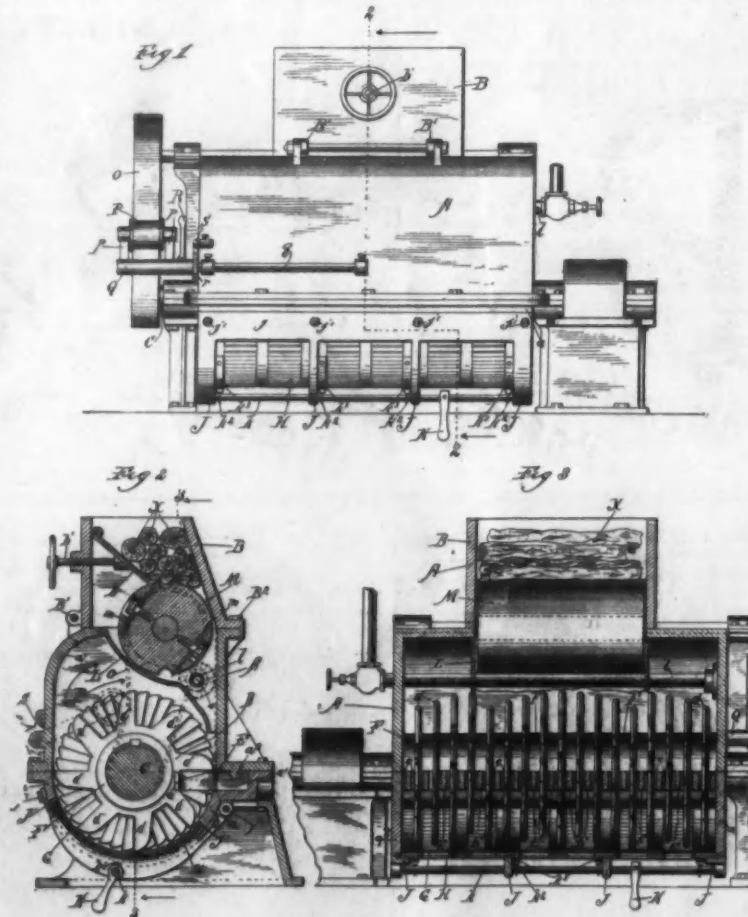
ber into which the pulp is discharged from the beaters by centrifugal action. That wall of the casing along which the pulp is thus discharged is curved inwardly at its upper end, as indicated at *a'*, so that the pulp is thrown forwardly and descends upon the beaters by the action of gravity.

to receive the material, and an apron, *L*, extends from one side of this aperture obliquely downwardly, so as to receive the impact of the pulp, then upwardly from the beaters, and terminates a sufficient distance from the side wall of the casing *A* to permit the entry of fresh material. The top

cylinder, *M*, carrying the cutting blades *m m*. The wood to be operated upon is introduced into the hopper in the form of blocks *X*, which fall upon the face of the cylinder *M*, so that the cutting blades gradually reduce them by chipping, the chips being carried downwardly and delivered into the reducing chamber. A horizontal pipe, *l*, extends longitudinally through the casing immediately below the cylinder *M*, and is provided throughout its length with small discharge apertures, by which means a suitable quantity of water may be delivered to the machine with the chips. The cylinder *M* is driven from the shaft *C* by means of a belt, *O*, upon suitable pulleys upon this shaft and the shaft of the cylinder. A belt tightener in the form of an idle pulley, *P*, co-operates with the belt, being suitably journaled in the arms *p p*, projecting from a sleeve, *Q*, mounted upon a shaft, *q*, secured in brackets attached to one of the sides of the casing *A*. The sleeve *Q* is controlled by a handle bar, *R*, and is locked in an advanced position by means of a ratchet wheel, *r*, and a pawl, *S*. By this means a loose belt may be employed, so that when desired the cutting cylinder *M* may be stopped without interfering with the action of the beaters, so that if the chips are fed to the pulverizer too rapidly the clogging of the machine may be prevented.

The upper edges of the blades *E* are inclined, as shown in Fig. 2, downwardly from the wall of the casing, so that by impact of the chips upon these blades they are thrown toward the centre of the beater cylinder and prevented while in this larger form from being thrown directly against the screen. After the material has become finely subdivided, this inclined form of the upper edge of the blades ceases in great measure to divert them to the centre, so that the effect of thus forming the plate is measurably to assort the coarser from the finer material, leaving the latter free to seek by the centrifugal action to escape through the screen. Near their inner ends the top edges of the blades are given an upward inclination, so as to prevent the material from being carried too far to the centre and into the space between the disks *D*.

The plate *b*, forming one of the walls of the hopper, is mounted upon a pivot, as shown, so that the capacity of the hopper may be varied to adapt the machine to the



WOOD-PULP-MAKING MACHINE.

By this means the pulp is returned to the inner portions of the beaters, the centrifugal action tending at all times to carry it to their outer ends. A casing, *B*, of less length than the casing *A*, is superimposed upon the latter and is secured thereto by the hinge *B'* at one side and by bolts *B''* at the other side. Within the casing *B* the top of the casing *A* is apertured

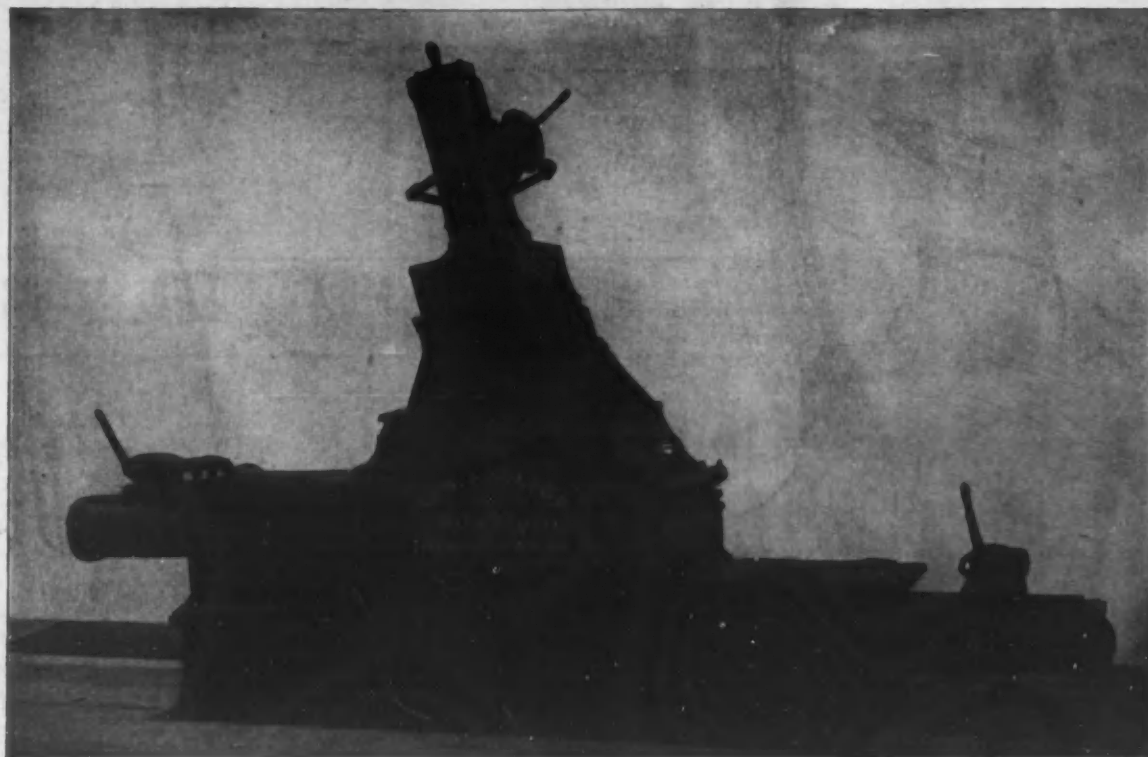
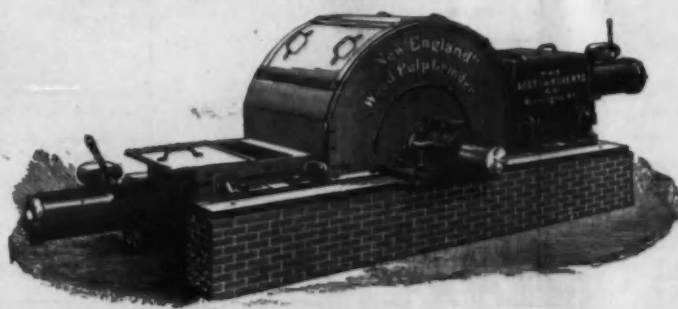
of the casing *B* is open, serving as the mouth of a hopper, which consists in part of the walls of the casing and in part of a swinging plate, *b*, pivoted within the casing and supported by a screw-threaded rod, *b'*, projecting through the casing wall, and being provided with a hand wheel. Between the mouth of the hopper thus formed and the apron *L* is journaled a horizontal

PULP GRINDERS ARE SUBJECT TO THAT LAW OF EVOLUTION,

"THE SURVIVAL OF THE FITTEST."

THIS cut illustrates The New England Grinder as first made and put on the market in the spring of 1888, fitted to use stone 48 inches diameter, 36 inches thick, to grind wood 24 inches long, having two pockets, one on each side of the stone, placed as low under the stone as practicable, and designed to use from 100 to 125 horse power. This arrangement of the pockets causes the stone to be partially lifted off its bearings when the feed pressure is applied, thereby reducing the loss of power by friction about 8 horse, whereas pockets placed on top of the stone in the usual way increase the friction from 4 to 8 horse power each, as shown by actual tests. Of these machines about 300 were sold, most of which are in use to-day, and have never been excelled in quantity or quality of pulp made, in proportion to the power used. The same machine was also made to use stone 18 inches thick, to grind wood 16 inches long. A third pocket placed on top of the stone was afterward added, so that the machine could be used as a regular three-pocket machine, all parts being made heavier and stronger and adapted to use 350 horse power, thus increasing the capacity of the machine; the hydraulic cylinders being at the same time made larger. Next, an adaptation of pipes and valves was added, so arranged that the three pockets might be used independently, as is usually done on a three-pocket machine; or, by closing a valve, the lower horizontal pockets could be used as a two-pocket machine and the top pocket used as a regulator of speed, the valves and pipes being so constructed that whenever the feed pressure was thrown off from either horizontal pocket the same pressure was turned into the cylinder of the top pocket, thus bringing the top pocket into action during the time the horizontal pocket was backed off to be filled, and when the pressure was again turned on to the horizontal pocket it was cut off from the top pocket; the arrangement being such that when the feed pressure was transferred from one pocket to another the second pocket was always brought into action before the first pocket was released, thus insuring that two pockets should always be at work, a feature possessed by no other pulp grinder. The machine has been modified and improved from time to time, during the past nine years, fourteen times, developing in 1896 into a machine as shown in the cut below, retaining all the desirable features and remedying every known defect.

The machine represented below is now offered on the market, greatly strengthened in all the working parts, to take stone 54 inches diameter, to grind 24-inch wood, weighs 9 tons and embodies the following points: The pockets can be conveniently adjusted and kept within 1-100 of an inch of the stone, SO THAT NO SLIVERS CAN BE MADE. The follower is always moved with the cylinder and works up close to the stone at all times, but cannot touch



it. Has brass-lined hydraulic cylinders, brass valves and stuffing boxes, steel piston rods, hammered shafts from 6 1/4 inches to 8 1/4 inches diameter, according to power used, can wear stone down to 40 inches diameter, and can take in wood 18 inches diameter without splitting. Can operate without throwing a drop of water or pulp out of the machine.

Can furnish machines, two-pocket or three-pocket, to grind wood 16 inches, 20 inches, 24 inches, or 28 inches long, at prices ranging from \$400.00 to \$700.00, using hydraulic cylinders ranging from 8-inch to 16-inch diameter, according to power used.

They are simplest, most conveniently accessible in all parts, most easily and cheaply operated, of any grinder on the market.

The pockets being larger than on any other machine, can use more power and make a greater product.

About 500 of these machines have been built, which are used in about 100 mills, a number greater than that of any other grinder in the world.

As figures are confusing, I make the following offers in plain English:

Will sell a heavy two-pocket grinder for \$550.00, guaranteed to make more pulp of good quality with greater economy of power and at less cost for operating expenses than can be done by any other machine on the market.

Will sell three-pocket machine with the above guaranty, adding a stipulation to make a greater aggregate production, using any power from 100 horse up to the maximum which a pulp grindstone can safely stand.

Will furnish grinders to be run in a competitive test of from 15 to 30 days, with any other grinder on the market, under the above warranty.

Will furnish complete outfit of pulp machinery, all of the best, including grinders, screens, wet machines, hydraulic pump, stuff and water pumps, wood-preparing machinery, log haul, shafting and pulleys, all guaranteed to make 10 tons of air-dry pulp in 24 hours, of spruce wood suitable for good news paper, at a cost not exceeding \$2.00 per ton, for \$5,000.00, or will furnish outfits for larger mills at prices in proportion.

No Pay Required Until You Get All You Bargain For.

Write for further information. No charge for reliable estimates.

Can make designs, furnish plans and specifications for mills to be located anywhere in the United States or Foreign Countries.

OLIN SCOTT, Bennington, VERMONT.

Wants and For Sale.

Twenty-five words or less, one dollar each insertion. Over twenty-five words, four cents a word each insertion, up to eighty words. Cash should accompany order.

Answers can come in our care and will be promptly forwarded without extra charge.

WANTED—A POSITION AS SUPERINTENDENT or foreman, book, news or manilla mill. Can give good references. Address H. M., care Journal.

WANTED—A PAPER SALESMAN WHO IS thoroughly acquainted with the Chicago consuming trade, to look after the interests of a large Eastern mill making fine writings, bonds, linens and ledger papers. State age and experience. Address Box 3038, Holyoke, Mass.

A SALESMAN NOW TRAVELING AND has for the last fifteen years visited regularly all the territory west of Buffalo and has a valuable acquaintance with the dealers and consumers, is looking for a connection with a good mill making lines used by the printing and stationery trades. Unquestionable references. Address SALESMAN, care Paper Trade Journal.

WANTED—BY A PRACTICAL MAN, SITUATION as superintendent of mill making card, book or flats from rag or woodstock. Address C. M., care of Journal.

POSITION AS SUPERINTENDENT OR FOREMAN on news, book or manilla; all colors; large practical experience. Address PRACTICAL, care Paper Trade Journal.

WANTED—SODA-PULP MACHINE CAPABLE of putting through 15 tons in 24 hours. With dryers complete. Also second-hand Paper Machine from 72 inches upward. Address ROYAL PAPER MILLS CO., East Angus, P. Q., stating size of machine, number of dryers and price.

SMART LONDON AGENT WITH FIRST-CLASS connections and long experience wishes to represent American mill; news, printings and writings. Apply X., care MORRIS, 1 Mitre Court, Fleet Street, London.

FOR SALE.

300 tons prime jute baggings, 200 tons colored cottons, and 50 tons white linens.

Best German packings. For particulars address D. B., care of the Paper Trade Journal.

FOR SALE.

One gun-metal Couch Roll, 20x120 inches. One 72-inch Fourdrinier Machine. One 76-inch Fourdrinier Machine. One 88-inch Fourdrinier part for 40-foot wire. Eight Doctors complete for 90-inch face calendars. One seamless Dryer, new, 48x90 inches. All in first-class condition.

BLACK & CLAWSON CO., Hamilton, Ohio.

PAPER MILL RUNNING ON SPECIALTIES, orders in hand, good will and property for sale to quick buyer; illness of owner reason for selling. Address Q., care Journal.

TWO LET—TWO LARGE LIGHT LOFT BUILDINGS suitable for manufacturing purposes. Will put in power to extent required. 20,000 square feet in building opposite Fulton Ferry, Brooklyn, and 12,000 square feet in building near Broadway Ferry, Brooklyn. Apply to F. X. SADLER, 283 West 50th St., New York City.

FOR SALE—THE HAMMER & FORBES CO.'S paper mill at Barnside, Conn. C. F. Hammer, Sec'y.

FOR SALE—AT A SACRIFICE, PAPER-MILL machinery. The entire paper-mill machinery, in first-class order, contained in our mill will be sold cheap or leased with the property.

D. W. SIMONS, Detroit, Mich.

FOR SALE.

One gun-metal Couch Roll, 20x120 inches. One 88-inch Fourdrinier part for 40-foot wire. Eight Doctors complete for 90-inch face calendars. One seamless Dryer, new, 48x90 inches. All in first-class condition.

BLACK & CLAWSON CO., Hamilton, Ohio.

PAPER MILL FOR SALE.

Best Location in the West, best water power in the West. In one of the best towns of the West. Best market of the West. Now running on book and news. The right party can secure a plant for a small cash investment. Address B., care of Paper Trade Journal.

OWEN PAPER MILLS,

Housatonic, Mass.,

FOR SALE OR RENT. Address DR. THEO. GEDDINGS, Housatonic, Mass.

FOR SALE OR EXCHANGE.

One 82-inch special Leffel Water Wheel with 8-foot Core Wheel, Pinion, etc. Also one Marshall Engine in good order, in use at present. Would take stack of 62 or 64-inch Calendar Rolls. Also Two Jordan Engines in good repair.

Address EXCHANGE, care Paper Trade Journal.

FINE PAPER MILL

FOR SALE OR RENT. Steam and water power, near New York; 6,000 lbs. daily; good order; now running. Address C. D. B., care Paper Trade Journal.

FOR SALE!

Beaters: One Umpherson; one 1800 Iron Side Holland and many others. Boilers: Six 6 ft. x 17 ft.; four 5 ft. x 16 ft.; five 4 ft. x 16 ft. Calendars: Two stacks 66 inch; one 3 roll board. Cylinder Moulds: One 30 x 62, newly covered. Cutters: One 44-inch Stevens; one 28-inch Black & Clawson; one 28-inch Smith & Winchester. Dryers: Four 28 x 48. Jordans: Twenty-eight Jordans, all makes. Fifty Tons Pulleys. Pumps: Three Corliss, double power, 6-inch plungers; one steam boiler feed, 1 1/2 suction; six 6-inch stuff pumps. Flute: One 26-inch wood and steel. Reel: One 68-inch x roll revolving; one 67-inch 12 roll revolving. Screen Plates: Eight 12 x 40. Steam Engines: One 14 x 40 Geo. Corliss; one 16 x 48 Geo. Corliss; one 25 x 48; one 26 x 60; one 14 x 14 Upright Putnam. Stevens Digester: One. Washers: Seven cylinder washers. Sturtevant Blowers: Two No. 5. One 68-inch Double Cylinder Machine Complete.

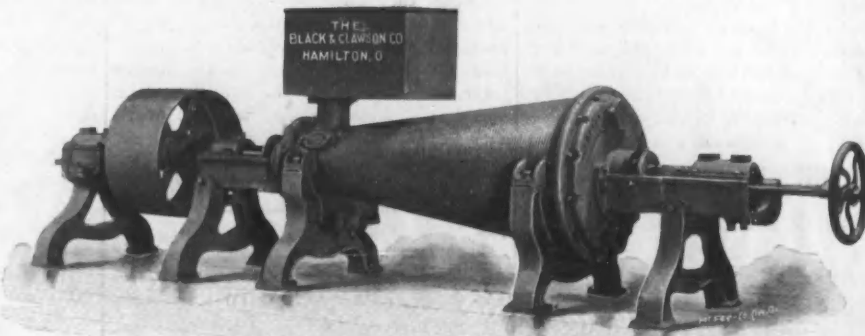
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THE BLACK & CLAWSON CO.,

HAMILTON, OHIO.

MANUFACTURERS OF LATEST IMPROVED...

Paper and Pulp Mill Machinery.



F. H. DAVIS & CO.

FIRE ADJUSTERS, DEALERS IN PAPER MACHINERY, ENGINES, BOILERS, SHAPING, PULLEYS, ETC.

Exchange Building, Boston, Mass.

Entire contents of the Dupont Paper Mills, consisting in part of one 88-inch and one 76-inch Fourdrinier paper machine, complete, with fifteen dryers and Marshall drive to each; six 1,000-pound beaters; four Scott's New England grinders; one 150 H. V. Green tandem compound engine; shafting, pulleys, rotaries; one 14-foot Globe rotary; three Horne beaters 1,000 pound; three Emerson beaters, 1,000 pound; four Jones beaters, 1,200-pound; one 88-inch Black & Clawson friction cutter; one 85-inch Finlay cutter; five Jordans; rag cutters and dusters; one 76-inch double cylinder machine, with gun metal press rolls; ten iron dryers, 36 x 72 inches; calendars, reel, cutter, slitters and winders complete; one 18 x 48-inch George H. Corliss engine; two Success screens; fifty iron dryers from 44-inch to 96-inch face; one stack of calendars; eleven rolls, 84-inch face; two Globe rotaries; one 7 1/2 x 20 foot horizontal rotary; one 11-roll stack of calendars, 85-inch face; one Emerson Jordan.

JAMES GASKELL,

FIRE ADJUSTER, DEALER IN Paper Mill Machinery and Mill Property,

249 Front St., NEW YORK.

I HAVE FOR SALE

two National pressure filters that will filter 500 gallons water per minute, with pump valves and pipe, that has only been used about six months; one 64-inch Fourdrinier with 33 feet 3 inch wire, with gun metal couch and press rolls. Dimension of dryers 26 inches, with one stack of calendars, reel slitters and Manning winder; one 64-inch cylinder machine; three molds, thirteen dryers, seven bottom six top, with reel and calendars, just right for making strawboard lining paper; one strawboard mill complete, and one Jager liner; fifteen dryers Black & Clawson's make; seventeen 24x74 dryers; eight 24x80 dryers, iron frame and horse complete; two beating engines, 60-inch rolls; one Jordan engine, three Kingland engines, one rotary bleach, and one large size Fuchs grinder; one binder's board mill complete, including one hydraulic press, wet machines, one 76, one 44 inch, and 120 New Haven plate; one Oile elevator, two shapers and one planer, also number of lathes, three steam boilers, one 150 horse power, built for the Russian Government, pressure 200 pounds.

It has the Indorsement of Leading Bankers, Chemists and Experts. USE It has never been successfully altered since its introduction in 1875.

COMMERCIAL SAFETY PAPER,

TO PREVENT THE "RAISING" OF CHECKS, DRAFTS, ETC. It is the ONLY PAPER, when once written upon, from which the INK cannot be removed, thereby preventing the "raising" of Checks, Drafts, &c.

MOUNT HOLLY PAPER COMPANY, MOUNT HOLLY SPRINGS, PA., U.S.A.

Also manufacture a Tub Sized and Loft Dried Map Paper that will not shrink or distort, especially adapted for Printing to Colors, as well as Flat and Folded Ruled Papers of every description.

NOTICE OF SALE.

SUPREME COURT, COUNTY OF JEFFERSON. THE PEOPLE OF THE STATE OF NEW YORK } THE GLOBE PAPER AND FIBRE COMPANY.

In pursuance and by virtue of an order of the Supreme Court duly made at a Special Term thereof held at the Court House in the City of Watertown, N. Y., Octo. 27, 1897, and entered in Jefferson County Clerk's office on the same day, I, the undersigned, receiver of the said Globe Paper and Fibre Company, will sell at public auction at the law offices of Purcell, Walker & Burns, 15 Washington St., Watertown, N. Y., on the 20th day of November, 1897, at ten o'clock in the forenoon of that day, four letters patent of the United States of America, numbered respectively 517,850, 517,851, 517,852 and 285,922, the first three of which were issued to Charles Ehrlicher, of Watertown, N. Y., and bear date April 13, 1884, and were respectively for improvements in "lagging for boilers and pipes," "fire-proof sheathing," "coverings for pipes and boilers," and the fourth of which was issued to Joshua M. Hammill, bearing date October 16, 1883, for improvement in "non-conducting compounds." Said patents will be sold for cash.

Dated October 27, 1897. PURCELL, WALKER & BURNS, Attorneys for Receiver, 15 Washington St., Watertown, N. Y. N. P. WARDWELL, Receiver.

Receiver's Sale OF A PAPER MILL.

By virtue of an order from the Superior Court of Hartford, Conn., I, Charles J. Barnard, Receiver offer the following property at private sale till the first day of December, 1897. Sale subject to the approval of the court.

Description of Property. Paper Mill known as THE FRANKLIN PAPER MILL; also as THE AMERICAN COPYING PAPER COMPANY. Mill property consists of four acres of land, more or less, located in the town of Suffield, Conn., on what is known as Stony Brook, two and one-half miles from Windsor Locks, one and one-fourth miles from Wood's Station on N. Y., N. H. and H. R. R. Water and Steam Power; stone dam with 36 feet fall. Brick Mill in good condition. Main Building, 80x80, three and one-half stories high, shingled roof. Machine Room, 26x80, slate roof and basement. Steam Engine Room, 16x23, graveled roof. Boiler House, 15x23, slate roof. Chemical Room, 18x23, graveled roof. Also three tenements, not in the best condition; one tenement in good condition, and including about one acre of land.

Description of Machinery. One Corliss Steam Engine, nearly new, 125 horse power. One Buckeye Steam Engine, 40 horse power. Two Steam Boilers of 80 horse power each. One Leffel Water Wheel set in iron case. Shafting all put in three years ago, all in good condition. Two Stuff Chests, nearly new. One Fourdrinier Machine, 62-inch, 33-foot wire, made by Rice, Barton & Fales; Seven 96-inch Dryers; Stack of chilled calendars. One Marshall Refining Engine. Two 400 lb. Beating Engines. One 600-lb. Washing Engine. One Rotary, 6x18. One Rag Cutter. One Duster. One 24-inch under-cut Cutter. All Belted; MILL READY TO START WITH BUT LITTLE OUTFLAY.

Price low; terms cash. For further particulars, inquire of C. J. BARNARD, Receiver, Windsor Locks, Conn. Box 12. Or at the mill.

OLARK & SPENGER, LEEH, MASS.



PAPER MILL FOR SALE, Southford, Conn.

DESCRIPTION.

BUILDINGS. This mill, erected in 1882, is constructed entirely of brick and stone with slate roof. There are six frame dwelling houses, containing eight tenements, two commodious storehouses, one large barn, one machine shop, one blacksmith shop, coal sheds, etc.

MACHINERY. One Smith & Winchester 72-inch four cylinder machine, with sixteen 36-inch dryers, and one eleven and one six roll stack of calendars; one 1,200, three 800 pound beating engines and two Jordan refining engines; one 7 x 16 feet rotary boiler, one rag cutter and duster, one 80 horse power Fitchburg horizontal steam engine, one condenser, one 25 horse power upright steam engine, three 75 horse power horizontal steam boilers, one large Acme paper cutter, three power elevators, three sets Fairbanks stationary scales, two portable scales, one Crocker rotary fire pump, automatic sprinklers, fire hose, hydrants, etc.; steam heating; one Herring Champion Safe, large size; lamps, belting, trucks, office furniture, etc.; machine shop contains upright power drill, planer, full set of small tools, 10 horse power upright steam engine, piping, tools, etc.

REAL ESTATE. Eighty acres of meadow and wood land, including two mill privileges at outlet of Lake Quassapaug.

WATER POWER. Mill is run by four 15-inch National water wheels under 94 feet head. Lake Quassapaug, located five miles above mill, is the source of water supply. It covers an area of 274 acres and contains 2,600,000,000 gallons of water. The privileges at the outlet of this beautiful lake are owned absolutely by this mill property, thereby controlling its waters. Eight Mile Brook connects this lake with mill pond five miles below. This brook drains a large watershed. The quantity and quality of this water supply are unsurpassed.

Mill is in complete running order. Location for freight will compare favorably with any mill in New England.

Property open for inspection at all times by appointment. Address, HEIRS OF L. C. WHITE, WATERBURY, CONN.

CHAS. M. JARVIS, President. GRO. H. BAGE, Secretary. BURR K. FIELD, Vice-Prest. F. L. WILCOX, Treasurer.

THE BERLIN IRON BRIDGE CO., Engineers, Architects and Builders of Iron and Steel Structures.



THE above illustration, taken direct from a photograph, shows the construction of an Iron Truss Bridge, designed and built by us at Massena, St. Lawrence County, N. Y., consisting of one span of 235 with a roadway 16 feet wide in the clear. OFFICE AND WORKS: EAST BERLIN, CONN.

character of material being operated upon. Should the material be hard and require a longer time for reduction, it is obvious that the feed should be slower, and this is secured by advancing the plate *b*, so as to contract the throat of the hopper, and thereby reduce the number of blocks in contact with the cutting blades, and consequently the quantity of chips delivered to the pulverizing chamber. When wood is used which is more readily reduced, the plate *b* may be moved backwardly, permitting a greater number of blocks to come into contact with the blades, and thus increasing the quantity of chips produced.

WHY THE PLANT WENT DOWN.

[WRITTEN FOR THE PAPER TRADE JOURNAL.]

By JAMES F. HOBART, M. E.

I have just been looking over a plant which is on the road to obscurity. Only a few years ago the concern was prosperous and doing a large business. To-day it is existing, soon it will be of the past. Several lessons are to be learned from the condition of affairs and things in and around this mill. The first thing which strikes the observer is the extreme air of dilapidation. Everything seems to be "hung by one hinge." The buildings are out of repair, the machinery, if not worn out, is fast becoming junk. Directly, this state of affairs is traceable to a cramped state of the finances. Every energy has been strained to the utmost, in the hope of making enough out of the mill to put it in its former prosperous condition. The attempt has been a failure, and the immediate result is a state of things worse than before the trial was made.

Tracing the matter backwards, the "earmarks of cause" are plainly visible to one familiar with the ways of mills and mill owners. The fundamental cause was the establishment of a rival concern, or a number of them, each making an article a little better adapted for the purpose than was turned out by the mill we are discussing. This enabled the rival concerns at once to set the pace, and the price as well. The materials used by the rival concerns were easily manufactured, while the material used by the other party was of a nature antagonistic to the forms into which it had to be manufactured. This gave the rival concerns the inner track at once, and they were good jockeys enough to keep the pole after they had got it.

Another cause leading to the downfall or decay of the concern was the management of the factories. To begin with, they were in direct charge of an assistant superintendent who was perfectly capable of successfully managing the entire plant, if he had been let alone in his work. But that was not the case. The superintendent had to have his say, by all means. That is what he was supposed to be there for, while really he represented some money that was invested in the company and had to be put somewhere to get rid of him. He was a man who imagined himself to be a great mechanic, an engineer in fact, who could develop anything if he only had the time and inclination. He certainly was ar-

tistic in his ideas, but they were devoid of the simplest rules of mechanics, not even to mention those of engineering. In fact, he knew just enough to be a dangerous man for a manufacturing concern to have in power over property, and manufacturing property at that.

He was prolific in ideas and suggestions, and if the ideas bore worthlessness upon their face they would be presented to those under him, to be worked out and put in practice. If rejected by those to whom they were presented there was trouble from that cause, and if in self-defence the ideas were carried out and made to prove their lack of value, then the man who put them through was condemned for not seeing their worthlessness and rejecting them before time and money had been spent on putting them in practice.

A correct transcript of the cause of decay of this concern demands the truth to be stated, that other concerns may avoid shipwreck on the same rocks. To this end it is necessary to reveal the fact that the superintendent had occasional periods of mental irresponsibility, when his orders would be very urgent and emphatic, and the next day the work would be countermanded, with total conviction of ever having issued any such orders, and a total repudiation of ever having done so.

This course naturally led to a great deal of useless—yes, much worse than useless—work being done in the factory and thousands of dollars annually wasted in carrying out whims and commencing things which were never finished.

In addition to all this handicap matter, the factories were under the disadvantage of too much office interference. Every few weeks somebody would come down to "straighten out" some department of the works. Sometimes it was the secretary, another time the treasurer, who came down, and spent a few hundred dollars in turning things upside down, and undoing what the last man from the office had accomplished. Another time, a clerk or a salesman, would try his hand at revolutionizing the manufacture of a particular kind of paper, or at getting a peculiar tint, or at changing over the machine to suit some idea he had picked up and seductively presented to the owners. All this cost lots of money, and the profits had to pay it. When they refused there was a great hurrah, and something had to be done right away.

Then the "boss in chief" took a hand. Peremptory orders would be issued to "reduce expenses at once." The only way it could be done, within the power of the assistant superintendent, was to reduce the pay roll. As none of the operatives could be spared, the manufacturing having to be carried on at any cost, the repair force must necessarily stand the brunt of the order. Time after time, upon the reception of the intermittent order to "reduce expenses," the entire force of repair mechanics would be "laid off." This, of course, put an end to all improvement in the plant. It also effectually stopped even the keeping of the machinery in condition to do good work. The instant the repair men were laid off, the factory and all within it continued to deteriorate unchecked.

The course of these spasmodic retrenchment attacks was always the same. In a

few days something had to be fixed, orders or no orders, and a few of the mechanics were set to work again. In a few more days some more of them were back, and before the end of the month—these chronic attacks usually came just after the monthly balance sheet had been laid before the company—most of the men would be back again, only to take another enforced vacation at the beginning of the next month or the one after it.

This was the pace which told upon the downward course of the factory. When the men came back they could not commence where they left off. No. Other things had happened since that work was commenced, and the new ways took precedence over the old in that establishment. Thus the needed work that was well commenced and was actually necessary for the maintenance of the factory was never finished. Much of the new work was left in the same way whenever the call for "less expense" decimated the working force in the repair shop.

The natural result of such a course can only lead to the making of temporary repairs of the quickest possible kind. As a result the entire plant becomes so badly run down in the course of a year or two that rebuilding, and, perhaps, a good deal of new machinery, is the only way of making it a profitable property again.

Another thing this concern suffered from, and that was "over management." The "company" consisted of the heads of several separate concerns in the same, or similar lines of manufacture. The several concerns had been consolidated, and, of course, the head of each had to have a position of interest and responsibility in the new concern. The result was that the several heads of the consolidated concerns were made president, vice-president, secretary, treasurer, etc., of the new organization, with results that I believe to have been far from harmonious or profitable.

Theoretically, the scheme seems just right. There are the heads of several manufacturing concerns, all experienced in manufacturing various kinds of paper; where can a better collection of men be found to form the officers of a large company to make all kinds of paper? Practically, it didn't seem to work that way. The reason may not be hard to find. Each and every one of the new officers had been taught to command, but not to obey. What so natural as to expect that they each should wish to keep on commanding after the change? Who would expect them to obey? If any obeying had to be done let some other man do it. This very readily explains why the various officers, one after the other, should take turns at "regulating things" at the factory. And anyone can see the results of such a policy, or lack of policy, that exists all through this concern. The competitors, as stated, already fix the prices. In a short time they will also make all the goods.

AT AUCTION.

Fully Equipped Pulp and Paper Mill.
Grand water power, held by cemented stone dam; modern machinery, buildings and fixtures; low freight rates, cheap wood, labor, coal. For detailed information, date of sale, etc., apply to
A. H. BURBOWS, Trustee,
Lynchburg, Va.

JOSEPH C. GODFREY,

SUCCESSOR TO
Uttersville Paper Mills, Sauquoit Paper Mills, Utica Paper Mills.

TISSUES AND WAXED PAPERS.

Office, 541 Exchange Building, Boston, Mass.

ECLIPSE CORLISS ENGINES

OF ALL STYLES, 40 TO 2,000 H. P.

Built by - -
FRICK COMPANY, Engineers.

Corliss Horizontal Stationary Engines,
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Condensing or Non-Condensing, Single or in Pair.

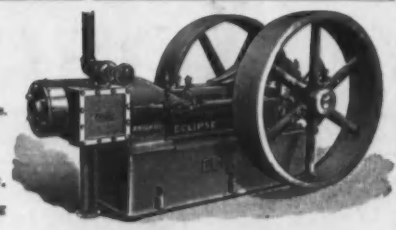
Corliss Compound Engines,
Tandem or Coupled, and Cross Compound.

Corliss Engines for any Service.
Frick Company's High Speed

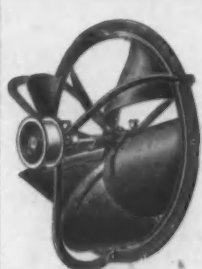
Automatic Steam Engines.

Capacity up to 200 H. P. Ask for Illustrated Catalogue.
We solicit opportunities to submit proposals for furnishing all kinds of power plants. Address

FRICK COMPANY, Waynesboro, Pa.



NEW YORK OFFICE: Taylor Building, 22-41 Cortlandt St.



STEAM
IN THE
MACHINE ROOM
AND
DUST
IN THE
RAG ROOM
ARE TROUBLESONE.

THE BERRY WHEEL REMOVES BOTH.

WRITE TO A. HUN BERRY, 23 West First Street, BOSTON.

EXPORTS FROM NEW YORK.

(Continued from page 877.)

bbls.; Brazil, 82 bs., 2 bbls., 2 cs.; British Africa, 2 bs.; British Australasia, 1 bl.; British West Indies, 2 bs.; Danish West Indies, 1 bl.; Dutch West Indies, 6 bs.; San Domingo, 2 bs.; Uruguay, 1,000 bs.; Venezuela, 24 bs. Totals—5,840 bs., \$18,678; 500 bbls., \$1,400; 2 cs., \$136; 2 bbls., \$135.

WALL PAPER, to British West Indies, 1 cs.; Mexico, 13 bs.; Venezuela, 2 cs. Totals—3 cs., \$192; 13 bs., \$165.

WASTE, bales, to Antwerp, 4; Central America, 2; San Domingo, 4; United States of Colombia, 5. Totals—15 bs., \$476.

WOOD PULP, rolls, to Antwerp, 1,056; Havre, 394. Totals—1,450 rls., \$3,875.

WOOD PULP MACHINERY, cases, to Liverpool, 21, \$3,835.

Total exports for the week, \$6,691,863.

Paper Mill Sold.

The entire property of the Sheffield Paper Company, Saugerties, N. Y., was sold at auction under foreclosure at the Palmer House, in that village, by Referee Benjamin M. Coon, October 25. The sale was under a second mortgage, upon which there was due for principal, interests and costs about \$125,000. The first mortgages amount to about \$50,000. There was a very large attendance at the sale. Colonel A. G. Paine, president of the New York and Pennsylvania Company, bid \$25,000; the next bid was \$40,000, and at that sum the property was struck off to Mrs. Agnes R. Sheffield, the trustee for the bondholders under the foreclosed mortgage. The sale includes the big paper mills, the buildings occupied by the Saugerties Manufacturing Company, and several other buildings and lots, together with a large quantity of paper making machinery. It is not yet known what will be done with the property, or whether the paper mills will be operated at all for the present.

Figures are being furnished for paper mill machinery, with complete power plant to run it. The inquiry comes from a Russian city. As similar orders have recently been filled in this market in competition with Germany, the parties having the business in hand feel almost positive of securing the order. Last shipment of paper mill machinery for Abo, Finland, Russia, which was made a few days ago, amounted to \$11,376.

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The Patent Endless Felts of the
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have proven themselves unequalled. Stand to their size and increase production materially.
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UNAFFECTED BY HEAT, STEAM or WATER.
Belts for Main Driving and Work of a Heavy Nature a Specialty.
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SOLE MANUFACTURERS.
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PAPER MILLS.
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Architects.

PRIDE, CHAS. B., Mill Architect and Hydraulic Engineer. Specialties: Paper and Pulp Mills. Appleton, Wis.

TOWER & WALLACE, Architects and Engineers. ASHLEY B. TOWER, Consulting Engineer. Designs for paper, fibre and textile mills. Broadway and 25th Street, New York, N. Y.

Bale Ties.

WILSON, H. F. & H. F., Manufacturers of Steel Wire Bale Ties, for baling all compressible material, 577 and 579 Tenth ave., New York City.

Baling Presses.

RYTHER MANUFACTURING CO., Office and Factory, 48 Mill Street, Watertown, N. Y.

Dandy Roll, Fourdrinier & Other Wire Mfrs.

BROWN & SELLERS, manufacturers of Fourdrinier Wires, Wire Cloth, Dandy Rolls, &c., Holyoke, Mass.

BUCHANAN, BOLT & CO., Patent Seamless Wove and Laid Dandy Rolls, Fourdrinier Wires. Holyoke, Mass.

Jute Butt Brokers.

CABOT, RAY & CO., 81 Water st., New York.

Paper Clays.

BARBER, CHAS. B., 5 Beekman st., New York.

LIZZIE CLAY AND PULP CO., Manufacturers White New Process Clay for Paper Trade. Established 1870, M. T. Warns, Proprietor. Phillipsburg, N. J.

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HEWITT, C. B. & BROS., Printing, Wrapping Building Papers. 48 Beekman st., New York.

HULBERT, H. C., & CO., 53 Beekman st., N. Y.

MURPHY, JOHN J., 47 John and 8 Dutch sts., N. Y.

Paper Makers' and Paper Stainers' Colors.

HUBER, J. M., Manufacturer and Importer of Carmine, Pulp Colors, Orange Mineral, Ultramarine, Paper Blue. 239 Front st., New York.

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MCQUADE, ARTHUR J., 525 & 527 E. 12th st., N. Y.

METZ, PHILIP, 49 Ann st., New York.

OVERTON, R. H., & SON, 104 Times Bldg., N. Y.

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RAU, G., Times Building, Rooms 112 and 113, N. Y.

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