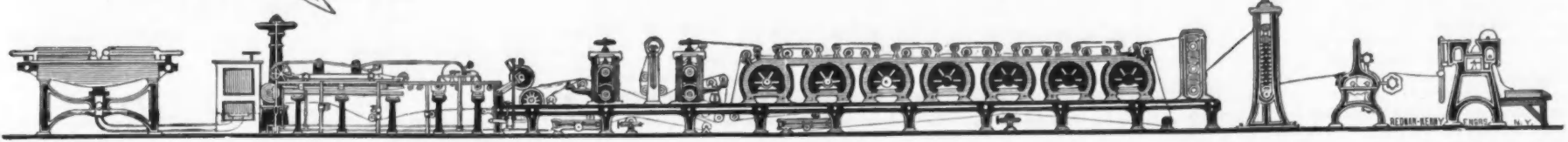


# THE PAPER TRADE JOURNAL.



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

VOLUME X.—NO. 10.

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## Trade Topics.

### Boiler Setting.

[WRITTEN FOR THE JOURNAL.]

#### V.—BOILER COVERING.

The higher the pressure in the boiler, of course, the higher will be the temperature. Now, it is one of the laws of heat that the quantity of heat lost by radiation from the outer walls is directly in proportion to the difference in the temperature of the boiler walls and the external air. By experimenting with various thicknesses of non-conducting cows' hair felt, all of one kind, tightly drawn on the surface of iron plates to avoid air spaces, it was found that between the limits of  $\frac{1}{4}$  inch and  $7\frac{1}{2}$  inches of felt, the radiation varied almost exactly as the inverse ratio of the square roots of the thicknesses of felt.

Thus, with a thickness of plate of 5-16 inch, there were radiated the following proportions of heat:

Thickness of Belt.	Units of Heat per Hour per Sq. Ft. per Deg. Diff. of Tempe.	Comparative Waste.
Naked.....	2.933	100.
$\frac{1}{4}$ inch.....	1.054	35.9
$\frac{1}{2}$ inch.....	0.573	19.5
$\frac{3}{4}$ inch.....	0.412	14.
1 inch.....	0.337	10.4
$1\frac{1}{4}$ inch.....	0.274	9.3
$1\frac{1}{2}$ inch.....	0.251	8.5

The smaller the boiler, the greater the waste of heat by radiation, because small boilers have larger surface in proportion to their contents than large ones have. A boiler having eight times the capacity has only four times the surface. One having nine times the surface has twenty-seven times the capacity in some experiments.

In some experiments by Isherwood at the navy yard in New York on a locomotive type of boiler of one-fourth inch boiler plate with 5,306 square feet of grate surface, 22.1 cubic feet of water room, and 12.3 cubic feet of steam room, and 94.09 square feet of external heating surface, the boiler standing in a shed of boards with one end open, there were 687.565 pounds of water evaporated per hour during the experiment before boiler was covered with felt, and covering with felt increased its capacity 22.05 per cent.

In other words, there were 151,608 pounds of steam condensed per hour, simply by reason of the omission of felt.

Putting this in pounds per hour per square foot of external surface, we have 1,6113 pounds of steam condensed per hour per square foot.

In these experiments the temperature of steam and water within was 360° F., and that of the external air, 53.5°.

Of course if the temperature of the external air had been lower, and that of the steam higher, there would have been more loss in pounds of steam condensed per square foot, and more in per cent. of steam condensed.

### Slide Valves.

The three-ported slide valve, like all other valves which affect both the steam admission and the exhaust, has not the same range of cut off, by reason of the cramping of the exhaust passages.

If the steam is cut off at half stroke, by reason of lap being given to the steam valve, the same amount of lap on the exhaust side would shut off the exhaust as well as the steam admission.

If lap is given on the steam side and none on the exhaust, the exhaust will open before the piston arrives at the end of the stroke, and the exhaust will take place too soon.

The best that can be done is to add just enough lap to the exhaust side to counterbalance lap on the steam side, so that the exhaust will be opened before the piston gets at one end of the stroke and close before it gets to the other end.

In practice it will be found that two-thirds are about the shortest that a three-ported slide valve can be made to cut off to advantage, and often this is too short for good duty in large engines. It is for this reason that the independent cut-off riding on the back of the slide valve is used.

The more ports the cut-off valve has, the shorter the stroke needed to get the necessary opening.

This independent riding cut-off valve may have its point of cut-off very slightly altered by changing its stroke.

Increasing the length of stroke or travel of the valve delays the point of cut-off. With less valve travel the steam is cut off sooner. This, however, alters the head of the valve. Hence, whenever the travel is altered the eccentrics should be set to keep the lead the same.

If the leads be equal at both ends, the point of cut-off will not be the same at both ends of the

cylinder, because the connecting rod is not parallel; that is, when the piston is half way, the crank is not at 90 degrees.

The shorter the connecting rod the greater this difference.

### On the Manufacture of Sulphate of Soda.

[Continued.]

The salt prepared by Otto Pohl's method works exceedingly well in the direct process. His system consists in evaporating the brine by bringing the products of combustion into direct contact with it in one vessel, while above there is a pan in which another quantity of brine is heated from below. It is found much more economical than the ordinary system of salt manufacture both as to fuel, labor, and working space, and hence, affords a supply of salt at much lower cost. I have here samples of this salt kindly furnished by Mr. Pohl.

Any carbonaceous matter contained in salt used for the direct process is quickly burnt out in the cylinders, leaving a perfectly white sulphate.

When a cylinder is filled with salt it is made the exit of the series, and quickly becomes elevated to a working temperature (which may be estimated at 400° C.) by the hot gas coming from the previous cylinders, and also by the action of the small fire attached. As soon as the formation of sulphate commences, the temperature rises rapidly, rendering the further application of external heat unnecessary until—in consequence of the small amount of chloride remaining—the heat, generated by chemical action, diminishes.

As the salt becomes converted into sulphate it is brought nearer and nearer to the source of sulphuric acid, the proportion of which, passing the cylinder, increases daily until it becomes the first cylinder in the series, when it receives the red hot gas coming direct from the burners, which quickly decomposes the remaining chloride.

The time occupied in decomposing the contents of a cylinder varies with the kind of salt and the size of the pieces employed, but under ordinary circumstances should not exceed 21 days, and has often been done in less than 14 days.

When the charge is decomposed the cylinder is isolated by closing the dampers connecting it with the sulphurous pipe and the succeeding cylinder, which latter in its turn is made the first in the series. The drawing-door is now opened, and the sulphate discharged; after which the cylinder is refilled, and again made the last in the series.

The amount of cubic capacity required in the cylinder per ton of sulphate per week is about 170 to 180 cubic feet.

The pyrites burners, with the exception of being better protected against heat losses, are the same as used in the old process.

The draught from the burners is obtained by means of exhausters placed on the passage from the cylinders to the condensers. The waste steam from the engine driving these, after passing through a super-heating coil, heated by the waste products of combustion coming from the cylinder fires is mixed with the sulphurous acid in the burners to supply the necessary water vapor for the decomposition of the chlorides. Besides being an economical source, this has the advantage of automatically regulating the supply of steam to the sulphurous acid, which must vary with the speed of the engines driving the exhausters.

Neither the hydrochloric nor sulphur acids have any appreciable effect upon the iron work of the apparatus, as the temperature is always in excess of that required to keep them in the gaseous condition.

The condensers used are the same as in the old process, but, as the gas comes in a continuous stream, there is no necessity for the frequent variation of the supply of water to the condensers which is required to condense the acid from pots.

The advantages claimed are briefly as follows:—

1.—Although the cost of apparatus is about the same as that required for the old process, there is this difference: That whereas the life of a vitriol chamber may be estimated at, say, ten years, the cylinders used with ordinary care in the direct system show every sign of lasting three times that period without renewal.

2.—Less fuel, being about one-half that required by the old process.

3.—Less labor, and, with the exception of the burner men, and one intelligent person to look

after the plant, no skilled labor is required. Hence, less difficulty in dealing with the workmen.

4.—Less repairs. In the instance of one apparatus which has been working several years, I am informed that this item is less than 6d. per ton of sulphate made.

5.—No nitrate of soda necessary.

6.—Cheaper qualities of salt—not available for the old process—are used.

7.—Less sulphuric among the hydrochloric acid. Consequently less annoyance from sulphate of lime in the Weldon process.

8.—No leakage of hydrochloric acid into the fire flues, the whole of it passing through the exhausters.

9.—The sulphate when drawn emits no hydrochloric or sulphuric acid to annoy the workmen.

10.—Sulphate is made containing only very small quantities of chloride and free acid and, therefore, especially adapted for the manufacture of 76 per cent. or other high strength caustic, for which it is largely used. The manufacturers,

of alumina is the best mordant for quercitron. Alum is applied either before or after the pulp is dyed blue. The tints produced may be enlivened and beautified by a second coloring with aniline blue; but the red blues will, of course, be unfavorable to the purity of the binary color. Suitable combinations of Prussian blue and red colorants may be had for the purpose of producing violet and lilac by using bluish red colorants, like fuchsine and cochineal, and adding aniline red blues. A decoction of redwood gives a bluish tone, extract of logwood a violet blue.

**Royal Blue.**—Peroxide of iron is as important for fixing Prussian blue on the fibre as for the formation of rust yellow. The metallic base is precipitated from a solution of the metallic salt by a bath of yellow prussiate of potash as an insoluble blue compound. The development of the blue on the fibre is to be explained in the same way as the formation of chrome yellow on the pulp, inasmuch as the mechanical connection between the dyestuff and the cell does not exclusively rest on the attraction of the surfaces, but on the distribution of the base on the interior of the cell. Vegetable fibres combine without an intermediate with the iron mordants, which form the base for Prussian blue. The pulp mordanted with alum is treated either with a solution of sulphate of iron or sulpho-nitrate of iron and tin salt, and then colored by adding a solution of yellow prussiate of potash acidulated with sulphuric acid. The perchloride of iron is less suitable for mordanting vegetable fibre. A rust yellow foundation may also be given to the pulp by successively treating it with a solution of green vitriol and an alkali, whereby peroxide of iron is precipitated on the fibre. The best mordant is obtained by using nitrate or sulpho-nitrate of iron. According to concentration, 1 part of prussiate of potash may be used with 2 to 2½ parts of the iron mordant. It is indifferent whether the tin salt is added immediately after the iron mordant or after acidulating the finished color. The dyeing is then effected as follows: 4 to 5 parts of the iron mordant, 1 part of tin salt, 2 parts

of prussiate of potash, 1 part of sulphuric acid or 2 parts of muriatic acid; or 4 to 5 parts of iron mordant, 2 parts of prussiate of potash, 1 part of sulphuric acid, or 2 parts of muriatic acid and 1 part of tin salt. If the color is to have a greenish tinge, disoxydizing has to be effected by washing and the tin salt has to be omitted.

**Mordanting with Tartaric Acid.**—The affinity of acids for alkaline bodies is utilized for fixing safflower colors by means of organic acids. The colorant appears in commerce as carthamine, produced on a large scale from the blossoms of the safflower imported from the East Indies under the name of Bombay or Bengal safflower.

**Rose Color with Carthamine.**—Is only used for letter and flower paper. After the first coloring it may be mordanted a little with tartaric acid. Too much acid will make the tint too yellow. The shade obtained is very delicate, but not fast. Eosine produces much cheaper and faster shades than rose carthamine.

[END OF PART I.]

**Crocker's Reversible Self-Packing and Self-Cleansing Filter.**

The drawing represents a section of what is known as Crocker's Reversible, Self-Packing and Self-Cleansing Filter. The great demand for pure water, not only for domestic use but for manufacturing purposes—particularly in paper mills—has led to innumerable experiments and devices. The filter here shown is the outcome of careful study and practical construction. It is said to combine all of the qualities requisite for perfect filtration and thorough cleansing, and here it may be remarked that a filter not self-cleansing or easily cleaned is worse than none, for the dead matter collecting in a filter is more likely to produce dangerous results than the unfiltered water itself. The Crocker filter provides for passing the water through two fine metal strainers and a body of fine animal charcoal (the best filtering material known); but it differs from all other reversible or revolving filters in the following essential points: The manner of packing; the manner of holding the ball containing the filtering material; the self-packing stem or handle; the construction of the strainers, and the manner of putting them into the ball. While not differing materially in its general scientific principles from some filters previously invented, its superiority lies in the improvement of every detail of its mechanism and construction, and a freedom from any lia-

bility to become inoperative or impure. The matter of refilling with the packing material when required is made easy for any one, however inexperienced, and there is an improved device for attaching the filter to smooth faucets, not provided with a screw end. The Crocker filter is made in sizes up to 30 inches in diameter, and larger if required, and is thus suited for faucets, and for attachment to dwelling house, schoolhouse, hotel and other main pipes, and to stationary boilers and locomotives, and also for use in paper mills, breweries, bleacheries, starch factories and other manufacturing establishments requiring pure water. All sizes are cleaned alike without removing from connections. In material and workmanship these filters are of the best, the company manufacturing them having every facility in machinery and employing first-class mechanics, under the supervision of James A. Crocker himself, the patentee, and a practical man.

The letters on the cut indicate the parts according to the following description. AA, Packing of stem. B, Stop, to prevent the ball from turning entirely over. CC, Packing of ball and outer case. D, Free passage for water without filtering. E, Strainer. F, Filtering material.

The manufacturer of this filter is the Crocker Filter Company, 174 High street, Boston, Mass.

### Increasing Consumption of Heavy Chemicals.

The stimulating effects of the commercial "boom" in the United States during the latter part of 1879 on the English chemical markets, and the depression there which so promptly followed the reaction here during 1880, showed how largely are the British chemical industries dependent upon America for a market for their products. The steady increase in the importations of the leading chemicals into this country, as indicated by the customs' statistics, accounts readily for the sensitiveness of the British markets to any influences from this side. The following table shows the imports for the last four fiscal years:

	1880.	1879.	1878.	1877.
Bleach, tons.....	75,595	30,523	34,785	33,796
Carb. (sulf and ash).....	161,095	118,530	113,973	109,640
Caustic.....	22,395	22,837	16,584	16,687

The United States is already England's chief market for chemicals, and the large increase in the importations during 1879 and 1880 over preceding years, shows how largely these heavy chemicals enter as crude materials into our domestic industries. The competition among English manufacturers for the American trade is increasing every year, with the growing importance of this market.—*Oil and Drug Reporter.*

### Draft Regulation.

A correspondent writes to know which is the better way to regulate the draft of the fire: (1) by shutting off the air supply below the grate, (2) by closing the damper in the chimney, (3) by letting in air above the grate, or (4) by a combination of two or more of these three methods?

In reply to this, we have to say that the condition of combustion should have been stated.

What would be a good rule for a stove might be a bad one for a furnace, or for a boiler, or it might be right, according to circumstances.

What would be right for some boilers or for boiler settings, might be just the wrong thing for another boiler or for another setting.

All of which sounds very Bunby-like, and might be construed into an attempt to dodge the question by a non-committal answer.

But it must be remembered, that in giving advice upon such a subject, as in giving medicine in case of sickness, what might be good in one case would not be good in another.

The doctor would have the patient before him to determine what to advise.

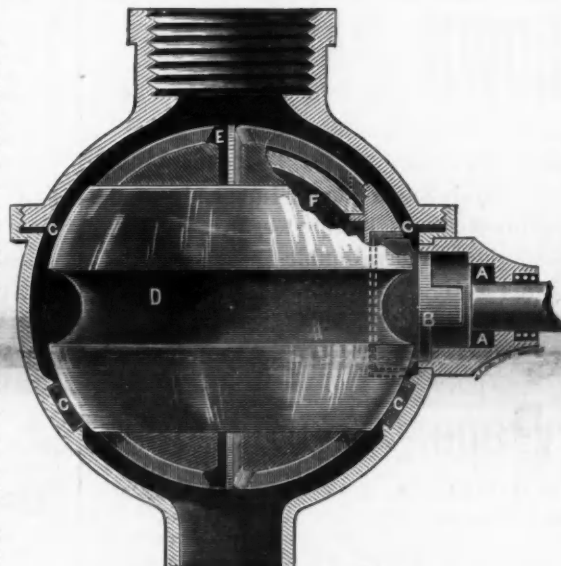
In this case, we must imagine all kinds of patients, in order to enable the inquirer to fit to his own case the proper remedy or advice.

But we shall not dodge this case at all. We shall simply lay down some principles, which will be good for all possible classes of cases.

In the first case—that of shutting off the air supply below the grate only (leaving the damper open, if there be a damper),—we will effectually diminish or stop combustion, on two conditions, first, that the ash pit and door be perfectly tight; and second, that there be no leaks into the combustion chamber.

If the ash pit and door were not tight, air could not be drawn in through these lower leaks and keep up the supply necessary for combustion, although the lower door were nominally closed.

In the second case, that air which is so often needed to complete the insufficient combustion caused by the air which passed through the grate, would be apt, with some kinds of fuel (especially wood), to keep up more or less imper-



SECTION OF CROCKER FILTER.

while guaranteeing this quality to contain less than 0.5 per cent. chloride of sodium, often supply it with less than 0.2, and even as low as 0.5 per cent. chloride. I need hardly say that sulphate of such a quality commands a decided preference over that made by the old process, and in practice sells for about 2s. 6d. per ton over the ordinary market rate.

Sulphate made by this process is also used without refining for the manufacture of plate glass, and is superseding that of the old process which has to be refined at an additional cost of 2s. and upwards per ton before it is fit for this purpose.

Lastly a reduced cost of production, which may be fairly estimated at 15 to 20 per cent.

In conclusion, the process is now rapidly extending. Eight sets of apparatus are now at work, three others are in course of construction, giving an aggregate capacity of production of about sixty-seven thousand tons per annum. Arrangements are also being made for the immediate erection of additional apparatus.

### Coloring Paper Pulp.

BY JULIUS ERFURT.

PART I.—CONTINUED.

**Red Prussiate of Potash.**—By the action of oxidizing bodies, the yellow prussiate of potash is changed into red prussiate of potash, losing one equivalent of potash. It contains the iron not as a protoxide, but as a peroxide. The sesquicyanide of potash forms reddish yellow crystals of the formula:  $Fe_2Cy_2 + 3KCy$ . The action corresponds to that of the red prussiate. The blue precipitate which the latter forms with iron salts is lighter in color than Prussian blue, and is represented by the formula:  $Fe_2Cy_2 + 3Fe = Fe_3Cy_2 + 3FeCy$ .

Milori and Paris blue are other names for Prussian blue, their value depending on the purity of their shade and their coloring power, which can be easily determined by tests in a small way. The color is decomposed by alkalis and restored by oxidizing agents such as chloride of lime and muriatic acid, nitric acid, &c. Green is obtained by dyeing Prussian blue on top of chrome-yellow. This is a fast but not handsome color. For fine papers it is preferable to have a basis of fustic or turmeric with alumina mordants. In mordanting the pulp, an excess of the alumina salt should be used, so as to increase the affinity of the substance for the blue colorant in suspension. The yellow foundation may also be given by quercitron. Acetate



fect combustion of the fuel on the grate, particularly of the top layers.

Our correspondent may determine which of these conditions applies to his own case.

The second way, by closing the damper, will work more or less effectually according to the conditions of that case.

If the combustion chamber above the grate were tight, and if the chamber itself were tight, while the lower or ash pit door were left open, the fuel lying upon the grate would be kept enveloped in an atmosphere of carbonic acid or of carbonic oxide, which would check its ardor.

But if the combustion chamber above the grate has leaks (which really are useful with a full rate of combustion by reason of forming gas consumers or smoke consumers), and if there be any tendency to strong draft from the room in which the stove, furnace or boiler are located, then air will pass from below through the grate, cause combustion and the gases of combustion will pass out through these leaks.

If the damper itself is not tight, of course closing it will be effective only in proportion as it is tight.

In the third way mentioned, that of admitting air above the grate, it may increase the heat of the stove, heater or boiler, or it may diminish it, just according to the conditions of that case.

In some cases, admitting air above the grate either lessens the combustion of fuel or increases the heat of combustion, or both combined.

This will be in cases where the air is improperly supplied below the grate and the furnace is not consuming the fuel economically.—*Millers' Journal*.

**New Patents.**

No. 228,227. Process of Making Wood Pulp for Paper.—Henry H. Furbish, Berlin Falls, N. H.

No. 228,422. Paper and Manufacturing the Same.—N. Newton, Holyoke, Mass.

**REISSUE.**

No. 9,581. Vegetable Fibre from Pine Leaves and Other Vegetable Substances.—John George Stephens, assignor to the Clare Fibre Company, same place. Original No., 235,310, dated December 7, 1880.

No. 9,568. Machine for Making Frames or Casings for Lamps from Paper Pulp.—Grenville M. Stevens, Deering, and Hugh J. Chisholm, Portland, Me. Original No., 234,694, dated November 21, 1880.

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J. S. McELWAIN, Agent.



Correspondence.

Holyoke Notes.

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., March 10, 1881.

The Parsons Paper Company is about to begin extensive repairs on the old Mt. Tom mill, which it recently bought. The upper portion has already been renovated and a large addition built for the use of the Hampden Glazed Paper and Card Company, and now the Parsons Company will occupy the remainder for increasing its own capacity. A 66-inch Fourdrinier machine, four engines and probably six drainers will be put in. This mill was almost the first ever built in the city, and although used for a long time as a grist mill it has for years been the home of the Lincoln Paper Company, which made manilla paper. But now the old machinery will all be cleared out and everything made new, except the outside walls, which were built in the first place to stay. The machine room will be made twenty feet longer and six feet wider, the latter by building out toward the river.

The Water Power Company has started the fires under the boilers for heating its new mills, and the Envelope Company has commenced getting in its machinery, hoping to get to running in a week or two. This company occupies the upper story of the lower level building, where it will have room enough to double the capacity of 600,000 envelopes a day, with which the company intends to start. The National Blank Book Company will soon take possession of the Cabot street building, and begin to remove its establishment from New York. This will make an important addition to Holyoke, though we are getting so now that one big concern does not count as much as it once did. The Water Power Company has already begun work on the foundations for the upper level building, which will form the third side of the square of large mills, making, when completed, the most extensive collection in the city.

Holyoke expects to get a new depot this summer. The Connecticut River road has felt the need of one for years, and it fully recognizes the necessity of giving our growing community better accommodations than we enjoy at present. But the question of new roads coming to the city, and the probable call for a union depot has occasioned considerable anxiety and hesitation. The Water Power Company is working for two new roads, and thinks the city must have a large union depot. The River road is willing to do what is fair, but it feels like doing something this season on account of the urgent need, and the upshot may be that this company will begin preparations for building a depot large enough to accommodate the other roads whenever they come in. At the recent railroad hearing in Boston, on the petition of the Connecticut Valley road to extend their tracks to Holyoke, the Water Power Company presented statistics which it had carefully collected, showing that the whole bulk of Holyoke freight is about 300,000 tons annually, of which 20 per cent. is in manufactured articles sent away.

The postal card agency had the largest order yesterday, by nearly 1,000,000 cards, that it ever received. The order called for 5,967,500 one-cent cards, and 1,000 two-cent cards, which will weigh altogether nearly twenty-four tons and make three car loads.

E. C. Taft, D. H. Newton and James H. Newton, with their families, have gone to Florida to stay till the rigors of the New England spring, the worst season in some respects, are over.

Edward P. Bagg, son of Aaron Bagg, of West Springfield, and bookkeeper for the Parsons Paper Company, has bought a Holyoke building lot.

There is a good prospect for a thrifty industrial association for the practical instruction of skilled mechanics and those wishing to become such. Many of the best people in the city are interested in the movement, which is to be formally organized Monday evening. It is proposed to have a membership fee and an annual assessment, with which to maintain a good reading room and scientific library.

It is a wonder that we do not have more cases of smallpox in this city, considering the danger of infection from the paper rags. Just over the river, in South Hadley Falls, the authorities were a little slack, and now they have two families isolated and four or five of the children down with the disease. One child has died. In both the recent instances the Holyoke officers have had to be sent for, and the premises have been forcibly entered, the families having such a dread of having their children taken to the pest-house. This has been often proved to be the safest plan for them, however, besides being best for the community. The two cases at the Holyoke pest-house have recovered and been discharged, and there has been no death for a good while.

W. H. Goodenough, a foreman in one of the Whiting paper mills, has removed to Adams, where he will enter the employ of L. L. Brown.

There are three kinds of steam traps. The expansion trap is of two kinds, one composed of metals expanding differently under heat (as brass and iron), the other depending on the expansion of a liquid. As condensed steam is cooler than live steam, it cools the most expandible of the two metals so as to open a passage for the water. If there is a liquid to be expanded, live steam closes the orifice and condensed steam opens it. The function of a good pot trap must be to discharge the water of condensation from coils or from the cylinder of an engine into a tank or sewer at a higher level than that which it drains, keeping the coils of the cylinder dry. To be of real economy, a trap should discharge the water of condensation back into the boiler. The pot trap is not economical by reason of its not discharging water down to atmospheric temperature and pressure, under any condition of temperature of the water in the coils due to high pressure.

The Paper Trade in the City of New York.

[Continued.]

Apart from his association with the manufacture of white paper from straw Coe S. Buchanan has a very interesting history in connection with the general paper trade. He comes of an Orange County, New York, family, and was born in Essex County, New Jersey, on June 1824. The late James T. Derrickson having married his sister young Buchanan was ushered into the paper business in 1841 at the old Plain Valley paper mill, near Morristown, N. J., then owned by Gaunt & Derrickson. Of this mill Mr. Buchanan gives the following interesting account:

"It had in former days been a hand mill, never handsome, and its appearance was not at all improved by latter additions. The rag room was much the best part of it, ample in size and well lighted. Its proportions were due to the fact that all the stock was then prepared by hand, and good old Barbara, who was mistress of this department, required a large force to prepare the quantity needed for the half ton of paper which was the maximum product per day. She was not young then, but a few years ago I was told she still held the same position in the same room, not much changed, a remarkable instance of the length of life accorded to the godly amid the dust of the rag room. The devil was no doubt sometimes troublesome in that room, but not in mechanical form; nor was his brother the rag cutter there. The only machine was a wire cylinder inclosed in a box; constructed apparently to give the least possible result for the labor expended, as it could be filled only by hand, and after sufficient rotation was emptied in the same way.

"The rag boiler was of copper, six by six. Wooden staves bolted on top doubled its depth. A fire underneath gave fair results when the smoke could be prevailed on to go up the chimney instead of coming out at the furnace door. Three small engines and two small bleaching vats in a dingy, cramped room afforded the pulping capacity. A huge over-shot wheel drove the engines and a small wheel of the same kind the machine—that is, when there was water to work them. The machine was one of the first imported to this country from England, and had done service in some Eastern mill. Its short wire and small drivers made about 35 feet per minute possible.

"John and William Kay, Scotchmen, afterwards widely known as skillful paper makers, were the only permanent skilled workmen in the mill. Occasionally, journeymen paper makers—'tramps,' as they were called in that day—would get a short job. Among those who obtained work while I was there was a young Scotchman, from whom I obtained a description of bleaching with chlorine gas, which enabled me to have constructed at the village shop a retort for its manufacture. With this I began experiments on various fibres, including straw. This young man was Adam Lowery, now a wealthy citizen of Cleveland, Ohio. I may add that the secrets of the paper trade were jealously guarded in those days, and the Kays regarded my disposition to inquire into them with anything but a friendly spirit. Receipts for sizing, color making and similar processes, were placed among the dark arts and sold for high prices, in some instances as much as \$500."

Mr. Buchanan says that his thoughts were turned at the very first to the utilization of coarse materials. The extent of this field will be realized when it is recalled that there was no such thing then as straw wrapping paper, and that manilla rope was not used. Wrapping paper was made mostly from the lower grade of rags, hemp rope and coarse bagging. "Scarcely anything now used in making wrapping paper," continued Mr. Buchanan, "was then turned to account. Lyman Hollingsworth soon after began to use manilla rope in making manilla paper. Straw wrapping paper did not make much show in the market until about 1850, and was of very small importance as late as 1845. Joseph Smart, who had a mill at Roslyn, Long Island, or in that vicinity was the first man that I know of making old printed paper over into new white paper. His water power was taken away from him when Brooklyn made her first water works, and he then went to Troy, where his sons now are."

Mr. Buchanan came to New York city in the spring of 1843, and obtained a situation with Charles Marr, a paper stock dealer at 4 Burling slip. He began business as a paper stock dealer on his own account in February, 1845, and in connection with this gradually built up a paper business. In the spring of 1848, in conjunction with Preston Warfield, he bought out Marr, the firm being Warfield & Buchanan. A few months later he sold out to Warfield, who, in 1849, went to California, and was subsequently stabbed and killed there by some Spaniards. In 1850 Mr. Buchanan bought an interest in the Empire Paper Mills at Rock City Falls, now owned by George West and then by Kilmer & Ashman, the firm becoming Buchanan & Kilmer. In 1852 Buchanan & Kilmer moved from 4 Burling slip, where their office had been from the start, to 107 Fulton street, and soon afterwards took into copartnership Ellsworth Cheeseborough and William H. Parsons. The name of the new firm was Cheeseborough, Buchanan & Co. Cheeseborough was bought out after a few months, and the name of the firm changed to Buchanan, Parsons & Co. In the fall of 1855 Buchanan & Kilmer sold out the New York business to Wm. H. Parsons, and confined their attention to manufacturing. At this time they were running several mills near Saratoga. In 1856 they dissolved copartnership, Buchanan taking the Empire mill and two smaller ones, and Kilmer the straw print mill at Rock City Falls. Mr. Kilmer still owns this mill, and has grown wealthy from the profits of it.

One of the two smaller mills taken by Mr. Buchanan was burned down in March, 1858, and afterwards rebuilt by him in conjunction with Solomon A. Parks, now of Glen's Falls, as a straw print mill. This was known as the Pioneer

Company Mill. It was burned in March, 1859, and upon its site Mr. West has since built one of his half dozen paper mills. It may be mentioned in this connection that about 1862 Mr. West bought of Mr. Buchanan the Empire mill, with its personal property, entirely on credit, but soon paid for it and built another mill. His neighbors manifested their approval of his enterprise by giving him political preferment, and he acknowledged the distinction by building another mill. These interchanges of compliments have been continued until at present Mr. West is a member of Congress, and the community is rendered prosperous by the possession of six or seven paper mills.

In 1863 Mr. Buchanan, in company with D. A. Bullard and others, built the mills at Schuylerville, N. Y., which they sold in 1870. The final chapter of Mr. Buchanan's history in connection with the New York paper trade, has been told in these columns with that of Perkins, Goodwin & Co.

In conclusion, however, it will be interesting to read Mr. Buchanan's account of the paper trade in this city in 1843, thirty-eight years ago. He says:

"When I came to New York, as you went down Nassau street the first house to meet in the paper line was that of John Priestly, at 116 or 120, and the next was John Campbell's, at 112 and 114. Just down Fulton street, between Nassau and William streets, was the house of White & Sheffield, and next door to that was Burnap & Babcock's. In Nassau street, just below John, kept Perse & Brooks. Turning down John, the first paper dealer to meet was E. B. Clayton. On the other side of the street, a little below, was Edgar J. Bartow. Below Gold street Thomas Vernon kept a little seven by nine place. At that time he and his brother Samuel used to drive their own wagon, and carry bundles about on their shoulders. Next below was Seymour & Co. At the corner of Water and Burling Slip was the warehouse of Cross, Bulkeley & Gookin. At 5 or 7 Burling Slip was Peter Poillon, Jr. Two or three doors below Cyrus W. Field was just making his start, mainly in rags and wrapping paper. I remember that old Marr would not let me deliver a bundle of rags to him until he had paid the money for them. In Maiden Lane was Simeon Kingsley. I think these were the only paper warehouses in a wholesale way then in New York."

[To be Continued.]

A Paper Makers' Convention.

A meeting of the Western manufacturers of straw and rag wrapping paper was held at Chicago on March 3 and 4. This meeting was distinct from and independent of the Western Wrapping Paper Makers' Association.

Following is an official report of the

PROCEEDINGS:

CHICAGO, Ill., March 4, 1881.

At a meeting of those manufacturers of wrapping paper whose mills are located within the States of Ohio, Indiana, Illinois, Iowa, Wisconsin and Michigan, held at the Sherman House, in the city of Chicago, Ill., Thursday and Friday, March 3 and 4, 1881, for the purpose of fixing a price on the different weights of straw and rag wrapping papers, and for ascertaining the stock of straw on hand at the mills and the supply of the same possible to be had by the 1st day of August next, there were represented in person, by proxy or by letter, the following named manufacturers:

Menasha Paper and Pulp Company, Menasha, Wis.; Rock River Paper Company, Beloit, Wis.; F. H. Reibling, Joliet, Ill.; S. W. Williams, Marseilles, Ill.; Bird Bigford, Marseilles, Ill.; Milan Paper Company, Milan, Ill.; Quincy Paper Company, Quincy, Ill.; Brownell & Miller, St. Charles, Ill.; John Black, Springfield, Ill.; Northwest Paper Company, Rockton, Ill.; Bradner, Smith & Co., Rockton, Ill.; M. T. Close & Son, Iowa City, Iowa; John R. Booth, Decorah, Iowa; Newbury Brothers, Vernon, Mich.; H. B. Childs & Son, Grand Rapids, Mich.; Niles Paper Company, Niles, Mich.; H. Smith, Tecumseh, Mich.; Jacob Mitchell, Palmyra, Mich.; H. N. Mather, Jackson, Mich.; Delphos Paper Company, Delphos, Ohio; David King, Clifton, Ohio; Republic Printing Company, Springfield, Ohio; George Rutledge & Co., Dayton, Ohio; G. P. Tangeman & Co., Hamilton, Ohio; J. H. Tangeman & Co., Lockland, Ohio; Haide-man Paper Company, Lockland, Ohio; J. C. Skinner & Co., Hamilton, Ohio; Oglesby, Moore & Co., Middletown, Ohio; Cleveland Paper Company, Cleveland, Ohio; Massillon Paper Company, Massillon, Ohio; Friend & Fox Paper Company, Lockland, Ohio; Judy, Knisley & Co., Coshocton, Ohio; T. J. Lytle, Valparaiso, Ind.; S. Bard, Logansport, Ind.

Meeting convened at 1 a. m., March 3. Upon motion of R. P. Dart, of the Milan Paper Company, Milan, Ill., J. H. Tangeman, of Lockland, O., was chosen chairman of the meeting, and C. W. Scott, of the Delphos Paper Company, Delphos, O., was chosen secretary. A thorough canvass of the stock and supply of straw was made; very full reports being furnished by G. W. Hastings, of Springfield, O.; R. P. Dart, of Milan, Ill.; and J. Mitchell, of Palmyra, Mich.; and shorter statements being made by Messrs. Fish, of Niles; Newberry, of Vernon; and H. B. Childs, of Grand Rapids, Mich.; F. Reibling, of Joliet; John Black, of Springfield; Bird Bigford, of Marseilles, Ill.; Samuel Bard, of Logansport, Ind.; M. T. Close, Jr., of Iowa City, Iowa; J. H. Tangeman and J. C. Richardson, of Lockland, O.; and the shortage was found to be greater and more general than had been supposed. It is estimated that the shortage will amount to fully one-third of the full capacity of the mills making straw paper during the next few months; and further, it is accepted as certain that the mills, if run full time and fully supplied with straw, would not be able to supply the demand for wrapping paper from now until August 1.

A resolution was offered by G. W. Hastings fixing the price on the various weights of paper, which was very generally discussed, and after receiving several amendments was laid upon the table to be taken up at the opening of the meeting on the morrow; and at 5 p. m. a motion to adjourn until 10 a. m., March 4, was carried.

SECOND SESSION—MARCH 4.

Meeting came to order at 10 a. m., with J. H. Tangeman in the chair.

On motion, it was resolved to resume the discussion of the resolution upon the table, which was finally withdrawn, the following being substituted and unanimously adopted:

Resolved, That the minimum price of heavy and

light straw and rag wrapping papers be respectively as follows:

Ream.	No. Sheets.	Size.	Weight.	Per Lb.
Heavy Straw Full.	480	13x18	20 lbs. or over.	25c.
Light Straw	480	13x18	7 lbs.	3c.
Light Straw	240	13x18	6 lbs.	3 1/2c.
Light Straw	240	13x18	5 lbs.	3 3/4c.
Heavy Rag Full.	480	13x18	20 lbs. or over.	25c.
Light Rag	240	13x18	8 lbs.	3c.
Light Rag	240	13x18	7 lbs.	3 1/2c.
Light Rag	240	13x18	6 lbs.	3 3/4c.
All Straw Ham Paper				3 1/2c.

Delivered in Chicago, St. Louis, Cincinnati, Cleveland, Buffalo and Louisville, which places shall be considered common points of delivery. That no greater amount be deducted on shipments to other points west of the Allegheny Mountains than the freight from the mill to the nearest common point; and that no price be fixed on paper delivered east of the Allegheny Mountains.

It was unanimously agreed by the mills represented that they would abide by the prices as fixed, and that the secretary be instructed to have the proceedings of this meeting printed, to send a copy to all mills not represented and request their hearty co-operation in maintaining the prices throughout. The manufacturers present at the meeting having no hesitation in assuring them that said prices can be had if asked and adhered to with any reasonable degree of firmness.

Upon motion of Mr. Richardson, a vote of thanks was tendered the proprietors of the Sherman House for their kind and gentlemanly treatment of the manufacturers, and for the use of their club room for the two meetings.

The object for which the meeting was called being fully attained, a motion to adjourn was carried. Respectfully submitted, J. H. TANGEMAN, Chairman. C. W. SCOTT, Secretary.

Fires.

Free Brothers, printers, Laconia, N. H., have been burned out.

Salisbury & Humphries, booksellers and stationers, Cobourg, Ont., Can., have been burned out.

K. R. Griffin, publisher of Franklin (Va.) Gazette, has been burned out. Loss \$700; no insurance.

The Phoenix Paper Mills at Peekskill, N. Y., operated by George F. Hoffman, were burned on Monday morning. The loss is about \$8,000. The amount of the insurance, owing to the absence of the owners, is unknown.

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Those who have unsafe Rotary Boilers in use can exchange them for the Loring Patent Rotary, and can be furnished with abundant evidence that the Loring Boiler is absolutely safe, and the only safe Rotary Bleaching Boiler in use. For the production of chemically prepared wood-pulp it has been found extremely difficult to make a boiler that would remain absolutely tight for any considerable length of time. I have accomplished this result by adopting modes of construction far in advance of the best methods for producing first class boiler work, in combination with substances and methods entirely independent of boiler work, and only known to myself. I invite special inquiries in regard to my patent WOOD-PULP BOILERS, patent STRAW-PULP BOILERS, and Rotary Bleaching Boilers; also to my patent process for extracting water from wood and straw pulp, and to my improved Fibre or Drainer Tanks, and Fibre Valves. The common steam boilers built by the undersigned have proved more durable and safer than those of any other manufacturer in the United States. Steam boilers, now in good condition, that have been in constant use twenty-eight years, can still be seen in use in Boston. Not one of the many thousand boilers, varying in weight from one-half to forty tons, has ever exploded or given out, to cause injury to a single person or to one dollar's worth of property, during the twenty-eight years.

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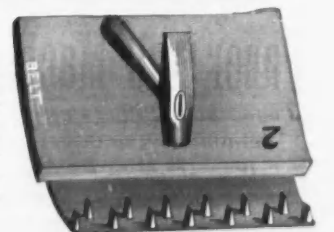
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HEWITT, C. B. & BRO., 48 Beekman st., N. Y.
HOWE & DIECKMANN, No. 80 Walker st., N. Y.
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LYON, N. C. Jr., 46 Ann st., N. Y.
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Paper Makers' Chemicals and Colors.

- HILLER & MERZ, Ultramarine, 55 Maiden lane, N. Y.
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SERGEANT BROS., 78 William st., N. Y.

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- BARTOW, THEO., & SONS, Jute Butts and China Clay, 54 Pine st., N. Y.
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MAHARIN, M. A., Metals, 513 Washington st.
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MCQUADE, ARTHUR J., 535 & 537 E. 19th st., N. Y.
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- BLOOMINGTON PAPER AND BAG CO., "Acme" Satchel Bottom Bags, 38 & 40 La Salle st., Chicago, Ill.
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- BLANCHARD, J. HENRY, Chemicals and Wood Pulp, 108 Milk st., Boston, Mass.
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DICKINSON & MAYO, Cotton Rags and Paper Stock, Springfield, Mass.
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B. FELSENTHAL & BROS., Paper, Bags, Twine, Woolen & Cotton Rags, 156-160 S. Desplaines st., Chicago.

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MCARDLE & HART, Cotton & Woolen Rags and Paper Stock, 200 & 201 West st., N. Y., & Newburg, N.Y.

MARKLE, C. P., & SONS, Mfrs. of Printing and Glazed Hardware, 126 Second ave., Pittsburg, Pa.
MAYER, A. B., Rags and Paper Stock Dealer, 1014, 1020 & 1022 N. Twelfth st., St. Louis, Mo.

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

IMPORTS of Paper and Paper Materials, Books, &c., at the Port of New York, for the week ended March 4, 1881. Quantity given in packages when not otherwise specified.

Table with columns for item name, quantity, and value. Includes categories like Aniline Colors, Alum, Alumina Cake, Bleaching Powders, Soda Ash, Soda, Bicarb, Soda, Caustic, Soda, Sal, Ultramarine, Books, Newspapers, Engravings, Ink, Lead Pencils, Paper, Steel Pens, Stationery, Slate Pencils, Clay, Jute Butts, Jute Rejects and Cuttings, Paper Hangings, Paper Stock, Terra Alba, Waste, and Totals.

TOTAL IMPORTS.

Table showing General Merchandise, Paper, Paper Stock, and other imports for the week ended March 4, 1881, with values in dollars.

IMPORTS of Rags and other Paper Stock at the Port of New York, since Jan. 1, 1881, from the following Ports, showing quantities from each Port.

Table showing imports of Rags and other Paper Stock from various ports including Algeria, Alexandria, Antwerp, Bremen, Bristol, Cadix, Calcutta, Campeachy, Canary Islands, Cardiff, Catania, Dundee, Genoa, Glasgow, Hamburg, Hull, Jamaica, Leghorn, Leith, Liverpool, London, Pillau, Rio Janeiro, and Yokohama.

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports for the Week Ended March 9, 1881, with Aggregates and Values.

Table showing exports of Paper, Books, &c. to various foreign ports like Australia, United States of Colombia, Cuba, Naples, Mexico, Havre, Rotterdam, London, British West Indies, United States of Colombia, Porto Rico, Mexico, Venezuela, and Hayti.

AGGREGATES AND VALUES.

Summary table of aggregate values for Paper, Paper Stock, Books, Rosin, Stationery, and Totals.

TOTAL EXPORTS.

Table showing Total Exports for the week ended March 9, 1881, including Paper, Paper Stock, Books, Rosin, and Stationery.

NEW YORK IMPORTS.

FROM MARCH 2 TO MARCH 9, 1881.

Paper Stock.

J. S. Blydenberg, Obed Baxter, Yokohama, 2,257 lbs. rags.
Fabbri & Chaucey, Alfio, Genoa, 90 bs. rags.
J. L. Taylor, Laura, Liverpool, 65 bs. rags.
Oelrichs & Co., St. Olaf, Algeria, 1,519 bs. manillas.
J. W. Mason & Co., Wisconsin, Liverpool, 212 bs. manillas.
J. C. O'Brien, Rhiwindda, Cardiff, 149 bs. manillas.
J. W. Lyon & Co. Celtic Monarch, London, 596 lbs. old papers.
W. I. Clark, State of Florida, Glasgow, 94 bs. rags, 26 bs. old papers.
W. I. Clark, Assyrian Monarch, London, 47 bs. rags, 7 bs. manillas.
Train, Smith & Co., by same, 397 bs. rags.
W. H. Parsons & Co., Canada, London, 45 bs. old papers.
C. B. Richards & Co., by same, 48 bs. rags.
Campbell & Smith, Denmark, London, 33 bs. rags.
Jos. Libmann & Co., by same, 53 bs. rags.
W. H. Parsons & Co., City of Liverpool, London, 143 bs. rags, 69 bs. old papers.
Geo. Watson, Jr., by same, 79 bs. rags, 432 bs. old papers.
W. H. Parsons & Co., Australia, London, 63 bs. rags, 235 bs. old papers.
W. H. Parsons & Co., State of Georgia, Glasgow, 6 bs. old papers.
Geo. Watson, Jr., by same, 63 bs. rags, 100 lbs. old papers.

Paper.

F. Alexandre & Son, Westphalia, Hamburg, 5 ca.
L. De Jonge & Co., by same, 2 ca.
G. Gennert, by same, 1 ca.
J. Walker, Wisconsin, Liverpool, 1 ca.
Whitney & Young, Scythia, Liverpool, 1 ca. hangings.
N. Francklyn, by same, 2 ca. and 1 bale hangings.
Chadwick Bros., City of Montreal, Liverpool, 3 ca.
C. H. George, by same, 2 ca. hangings.
Kaufmann & Strauss, Mosel, Bremen, 4 ca. colored.
F. J. Emmerich, by same, 2 ca.
G. W. Lake, Laura R. Burnham, Shanghai, 10 ca.
Dodge & Olcott, Albatross, Bordeaux, 2 ca.

E. Fougere, by same, 7 ca. writing.
Dickerhoff, Roeflver & Co., Switzerland, Antwerp, 5 ca.
Merchants' Dispatch Company, by same, 2 ca.
Fischer & Keller, Calders, Havre, 1 ca. hangings.
Elmer & Amend, Gellert, Hamburg, 2 ca.

BOSTON IMPORTS.

FROM MARCH 3 TO MARCH 9, 1881, INCLUSIVE.

[NOTE.—By order of the Treasury Department at Washington the names of importers of merchandise at this port are withheld from the press. Parties wishing their names to appear in the reports of imports will please communicate with J. Henry Blanchard, No. 103 Milk street.—Ed.]

Books.

H. J. Bartlett, Sidon, Liverpool, 1 ca.
C. Schoenhoff, by same, 1 ca.
Boston Athenaeum, by same, 3 ca.
Order, by same, 1 ca.
Little, Brown & Co., by same, 11 ca.
Order, by same, 1 ca.
Ginn & Heath, by same, 2 ca.
Order, Marathon, Liverpool, 1 ca.
A. Williams & Co., Olympus, Liverpool, 1 ca.
Estes & Lauriat, by same, 1 ca.
C. Schoenhoff, by same, 1 ca.
A. P. Schmidt, by same, 1 ca.
Public Library, Massachusetts, Liverpool, 1 ca.

Paper, &c.

Gay & Wolf, Bavarian, Liverpool, 9 ca. albums.
H. Partridge & Co., by same, 1 ca. albums.
Lockwood, Brooks & Co., Sidon, Liverpool, 1 ca. manufactured.
Ward & Gay, by same, 1 ca. manufactured.
C. Reid & Co., by same, 1 ca. manufactured.
S. Thaxter & Sons, by same, 1 ca. manufactured.
Order, Olympus, Liverpool, 4 ca. manufactured.
Baldwin Bros. & Co., by same, 3 ca. manufactured.
C. Reid & Co., by same, 2 ca. manufactured.
O. Ditson & Co., by same, 5 ca. music.
Cooper, Lewis & Co., by same, 7 ca.
Gay & Wolf, Istrian, Liverpool, 6 ca. albums.
L. Gans, Sidon, Liverpool, 1 ca. labels.

Paper Stock.

C. A. Cheney, Minnesota, Liverpool, 305 bs. paper stock.
H. M. Knowles, by same, 174 bs. paper stock.
Order, by same, 16 bs. paper stock.
Warren & Co., by same, 25 bs. paper stock.
H. M. Knowles, Massachusetts, Liverpool, 221 bs. rags, 60 bs. paper stock.
Train, Smith & Co., by same, 173 bs. paper stock.
H. M. Knowles, Canopus, Liverpool, 302 bs. rags, Train, Smith & Co., by same, 90 bs. rags.
Dutton & Schenck, Sidon, Liverpool, 51 bs. paper stock.
Order, Bavarian, Liverpool, 43 bs. rags.
Dutton & Schenck, Olympus, Liverpool, 48 bs. paper stock.
Order, by same, 21 bs. paper stock.
J. L. Taylor, Istrian, Liverpool, 97 bs. paper stock.
Order, by same, 66 bs. paper stock.
J. T. Lodge & Co., Waldensian, Glasgow, 52 bs. paper stock.
Dutton & Schenck, by same, 18 bs. rags.
Order, by same, 25 bs. paper stock.
Hill & Cutler, Seminole, Savannah, 9 bs. paper stock.

Soda Ash.

Warren & Co., Canopus, Liverpool, 156 cks.
W. L. Libby, by same, 5 cks. refined.
Wing & Evans, Bavarian, Liverpool, 158 cks.
J. L. & D. S. Riker, by same, 121 cks.
P. M. Swain, by same, 66 cks.
J. L. & D. S. Riker, Caspian, Liverpool, 62 cks.
Warren & Co., Minnesota, Liverpool, 130 cks.
Warren & Co., Massachusetts, Liverpool, 108 cks.
J. L. & D. S. Riker, Sidon, Liverpool, 50 cks.
Linder & Meyer, Istrian, Liverpool, 46 cks.
Wing & Evans, by same, 150 cks.
P. M. Swain, Olympus, Liverpool, 78 cks.
J. L. & D. S. Riker, by same, 406 cks. ashes and 118 refined alkali.

Caustic Soda.

Linder & Meyer, Bavarian, Liverpool, 353 drums.
J. L. & D. S. Riker, by same, 250 drums.
Warren & Co., Massachusetts, Liverpool, 169 drums.
E. & F. King & Co., by same, 200 drums.
P. M. Swain, Olympus, Liverpool, 70 drums.

Sal Soda.

Warren & Co., Canopus, Liverpool, 250 bbls.
Linder & Meyer, Bavarian, Liverpool, 301 cks., 200 kegs.
Warren & Co., Minnesota, Liverpool, 56 bbls.
Warren & Co., Massachusetts, Liverpool, 669 bbls.
Morey & Co., Istrian, Liverpool, 262 bbls.

Bleaching Powder.

G. Watson, Jr., Minnesota, Liverpool, 113 cks.
Warren & Co., by same, 213 cks.
Warren & Co., Canopus, Liverpool, 304 cks.
Linder & Meyer, Bavarian, Liverpool, 87 cks.
Wing & Evans, by same, 90 cks.
J. L. & D. S. Riker, by same, 155 cks.
Morey & Co., by same, 193 cks.
P. M. Swain, by same, 104 cks.

Ultramarine.

Morey & Co., Istrian, Liverpool, 30 ca.
Venetian Red.

Morey & Co., Istrian, Liverpool, 100 bbls.

Hide Cuttings.

C. A. Cheney, Minnesota, Liverpool, 218 bs. sizing.
Lockwood, McClintock & Co., by same, 113 bs.
Train, Smith & Co., Massachusetts, Liverpool, 98 bs.
Stone & Downer, Istrian, Liverpool, 141 bs.
Lockwood, McClintock & Co., Canopus, Liverpool, 292 pkgs.

PHILADELPHIA IMPORTS.

Paper.

Chas. Beck, British Crown, Liverpool, 3 ca.
M. M. Bayersdorfer, by same, 1 ca.

Paper Stock.

Brown Bros. & Co., British Crown, Liverpool, 5 bs. rags.

Soda Ash.

Order, Arndt, Liverpool, 50 cks.
Brown Bros. & Co., British Crown, Liverpool, 102 lbs.

Cooper, Smith & Co., by same, 176 lbs.
Baring Bros. & Co., by same, 960 lbs.
Brown Bros. & Co., Lord Gough, Liverpool, 120 cks.
Cooper, Smith & Co., by same, 30 lbs.
Order, by same, 31 cks.

Caustic Soda.

G. W. & J. W. Reeves, Lord Gough, Liverpool, 36 drums.
Order, by same, 40 drums.

Soda Crystal.

G. W. & J. W. Reeves, Lord Gough, Liverpool, 40 bbls.

Bleaching Powder.

Brown Bros. & Co., British Crown, Liverpool, 217 lbs.
Order, by same, 94 lbs.
Brown Bros. & Co., Lord Gough, Liverpool, 100 cks., 258 lbs.
Order, by same, 104 lbs.

BALTIMORE IMPORTS.

Soda Ash.

Order, St. Bernard, Liverpool, 78 cks.

Caustic Soda.

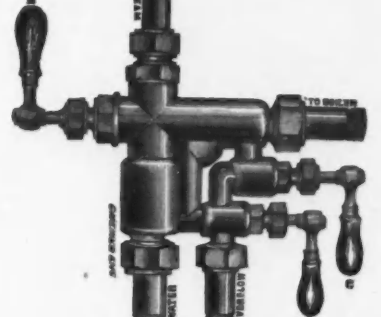
Order, St. Bernard, Liverpool, 300 drums.

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# The Paper Trade Journal.

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Single Copies, 10 Cents.

NEW YORK: SATURDAY, MARCH 12, 1881.

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

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

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

Subscription and postage for Great Britain, per annum, 21  
Subscription and postage for France, 25 francs  
Subscription and postage for Germany, per annum, 24 reichsmark  
Foreign subscribers may address our New York office.

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

All communications must be addressed to

### HOWARD LOCKWOOD,

Publisher and Proprietor,

No. 74 Duane Street, N. Y.

#### BRANCH OFFICES.

Philadelphia Office: J. VIENNOT, General Manager, 407 WALNUT STREET.

Western Office: P. G. MONROE, General Manager, 1 LAKESIDE BUILDING, CHICAGO, ILL.

#### FOREIGN GENERAL AGENTS.

W. F. Catchside	5 Ludgate Circus Building, London.
Elfwing & Co.	Stockholm, Sweden.
John L. Sprague	Gibraltar, Spain.
Leonardo Pardo	Vigo, Spain.
S. H. Haine	Antwerp, Belgium.
G. Galvagno	Turin, Italy.
S. Bernard	Venice and Florence, Italy.
G. Gade	Christiania, Norway.
J. H. de Busay	Amsterdam, Holland, and the Dutch East Indies.
John Hogan	Melbourne and Sydney, Australia.
Frearson & Bro.	Adelaide, South Australia.
W. Bartlett Langridge	Auckland, New Zealand.
R. T. Wheeler	Dunedin, New Zealand.
W. Snelling	Brisbane, Queensland.
A. G. Webster	Hobart Town, Tasmania.
Knight & Co.	Newchwang, China.
Kelly & Walsh	Shanghai, China.
Kelly & Co.	Yokohama, Japan.
A. Illustração Brasileira	Rio de Janeiro, Brazil.
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Federico Calme	Havana, Cuba.
Seymour Keeler	Valdivia, Chili.
José A. Barros	Barranquilla, Colombia.
Pedro Obregon	La Guaira, Venezuela.
Imp. de "El Ferrocarril"	Montevideo, Uruguay.
Bethencourt e hijos	Caraque, Venezuela.
Da Costa & Co.	Barbadoes, W. I.
Chas. Bartlett, Jr. & Co.	St. Pierre, Martinique, W. I.
J. O. Ryder	Tamatave, Madagascar.
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Juanquin G. Castilla	Tampico, Mexico.
G. C. Cato	Durban, Natal.
Thomas G. Thurm	Honolulu, Sandwich Islands.
John G. Clark	Kingston, Canada.
C. Haight	Toronto, Canada.

#### TO CORRESPONDENTS.

AS THE PAPER TRADE JOURNAL is the recognized vehicle of communication in matters of trade interest, we will be glad to receive correspondence from all parts of the country. Information and suggestion upon paper-making topics are especially valuable, and manufacturing news and personal items are equally acceptable.

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

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

QUIET reigns in the paper trade. The past week seems to have been quite bare of interest in local business matters.

THE straw board manufacturers have been holding a meeting at Chicago this week. At this hour we are not advised of their action, except that we understand that it has been decided not to make a change in prices. We expect to hear from our correspondent at Chicago before putting THE JOURNAL to press, and should his report reach us in time it will be found in another column.

"FESTINA lente" seems to be the motto of the paper stock dealers. The exchange, association, or whatever it is intended to call it, is very long in incubation. The energy our friends display at times is singularly wanting when there is anything progressive set on foot. Are there too many idols in the trade to which they love to cling? Is there fullness of joy in disputes over bad packings, reclamations, poor stock,

and the like? Perhaps the whole spice of the trade lies in disagreements.

LAST week we stated that we did not know of a felt cloth interwoven with wire. Since then we have received a sample of such cloth, and the manufacturers state that they have applied for a patent on it. This seems to be a new thing. May be it is, and may be not. What has our friend who has lately been putting the stamp of antiquity on several things spoken of by different correspondents got to say to this?

GERARD ROHLES, an African explorer, says that the Americans have begun to import alfa from Africa. This is news to us; and if true, the grass has not come in sufficient quantities to be remarkable as an article of import. Referring to the official report of the Treasury Department as to imports, we find that jute and other grasses are classified together. Alfa has not as yet secured the distinction of special classification as an article of import, and we must, therefore, infer that if it is brought into the country it is in such inconsiderable quantities that it has no prominence as an article of commerce with us. We cannot tell what a small beginning may extend to, but present indications do not point the way to the conversion of our paper makers to the use of this fibre.

IN the London *Examiner* of recent date we find an article referring to the illustrations in English and American magazines. While disputing Yankee art, the writer of that article pays a high compliment to American paper, a meed of praise all the more remarkable that he obviously does not want to say more than he can help or than a sense of justice compels him to. He is plainly a Briton of Britons, and we may therefore concede the honesty of his thought while we remark his partisan feeling. He says: "But if it has been forgotten that the perfection of the cuts in *Scribner* and *Harper* is, and could only be, the outcome of years of experience in a particular line, it has also been forgotten that one-half of the beauty and pleasingness of those cuts is the result of the careful printing and the splendid paper for which America is notorious. It is not too much to say that but for these advantages neither of these magazines could have attained to the high position which they now hold in the opinion of the world. And these advantages can scarcely be over estimated. The best engraving that was ever cut would be unsatisfactory in the highest degree if badly printed, and, with one or two exceptions, our magazines fail in this more conspicuously, perhaps, than in any other respect. It follows, then, that even if we succeeded in producing engravings equal, in delicacy, fineness and carefulness, to those in the two leading American periodicals, it would be to very little purpose unless we also discovered the secret of this printing and could produce paper as beautiful as theirs. There is not much profundity in the secret after all, and we gladly make a present of it to English publishers—if, indeed, they do not already know it. It is simply a question of expense." He says that "good paper means money." Of course it does; but it also means good workmanship and the highest skill in the art of paper making. The compliment covers as broadly the man who makes the paper as it does the one who uses it. We are glad to say that we have a standard of excellence which all classes, from the producer to the newspaper reader, combine to sustain. The American is shocked at the specimens of print paper which come to him from Europe, and wonders that there are people who can make it and exist. It would not be tolerated here.

#### In Town.

Alexander Buntin, Montreal, Can.; L. C. Woodruff, Buffalo, N. Y.; Chas. Crocker, Fitchburg, Mass.; Z. Crane, Jr., Dalton, Mass.; Wellington Smith, Lee, Mass.; H. M. Castle, Springfield, Mass.; A. T. Pope, Boston; John A. Manning, Troy, N. Y.

#### Personals.

Arthur Smalley, of Butterworth & Smalley, Manchester, England, will leave by steamer on Sunday for New York.

## Communications.

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

### Electricity.

To the Editor of The Journal:

A little steam allowed to escape under the calenders is the best remedy I know of for electricity in paper.

### The Color of Wood Pulp.

To the Editor of The Journal:

The difference between the color of wood and wood pulp is only imaginary. When dry, ground wood is of a dingy brownish yellow color, but, wet and freshly ground, it looks or appears to be whiter.

### A Ball-Valve Seat.

MEDUSA, N. Y., March 1, 1881.

To the Editor of The Journal:

Please say to "T. R." that the best ball-valve seat is a tube one-quarter inch thick, secured at the bottom by any suitable device, the ball resting on top and kept in proper position by three guide rods. "T. R." will see at once that any wear must be downward and equal on the outside and inside, and that the ball cannot, by any possibility, get down inside of the tube. Whether this device can be applied to any old pump I cannot say, as stuff pumps vary somewhat in the construction of the valve chamber. I suppose that all things must wear out in time, but a valve seat of this kind will come as near being immortal as any other part of a paper machine. A stuff pump should be run at a speed that will throw up, at least, double the quantity of stuff wanted for the machine. This will give a good, deep overflow back into the chest, and the supply to the machine will be nearer a constant quantity.

### A Durable Wire.

To the Editor of The Journal:

Noticing that much has been said in THE JOURNAL concerning the durability of wires, I submit a statement received a few days ago from George A. Friend, West Carrollton, O., and dated February 24.

Mr. Friend says: "I wish you to duplicate exactly the wire you sent me last June, size, 75 inches wide, 48 feet long, No. 60 mesh. I have the wire bought of you last October, but have not examined it and, therefore, can't make any report on it; but I can report on the one sent last June. I put it on my machine, running between 5,200 and 6,000 pounds daily of extra news paper, September 13, last, consequently it has been running five months the 13th of this month, and it looks as if it will run six months. I am making two 33-inch sheets, or 66 inches of trimmed paper on it, so you see the edges have kept nicely. I think this is a stumper for 'Doubtful,' who is writing to THE PAPER TRADE JOURNAL."

So, Mr. Editor, it would appear that there are wires that last just as long out of Holyoke as in it, and Mr. Friend's wire was not made in Holyoke.

WIRE MANUFACTURER.

### Value of the Top Couch Roll.

To the Editor of The Journal:

A correspondent, in writing to THE JOURNAL concerning a new and improved suction box for the wire, incidentally mentioned that it would dispense with the top couch roll. Another, not to be outdone, boldly takes hold of it and throws it outside of the machine room door, and cites the opinion of a manufacturer who now, or for a great many years, ran his machine without it.

Somewhere about eighteen or twenty years ago the Parsons Paper Company, Holyoke, Mass., fitted up two machines to run without a top couch roll; the idea being that, in making laid or water-marked paper, there would be a better impression left on the paper. To compensate for the absence of the coucher, there was a powerful suction pump attached.

Experience has proved that the idea was erroneous. Paper coming in first contact with a smooth roll, such as the press roll, is more liable to lose the impression than if it first met the couch rolls. The question is simply whether a smooth metal press roll or a coucher with a thick woolen jacket on it will have the greatest tendency to obliterate the water mark.

The success of the attempt was never apparent enough to induce other manufacturers to follow the example. In fact, one or both of the same machines are at the present time working with top couches.

Machine tenders who have run them say that at times they would make more broken than three machines with couches. If a small knot or a small piece of pulp dropped off of the slices or anywhere, the suction would not draw it as dry as the rest of the paper, and it would stick to the press roll; whereas if such things passed through the couches they would, by being a little the thickest, be pressed drier, and so pass safe over the press rolls.

I see it alleged that about all the top couch roll is good for is to destroy wires. Looking at it superficially, this may seem to be so; but such is not the case. It is said that wires do not last as long as with couches. This, on second thought, can easily be accounted for. The motive power for the wire is only the friction of bottom roll, taking into account the strong suction. The wire, in order to make it travel, has to be tightened to such a tension that only a very short time is required to burst it up.

Of course, it is impossible as yet to say what the new device may amount to. If it is so con-

structed as to help the wire to travel, possibly we can dispense with the couches. Then, and not until then, will I consider it time to think of abolishing the top couch roll.

J. L.

### Electric Lighting.

To the Editor of The Journal:

In answer to your correspondent from Spring Forge, I would say that, while I have no interest in any electric light, I have given the matter considerable attention for two years past.

The fact of this light being a power light made its study one of great interest to me. My business leads me to visit all kinds of mills—cotton, woolen, paper, &c. I have seen five or six different kinds of electric lights, and taking everything into consideration—including power to run, cost of carbons, steadiness of light (when machines are properly belted)—I have no hesitation in saying that the Brush electric light is far superior to all others. It is the only light that uses over a dozen lights on a circuit. They use one machine with forty lights which requires about thirty-three horse-power to run. Parties in New York can see this machinery in operation at the Brush Electric Light Station at 133 West Twenty-fifth street every night; also at William-Lincoln Linen Company's new mill, William-Lincoln, Conn.

I was in Thomas Dolan & Co.'s woolen mill, Philadelphia, a few weeks ago. He has 150 of these lights, and runs all night. He says that, while his help objected to them at first, saying it would injure their eyes, they now like them so well that he could not get them to do without them. A little while ago the electric lights of one room were shut off and gas lighted. Not one of the help would work. This mill uses steam power; but where a mill can get extra power, it seems strange they do not all put it in, especially in paper mills that run all night. I was recently in a cotton mill run by water power that had fifty-four Brush lights in operation. They had run six months, and the total cost of carbons, attendance, &c., for this time was \$110.

Gas for the same time would have cost \$2,000. America is way behind Europe on electric lights. Very few paper mills have put them in, and I cannot understand this. As a rule, they are very progressive, and nearly all have water power that can be used to good advantage. As I look at the matter, electricity is only in its infancy. What has been done is only a commencement. The future alone can tell what will be done, but the possibilities are very large—such as storing up electricity, carrying power by wire with only a nominal loss, moving railway trains, and even running all the machinery of large paper mills. Most people think that the dynamo-electric machines produce electricity by friction; but this is not so, as they do not touch anything. What is, and what causes electricity? Who can say? All that is known about it is covered by the fact that it is a power that makes itself known by its manifestations.

### Changes, Removals and New Firms.

W. D. Thompson, printer, Minneapolis, Minn., has sold out.

Bonner N. McCraven, stationer, Houston, Tex., has sold out.

Geo. W. Cooper & Co., paper stock dealers, Auburn, N. Y., have sold out.

Nash & Fredericks, wood cut printers, Boston, Mass., have dissolved partnership.

L. Horsey & Co., paper stock dealers, Gloucester, Mass., have dissolved partnership.

F. H. Graham, bookseller and stationer, Kewanee, Ind., has sold out to D. W. Seibert.

R. H. Rowan, paper box manufacturer, Norwalk, Conn., has sold out to E. S. Trowbridge.

Cummings & Meuser, publishers of the *Inquirer*, Galion, Ohio, have dissolved partnership.

D. & J. O. Behyman, publishers of the *Tippecanoe* (Ind.) *Times*, have sold out to E. A. Overman.

Farrington & Merwin, printers, of this city, have dissolved partnership. C. B. Merwin continues.

J. H. Miller & Co., printers, Columbus, Ohio, have dissolved partnership. J. H. Miller continues.

The firm of P. Boyer & Co., printers and publishers, Ridgetown, Ont., Can., has been succeeded by Boyer & Gadd.

George E. Desberats, lithographer, printer, &c., Montreal, P. Q., Can., has admitted Arthur Simard as special partner for \$5,000, to March 1, 1887.

S. H. Cox, publisher of the *Transcript*, Dedham, Mass., has sold out.

S. A. Perry & Co., booksellers and stationers, Oakland, Cal., have sold out.

T. J. Crook, publisher of the *Courier*, Sherman, Tex., has sold out, the sale to take effect April 1.

C. C. Clark, dealer in paper and mill supplies, New York, has removed from 98 Duane street to 85 Cliff street.

John H. Walsh, Orange County mill, Newburgh, N. Y., has been succeeded by the John H. Walsh Company.

Copes & Bellows, bookbinders, Philadelphia, Pa., have dissolved partnership. George M. D. Bellows continues.

Mullin & Buckingham, publishers of the *Bedford County Press*, Everett, Pa., have sold out to the Press Publishing Company.

J. G. Lugar's Son & Co., dealers in paper hangings, New York city, have dissolved partnership. Frank Lugar continues under same style.

B. M. Dennis, dealer in paper hangings, Baltimore, Md., has admitted Freeborn G. Smith, of Brooklyn, N. Y., to partnership, under the style of B. M. Dennis & Co.

Edward Evans, special partner in the firm of

L. D. Sims & Co., paper box manufacturer, Montreal, P. Q., Can., has retired. Remaining partners will conduct the business under the same style.

### Failures.

John H. Knarston, printer, San Francisco, Cal., has filed a petition in insolvency.

F. F. Russell, bookseller and stationer, Lansing, Mich., has made an assignment to Charles Connell.

George D. Bristol and Rufus H. Pickett, composing the firm of George D. Bristol & Co., stationers, 165 William street, this city, made an assignment last week to W. H. Evans, giving preference for \$600.

W. R. Andrews, publisher of the *American Queen* and the *Bazaar*, at No. 154 Nassau street, made an assignment Thursday to Albert L. Thomas, giving the following preferences: Sharp's Publishing Company, \$12,788.69; Butler & Johnson, \$1,755.53; Thomas Clark, \$2,279.34; J. P. Craighead, \$100. The assignment was forced on account of the failure of his uncle, DeForest Weld, of Jamestown, N. Y., with whom Mr. Andrews was in partnership in the dry goods business in New York about ten years ago. Mr. Andrews has a branch in Cincinnati.

W. & F. P. Currie & Co., wholesale dealers in hardware and metals, Montreal, P. Q., have suspended. They started in business in 1865, with moderate means, and worked into a large trade. About six years ago they made advances of over \$50,000 to Mr. Riddle, of Kingsly Falls, who carried on a paper mill. Riddle failed, and Currie & Co., holding mortgage security, took the property, and have since carried on the mill. They obtained a charter three years ago under the style of the Dominion Paper Company, but did not work it as a joint stock concern. In 1879 they sustained a loss by an explosion and fire at the mill, which prevented working for four months, after which it was refitted and improvements made. Their liabilities are reported at nearly \$500,000, with assets, exclusive of the Dominion Paper Company, of over \$300,000.

### Chattel Mortgages.

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

NEW YORK CITY.	
Mortgagor.	Amount.
E. A. Blauvelt	\$2,000
E. A. Marvin	491
A. S. Patton	4,300
Sprauer & Rehholz (R.)	1,000
B. Foster (B. S.)	725
T. Freund	150

NEW YORK STATE.	
Mortgagor.	Amount.
Joseph Garit, Albany (R.)	639

EASTERN STATES.	
Mortgagor.	Amount.
Severance & Kittredge, Lowell, Mass.	300

WESTERN STATES.	
Mortgagor.	Amount.
H. C. Allard, Virginia, Ill.	1,250
Augusta Gilb, Cincinnati, Ohio (B. S.)	300
Michael Gilb, Cincinnati, Ohio	300
Oscar C. Guessaz, St. Louis, Mo.	240
John M. Kemper, Cincinnati, Ohio	168
J. H. Miller, Columbus, Ohio	1,500

### Obituary.

**EZRA ALLEN.**  
Ezra Allen, of Boston, died last week. He was formerly engaged in the manufacture of paper at South Hadley, Mass. The Boston *Journal* says: "We are called upon to announce to-day the sudden death by typhoid pneumonia of Ezra Allen, who has been known to the business community of Boston for nearly threescore years. Like so many of those who in later life became well known in business circles, he came to Boston without money and without friends, and by honesty, perseverance, diligence and economy secured the respect and confidence of the community in which he lived. At the time of his death he was actively engaged in new enterprises, and, as he expressed himself but a day or two ago, was intending to withdraw from the confinement of his retail business on Temple place and devote his attention to the care of his other interests. Mr. Allen was a just man; he was just himself, and he demanded justice from others. Scrupulously exact in his dealings, he asked exactness from others. Without pretension, or a show of goodness, he was yet a good man, living a good life, taking his nearest duty and doing it. Among the business community to-day Mr. Allen counts many friends who will be saddened to hear of the death of one who was a land-mark in the city."

### BENJAMIN OLDS.

Benjamin Olds, aged ninety-two years, one of the oldest booksellers and publishers in America, died at his home in Newark, on Tuesday night. Deceased was a native of Connecticut, and went to live in Newark in 1816. He published in his day a large number of school books, which were popular in New Jersey and Pennsylvania; also the "Scottish Chiefs" and a very popular almanac.

W. H. Waldron, of the firm of W. H. Waldron & Co., publishers of the *Gazette*, Lewiston, Me., is dead.

Joseph Sanders, bookseller and stationer, Chester, Pa., is dead.

Edward A. Selden, of the firm of Selden Brothers, printer, Philadelphia, Pa., is dead.

Charles C. Barrett, bookseller and stationer, Portland, Oregon, is dead.

Adam H. Ecker, publisher of the *Democrat*, Washington, Pa., is dead.

Feed water is most liable to be muddy in the spring and fall, when there is more surface and muddy water running in and mixing with it. In the West the feed water makes more scale in dry weather than in wet, as it contains less rain water.



General Notes.

The stock of the Orange County Publishing Company, Bradford, Vt., has been attached.

The regular meeting of the Flour Sack Association occurred at Cleveland, O., on Thursday.

The "Horne" plate is said to be the best plate in the market. Parties using it have expressed their approbation of it, and the manufacturer, J. H. Horne, Lawrence, Mass., invites paper makers to try it.

A contest has been going on in the Patent Office relative to an infringement on the patent of the Detroit Lubricating Manufacturing Company's continuous feed lubricating oil cups, which has been decided in favor of the company, and Reid & Flowers, of Chicago, have been enjoined.

The Commissioner of Patents, in an appeal, from the examiner in chief on emery wheels, of Charles Heaton, says, "I have carefully examined the testimony in the case, as well as the arguments of counsel thereon, and have reached the same conclusion as the examiner in chief, deciding that Hart was the prior inventor."

Charles M. Thomas, who has just been released from the Erie County penitentiary, in this State, where he has been serving a term of imprisonment for forgery, was arrested immediately on his discharge and taken to Boston on a requisition from the Governor of Massachusetts. In 1868, when acting as agent for the Hope Envelope Company, he disappeared, and it was found that he had committed a series of forgeries to the extent of about \$80,000, various paper manufacturers holding a large share of the forged notes. He is likely to do further service in State prison.

Proposals for taking the waste paper and shavings of the Government Printing Office for one year ending March 10, 1882, were opened on Tuesday. The following is a statement of the highest and lowest prices bid for this stock:

Table listing prices for waste paper and shavings: 1-White shavings from blanks and blank books... per pound, 3.75 to 4.75; 2-White shavings from book papers... 3.25 to 4.51; 3-Imperfections from printed papers... 2.75 to 3.41; 4-Spoiled paper from the press... 2.75 to 3.00; 5-Colored papers... 2.5 to 3.87; 6-Brown wrappers... 1.00 to 1.51; 7-Waste sweepings... 1.5 to 2.41; 8-Cuttings from pasteboard... .8 to 1.2

SPECIAL NOTICES.

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

ATTERBURY BROS., Packers of Rags and Paper Stock, 253 & 255 Front St., New York City.

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

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY, March 11, 1881.

THE MONEY MARKET.—The monetary situation as contrasted with the previous week was characterized by ease, and brokers offering acceptable collateral found ready accommodation at fairly reasonable rates. The great bulk of the business was effected at 4@5 per cent. The requirements of the government bond dealers were supplied at 3@5 per cent., some few transactions, however, being reported at a small commission. Time loans, 60 days, were made at 5@6 per cent. In the discount market prime mercantile paper sold at 5@6 per cent., the business being light in volume.

The government bond market was strong throughout the entire week, and became quite buoyant after the President's veto of the Funding bill. The improvement in prices on the week's transactions is 1 per cent. in 6's, 3/4 in 5's, 3/4 in 4 1/2's, and 1 per cent. in new 4's.

The stock market has shown considerable strength; prices, after frequent fluctuations, finally closed at a decline as compared with those ruling a week ago.

Railroad mortgages were in light demand and fluctuated within a narrow range, in sympathy with the share speculation.

The foreign exchange market was irregular, pending the uncertainty about Treasury action, on which the condition of the money market depends. At the close dealers in commercial bills found it difficult to place them, except at ruinously low figures.

The posted rates at the close were: Bankers' sterling, 60 days, actual... \$4.79@4.80; Bankers' sterling, sight, actual... \$4.81 @ 4.81 3/4; Cable transfers, nominal... \$4.81 3/4 @ 4.82 1/2; Prime commercial sterling, 60 days... \$4.77 @ 4.78 1/4; Documentary sterling, 60 days... \$4.76 @ 4.77; Paris, bankers', 60 days... 5.29 1/4 @ 5.27 3/4; Paris, bankers', sight... 5.29 1/4 @ 5.25; Antwerp, commercial, 60 days... 5.29 1/4 @ 5.30; Swiss, bankers', 60 days... 5.29 1/4 @ 5.27 1/2; Swiss, bankers', sight... 5.29 1/4 @ 5.25; Reichsmarks (4), bankers', 60 days... 99 3/4 @ 94; Reichsmarks (4), sight... 94 1/2 @ 94 1/2; Guilders, bankers', 60 days... 39 1/2 @ 39 1/2; Guilders, bankers', sight... 39 1/2 @ 39 1/2.

THE PAPER TRADE.—The movement of Paper generally in the hands of the jobbing trade continues quiet, but quite sufficient, notwithstanding the increased production, to prevent any decline in prices. With manufacturers it is said that many of them are quite fully engaged on large orders taken recently at a shade below quotations. These orders are more particularly for super-calerendered Book Paper. With the exception of three heavy orders referred to above, quotations for Book Paper are very firmly held, and the supply is only moderate. There is a disposition to shade prices on News, and 6 1/2 @ 7c. is about the range quoted in lots from store for ordinary Rag Paper, and 6 3/4 @ 7 1/4 c. for Straw. Manilla Wrappings continue fairly active, and prices are firmly held. Straw Wrappings and Binders' Boards show no special movement. Straw Boards have been selling

fairly, but the demand for the spring trade has been very nearly supplied.

JUTE BUTTS.—The market is quiet but firm. Sales reported of about 1,500 bales paper quality at 2 1/2 @ 3c. cash, and 2 1/2-16c. time. We hear of an offer of 2 1/2-16c. being refused for 4,500 bales of a superior quality of Bagging Butts. The Roslyn Castle has arrived during the week with 2,650 bales, all of which go to manufacturers, and were sold prior to arrival, except 700 bales bagging quality, which are held at 2 1/2 @ 3c. We quote paper Butts at 2 1/2 @ 2 1/2-16c., and bagging at 2 1/2 @ 2 1/2-16c. as to quality. We hear of another offer of 2 1/2 @ 3c. cash being refused for 2,200 bales bagging quality, held at 2 1/2 @ 3c. Cable advices received here yesterday report the failure of Rushton Brothers, of Calcutta, a heavy house of jute packers. This, it is thought, will not have any effect upon this market, as they are not believed to be holders of any considerable amount of stock.

WOOD PULP.—The demand is still fair, and the market generally is unchanged, quoted at the range of 2 1/2 @ 3 1/2 c. for ground wood, according to quality and place of delivery. Bleached Chemical Fibre remains quoted at 4 1/2 @ 5 1/2 c., and Unbleached at 3 1/2 @ 4c., according to make.

FOREIGN RAGS AND PAPER STOCK.—The market has shown very little animation this week. Manufacturers still seem to be holding off under the belief that they will be able to force importers and dealers from the strong position which they have held lately, but there is no apparent indication of any yielding on their part. Advices from the foreign markets still report that packers there are still firm in their views, and have not altogether given up the idea of another "Yankee boom." The sooner they give up this delusive notion, the better it will be for themselves, as there is not the slightest basis at present for a repetition of what occurred in that direction about this time last year. In less time than two months the domestic market will be able to supply a considerable portion of the stock which the foreign market has furnished during the fall and winter months, at least of cottons; in the meantime with no small amount of goods already at hand, and manufacturers only buying in very limited quantities, it is difficult to see how a "boom" could be started, or even present prices be sustained. Among the few transactions reported were 50 bales P. P. No. 1 Leghorn Linens at 5 1/2 @ 6c., four months; 75 bales extra English Country Seconds at 3 1/2 @ 4c., four months; 100 bales London Seconds at 3c., four months; 75 tons do. Thirds at 1 1/2 @ 2c., three months; 100 tons extra fine packing, S. P. F. Hamburg Linens, at 4 1/2 @ 5c., sixty days; 50 tons do., S. P. F. F., at 5.42 @ 5.5c., sixty days; 5 tons C. S. P. F. Hamburg Cottons, said to be below standard, at 3 1/2 @ 4c.; 25 tons German Book Stock at 3 1/2 @ 4c., and 80 tons German White Shavings at 3 1/2 @ 4c., four months. We hear of offers being refused, ex dock, of S. P. F. F.'s at 4 1/2 @ 5c.; S. P. F.'s at 4 1/2 @ 5c., and F. F.'s at 4c., but the stock is said to be of off quality; otherwise better prices could be realized. A prime C. S. P. F. F.'s would readily find purchasers at 4 1/2 @ 5c. The arrivals of Paper Stock during the past week were quite large and aggregate 6,891 bales and bags, embracing 3,422 bales Rags, 1,582 bales Old Papers, and 1,887 bales Manillas.

DOMESTIC RAGS.—There is little change to note, the market continuing quiet. No. 1 City Whites are in no better supply, neither has the demand improved, and they are quoted within the range of 4 1/2 @ 5c., according to quality. No. 2 City Whites are quoted the same as last week, 3 1/2 @ 3 3/4 c., with an ample supply. City Seconds are weaker, being quoted at 1 1/2 @ 1 5/8 c., but their quality is extremely poor, and they may be said to be dear even at these figures. Among the sales were 40 bales No. 1 City Whites at 4 1/2 @ 5c., 50 bales No. 2 do. at 3 1/2 @ 4c., and 100 bales Seconds at 1 1/2 @ 1 5/8 c.

BAGGING, &c.—Gunny Bagging, although somewhat quiet, is quite firm, and is bringing comparatively rather better prices than Jute Butts. Ordinary brands of No. 1 Manchester Gunny are held firmly at 2 1/2 @ 3c., and for fine marks, such as P. 8's, 2 1/2 @ 3c. is asked. Holders are quite indifferent even at these figures, which are for spot goods and claimed to cost more to lay them down here. We quote 2.45c. for good No. 1 London Gunny. Jute and Manilla Rope are both held higher; for the former 2 1/2 @ 3c. is now asked, and sales of Domestic Manilla Rope have been made this week at 3 1/2 @ 4c., and Foreign do. at 3 1/2 @ 3 3/4 c. Among the transactions were 20 tons Domestic Manilla Rope at 3 1/2 @ 4c.; 35 tons Foreign do. at 3 1/2 @ 3 3/4 c.; 15 tons strictly No. 1 Burlaps Bagging at 2 1/2 @ 3c., and 18 tons good No. 2 do. at 2 1/2 @ 3c. No. 2 English Gunny Bagging is quoted firm at 1 1/2 @ 2c.

OLD PAPERS.—There is no improvement in the movement of these. Light Book stock is in very full supply in the hands of dealers, and manufacturers using these are generally overstocked. Prices are to some extent merely nominal. Among the sales were 25 bales clean Folded News at 2 1/2 @ 3c., and 30 bales Solid Printed Books at 3 1/2 @ 4c. We continue to quote: Hard White Shavings, 4 1/2 @ 5c.; Soft do., 4 1/2 @ 4 3/4 c.; Solid Book Stock, 3 1/2 @ 3 3/4 c.; Light do., ordinary, 1 1/2 @ 1 3/4 c.; good Folded News, 2 1/2 @ 3 1/4 c.; Crumpled do., 1 1/2 @ 2c.; Pure Manillas, 2 1/2 @ 3c.; Straw and Binders' Clips, 1 1/2 @ 1 3/4 c.

STRAW.—Continues in good demand, and values are firm. We continue to quote in New York: Long Rye, \$1.25 @ 1.30; Short do., 95c. @ 1.05, and Out, 85 @ 90c.

ROSINS.—The last grades continue scarce and wanted, but in the absence of arrivals and with no stock to speak of, there has been very little business. The medium and high grades are quiet and prices are nominal. We continue to quote prices in job lots from yard, viz.: C Strained, \$1.95; D Good Strained at \$2; E at \$2.15; F Good No. 2 at \$2.30; G Low No. 1 at \$2.40; H No. 1 at \$2.50; I Good No. 1 at \$2.75; K Low Pale at \$3; M Pale at \$3.25; N Extra Pale at \$3.50, and W at \$4.

CHEMICALS.—The market has been exceedingly quiet, and a weak and somewhat unsettled feeling prevails. Although the arrivals at this port have been moderate, they have been quite free at Boston, especially of Bleach, which has led to considerable quantities being offered at low prices. As a general thing, buyers are only taking goods for immediate requirements. The foreign markets are reported as moderately busy at steady figures. Sales are said to have been as follows: 300 cks. Bleaching Powders at 1.15 @ 1.30c. as to brand; 150 tons Soda Ash at 1.62 1/2 @ 1.65c.; 100 drums Caustic Soda, 60 per cent., at 3.95c.; 50 tons Sal Soda at 1.18 1/2 @ 1.20c.; 200 barrels Lump Alum at 2 1/2 @ 3c.; 100 barrels Ground Alum at 2 1/2 @ 3c.; 100 barrels Pearl do. at 2 1/2 @ 3c.; 400 barrels Natrona Porous Alum at 2 1/2 @ 3c.; 25 tons Aluminum Cake at 1.60c.; 15 cases Ultramarine at 25c.; 10 cks. yellow Prussiate Potash at 20c.; 10 cks. Bichromate do. at 15 1/2 @ 16c.; 15 cks. Antichlorine, at 3c.; 5 cks. Orange Mineral at 8 1/2 @ 9c.; 100 barrels Venetian Red at 1 1/2 @ 1 3/4 c.; 5 cks. White Sugar of Lead at 17c.; 5 cks. Brown do. at 10c.; 50 barrels Potato Starch at 4c.; 100 barrels Corn do. at 3 1/2 @ 4c., and 300 bxs. Extract Logwood at 9c.

CHINA CLAY, &c.—The heavy arrivals of English Clay during the week have had a depressing influence upon the market, excepting on prime grades, which are held firmly at \$17 @ 18, though the general demand is limited. Prices on the low grades range from \$14.50 to \$16 per ton, according to seller and quantity. Southern is in fair request and firm at \$12. Other articles in this line are unchanged.

COAL.—The mild weather of late has had a quieting influence on Anthracite coal, as most buyers find themselves fairly supplied and are not inclined to consider further wants until necessity compels. With the lessened demand there has appeared greater desire to sell, resulting in easier prices. The companies yet quote \$4.30 net for stove size, but this price is difficult to secure, inasmuch as the production has not been materially lessened, and is now far in excess of consumptive requirements. Bituminous continues inquired for, and prices have a strong support. Seward's Coal Trade Journal says: "During the week, since the date of our last, there has been but a moderate trade doing from tide-water, and rates generally are not up to what they were. This is due to the restricted market and the continued ample supply of Anthracite coal that is being forwarded to this vicinity for distribution. Interior trade keeps up and there are still reports of a lack of supply, due more than anything else, no doubt, to the insufficient transportation facilities to be obtained just at present. We hear that there is likely to be a good demand from the East, as soon as freights settle down to a reasonable figure. Buyers apparently have the market in their own hands at present, and when they get ready to forward orders, we shall have a more active state of affairs to record from the shipping ports. Until this time comes round, the tonnage that is mined ought not to find its way to the tidal ports too rapidly. If the interior want coal, by all means let them have it. Freights are off somewhat this week from old quotations, and at 65 cents to New Haven, \$1 to Providence and \$1.55 to Boston, there has been some business done." Quotations of Lehigh coal at New York shipping points are: Lump, \$5.25; Egg, \$4.40; Stove, \$4.30, and Chestnut, \$4. Lackawanna is \$4 for Lump, \$4.30 for Egg, \$4.45 for Stove, and \$4.10 for Chestnut.

PRICES CURRENT.

NEW YORK MARKET.

Table of current prices for Paper Market, Dealers' Selling Prices, Ropes, Old Papers, Leghorn and Genoa Rags, Alexandria Rags, Memel Rags, Trieste Rags, Konigsberg Rags, Japanese Rags, Chemicals, Coloring Materials, &c., and Woolen Rags.

Table of current prices for White Stockings, Blue Flannels, Reeds, old, Red, new, Mixed Cloth, Seamed Cloth, Skirted Cloth, Light Skirted Cloth, New Dark Clips, New Light Clips, New Black Clips, New Blue Clips, New Felts, New Fancy Shirt Cuttings, New Fancy Linsey Cuttings, New Sateets, clean stock, Satinets, Seams, Delaines, striped for extract, Black Shod Lastings, Blankets, Woolen, Wool Carpets, Mixed Carpets, White Linseys, Mixed Linseys, White Shirt Cuttings, No. 1, White Shirt Cuttings, No. 2, Mill Assorted Whites, Unbleached Muslins, City Whites, No. 1, New Canton, Flannels, New Second Light, New Seconds, dark, No. 2, Whites, Cotton Canvas, No. 1, Lines, Canvas, No. 1, Country Whites, No. 1, Country Mixed, free of Woollens, Seconds (City), Colors, per 100 lbs., Manila Rope, tarred, Gunny Bagging, No. 1, Gunny Bagging, No. 2, Kentucky Bagging, Burlap Bagging, No. 1, Tar Shavings, Hemp Twine Stock, Jute Waste, White Collar Cuttings, muslin lined, White Envelope Cuttings, Hard White Shavings, No. 1, Soft White Shavings, No. 1, Mixed Shavings, part white, Ledger and Writing, Solid Stock, Book Stock, No. 1, light, Old Newspapers, Pure Manillas, Bogus Manillas and Hardwares, Commons, Binder's Board Cuttings, Straw Board Cuttings, English Rags, &c., New Cuttings, cotton, Essex Fines, London Fines, cotton, Outshots, cotton, Seconds, Extra, Thirds, New Print Tabs, Checks and Blues, Light Prints, Light Fustians, Dark Fustians, Black Calicoes, First Canvas Linen, Second Canvas Linen, Black Bagging, Gunny Bagging, No. 1, Mixed Bagging, No. 1, Rope, Manila, Rope, Manila, tarred, Jute Ropes, Jute Threads, English Old Papers and Shavings, Hard Shavings, No. 1, White and Colored Shavings, No. 1, White and Colored Shavings, No. 2, Cream Shavings, Paper-Collar Cuttings, Leggers, Briefs and Letters, Newspapers and Pamphlets, extra, Old Newspapers, Broken News and Letters, New Books, solid folios, Old Blank Books, Old Printed Books, White and Buff Railway Sheets, Railway Tickets, Hamburg Rags, &c., Linen Cuttings, S. P. F., S. P. F. F., F. F., L. F. X., Extra Fine Blue Linen, light color, L. F. B., Burlap Bagging, No. 1, Shirt Cuttings, C. S. P. F. F., C. S. P. F., F. F., C. F. X., Extra Fine Blue Cotton, Cotton Canvas, Ropes, T. R. (tarred), M. R. (manilla), P. T. R. (standing rigging), Old Papers, Old Book Paper, Old Printed Books, Imperfections, White Shavings, Colored Papers, Writing Papers, Leghorn and Genoa Rags, P. P. No. 1 White Linens, S. S. No. 2 White Linens, T. T. No. 3 White Linens, P. R. Linen Stripes, C. C. No. 1 White Cottons, S. C. No. 2 White Cottons, R. C. Cotton Stripes, C. C. Colored Cottons, C. S., Q., Alexandria Rags, Whites, Blues, Colors, Memel Rags, S. P. F. F., S. P. F., F. F., L. F. B., Trieste Rags, S. P. F. F., S. P. F., F. F., L. F. B., Konigsberg Rags, S. P. F. F., S. P. F., F. F., L. F. B., Japanese Rags, Whites, ordinary, Blues, selected, Blues, ordinary, Lute Japanese, Extra grades 1/4c. higher, Chemicals, Coloring Materials, &c., Alum, lump, Alum, ground, Alum, pearl, Alum, porous, Alum, concentrated, Alum, potash, Aluminum Cake, "Elephant", Anti-Chlorine, Bi-Chromate Potash, Scotch, Bi-Chromate Potash, American, Bleaching Powder, Caustic Soda, 60 per cent, Caustic Soda, 70 per cent. (for 60 per cent.), Clay, English, per ton, Clay, English, extra, Clay, American, per ton, Coppras, American, Extract Logwood, Lime, common, per bbl., Lith. Blue, per bbl., Prussiate Potash, American, Rosin, common strained, per bbl., Rosin, No. 2, Rosin, No. 1, Rosin, extra pale, Rosin, extra pale, Sal Soda, English, per ton, Soda Ash, Soda Ash, refined, Soluble Blue.

Table of current prices for Clay, South Carolina, per ton, Clay, Terra Alba, English, per ton, Clay, Terra Alba, American, per ton, Corn Starch, Coppras, American, Extract Logwood, Mineral Fibrous Fulp, N. Y. Lubricating Co.'s Comp'd, per lb., Potato Starch, Prussian Blue, dry, Prussiate Potash, American, Orange Mineral, Rosins, good strained, per bbl., Rosins, good, No. 2, per bbl., Rosins, low, No. 1, per bbl., Rosin, No. 1, per bbl., Rosins, good, No. 1, per bbl., Rosins, pale, per bbl., Rosins, extra pale, per bbl., Sal Soda, Soda Ash, Soda Ash, refined, Soluble Blue, Spanish Brown, dry, Sugar Lead, white, Sugar Lead, brown, Sulphuric Acid, 66 degrees, Ultramarine, blue, Venetian Red, Vitriol, blue, Yellow Ochre.

BOSTON MARKET.

Paper.—Trade continues good, prices holding firm, with some manufacturers reporting as full of orders. Paper Stocks.—There appears to be no speculative movement, but a steady demand at unchanged values.

Chemicals, ash, bleach, sal and caustic are in excessive stocks with light calls, and prices are very low. It seems to be the opinion of many that as soon as the market is cleared of lots now seeking buyers, prices will improve somewhat; bleach is weaker than the others. Alums continue scarce on spot, with makers behind their orders, and prices are naturally strong. English and American clays are selling moderately well; demand steady. Stocks of rosins are light, and prices are quite firm.

Table of current prices for Paper Stock, Mill Assorted Whites, Cotton Canvas, No. 1, Cotton Canvas, No. 2, Gunny Bagging, No. 1, Gunny Bagging, No. 2, Shilvey Bagging, No. 1, Kentucky Bagging, Waste Woollens, Jute Butts, White Collar Cuttings, White Envelope Cuttings, Hard White Shavings, No. 1, Soft White Shavings, No. 1, White Shavings, No. 2, Mixed Shavings, 9/4 whips, Imperfections, Book Stocks, Light Prints, Manilla Papers, old, Hardware and Manillas, Straw Board Cuttings, Linen Canvas, No. 2, White Shirt Cuttings, Country White Rags, Country Mixed Rags, City Whites, No. 2, Seconds, Country, Colors, Manila Rope, Binders or Tar Board Cuttings, Common Papers, Oakum Junk, Hemp Rope, Tarred, English Rags, &c., Essex Fines, London Fines, cotton, Outshots, cotton, Seconds, extra, Thirds, New Print Tabs, Checks and Blues, Light Prints, Light Fustians, Dark Fustians, Black Calicoes, Gunny Bagging, No. 1, Gunny Bagging, No. 2, Mixed Bagging, No. 1, Rope, Manila, Rope, Manila, tarred, Jute Ropes, Jute Threads, English Old Papers and Shavings, Hard Shavings, No. 1, White and Colored Shavings, No. 1, White and Colored Shavings, No. 2, Cream Shavings, Paper-Collar Cuttings, Leggers, Briefs and Letters, Newspapers and Pamphlets, extra, Old Newspapers, Broken News and Letters, New Books, solid folios, Old Blank Books, Old Printed Books, White and Buff Railway Sheets, Railway Tickets, Leghorn Rags, P. P. No. 1 Linens, S. S. No. 2 Linens, T. T. No. 3 Linens, P. R. Cottons, S. No. 1 Cottons, S. No. 2 Cottons, T. No. 3 Cottons, Alexandria Rags, Whites, Blues, Colors, Smyrna Rags, Whites, Blues, Constantinople Rags, Whites, Blues, New Papers, Superfine Book, Fine Book, News, Rag and Wood, News, Straw, No. 1, all rag, News, Rag and Wood, Manilla, Cream Rope, Manilla, No. 1, Rope, Hard White Shavings, Extra Jute, Manilla, Jute and Gunny, Manilla, Bogus, Hardware, No. 1, tarred, Hardware, No. 2, Hardware, red, Straw Boards, air-dried, per ton, Straw Boards, steam-dried, per ton, Straw Wrapping, heavy, per ton, Straw Wrapping, light, basis 15x30, lbs, per ton, Binders' Boards, per ton, Leather Board, Common, per lb., Leather Board, counter, per lb., Leather Board, extra, per lb., Tar Boards, per ton, Chemicals, Aluminum Cake, currency, Alum, American ground, Alum, American lump, Alum, Potash, American, Anti-Chlorine, Bi-Chromate Potash, Scotch, Bi-Chromate Potash, American, Bleaching Powders, ordinary, Bleaching Powder, Caustic Soda, 60 per cent, Caustic Soda, 70 per cent. (for 60 per cent.), Clay, English, per ton, Clay, English, extra, Clay, American, per ton, Coppras, American, Extract Logwood, Lime, common, per bbl., Lith. Blue, per bbl., Prussiate Potash, American, Rosin, common strained, per bbl., Rosin, No. 2, Rosin, No. 1, Rosin, extra pale, Rosin, extra pale, Sal Soda, English, per ton, Soda Ash, Soda Ash, refined, Soluble Blue.



Table listing market prices for various commodities like Sugar Lead, Sulphuric Acid, Terra Alba, Ultramarine, Venetian Red, Vitriol, and Yellow Ochre.

PHILADELPHIA MARKET.

Table listing market prices for Paper Market items such as Extra Super, Calend. and Sized Book, No. 1 Machine-Finish Book, Rag News, Manila Rope, etc.

Paper Stock.

Table listing market prices for Paper Stock items including White Shirt Cuttings, Unbleached Muslins, Canton Flannels, No. 1 Whites, etc.

Chemicals, Coloring Materials, &c.

Table listing market prices for Chemicals and Coloring Materials such as Alum, Alumina, Alum. potash, etc.

CHICAGO MARKET.

Table listing market prices for Paper items in Chicago, including Plate, Super-Calendered, Fine Book, etc.

Rags and Paper Stock.

Table listing market prices for Rags and Paper Stock items like Whites, Blues, Prints, Bagging, etc.

MILWAUKEE MARKET.

Table listing market prices for Paper items in Milwaukee, including Plate, Super-Calendered, Fine Book, etc.

Table listing market prices for Rags and Paper Stock items such as Whites, Blues, Prints, Manila Rope, etc.

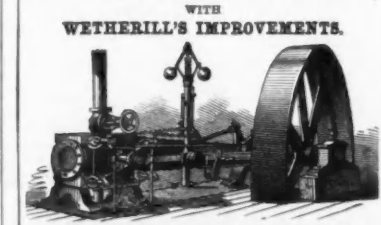
FOREIGN MARKETS.

The London Market.

Business during the week was unchanged, several good sized orders were placed at full figures, and although paper manufacturers here complain very much about the low prices of their product, they are coming freely forward and buy large parcels both for prompt and for later delivery, while from America also some good orders were received here.

Advertisements.

CORLISS ENGINE BUILDERS,



WETHERILL'S IMPROVEMENTS. BOILER MAKERS, Rotary Boilers, Wood Digesters, WOOD CHIPPERS.

ROBT. WETHERILL & CO., Chester, Pa.

WANTED—TO BUY OR LEASE, PAPER MILL, suitable for Book Paper, accessible to Philadelphia Market. Address M. B. Paper Trade Journal.

WANTED—WET PART FOURDRINER MACHINE, 56 inches wide, with First and Second Press Rolls of Metal, without the Stuff Pump. WOOLWORTH & GRAHAM, 75 Duane St., N.Y.

WANTED—A FIRST-CLASS FINISHER ON Book Papers. Address W., care of Rice, Kendall & Co., Boston, Mass.

WANTED—SITUATION AS FOREMAN BY A temperate and reliable man who understands the making of book, news, manilla and blotting paper, also working with straw and wood. Address H. K. T., office Paper Trade Journal.

WANTED—A FOREMAN WHO IS FULLY competent to take charge of a chemical wood pulp mill; one who has had large experience and understands every department in such a mill; must be reliable every way and able to give good references. Address A. B. C., office Paper Trade Journal.

FOREMAN WANTED—A MAN WHO THOROUGHLY understands Paper Making, to take charge of a Fourdrinier Mill supplied with all the modern improvements, now making No. 2 Manilla. Must be temperate, active and industrious, and come well recommended. To a suitable person a liberal salary will be paid. Address FOREMAN, Box 653, Baltimore, Md.

FOR SALE—TWO STRAW BOILERS 16 FEET long, 6 feet in diameter, made of 1/2-inch iron, double riveted, carry 110 pounds pressure. JAMES McHUGH, 536 N. Twenty-third st., Philadelphia, Pa.

FOR SALE—FOUR BEATING ENGINES, 30 inch rolls, with Washers. Apply to WILDER & CO., 42 Federal Street, Boston.

FOR SALE—TEN DANDY ROLLS, 62-INCH face, 4 wove and 6 laid. A BOYDEN TURBINE WATER-WHEEL, 36-inch, with iron case and brass buckets; made by Ames Manufacturing Co., Chicopee, Mass. In the best maner. The wheel is complete, in good order, and will be sold low. SMITH PAPER CO., LEE, MASS.

FOR SALE—One 40-inch Knave "Felt" Press Cutter, suitable for a straw paper mill; one Rotary Bleach Boiler, size 5 x 17 feet, all well geared one Stuff Pump, one 56-inch "Stratford" Revolving Cutter, one 82-inch "Lee" Revolving Cutter.

WANTED—Set 56 to 64 inch, 8 to 12 inch Chilled Calender Rolls, one Engine Pulley, size 5 feet diameter, 14 to 16 inch face, 7/4 inch bore. GEORGE ROBERTSON, Hinsdale, N. H.

TWO MANUFACTURERS AND CAPITALISTS.—STRAW BOARD MILL FOR SALE. In good running order, in one of the best locations for cheap straw and coal, on the Potomac River. A splendid chance for two or three young men; will be sold at a bargain. Address or apply to A. SOMMER, 64 N. 35th St., Philadelphia, Pa. No postal cards answered.

WATER POWER FOR SALE. (Twenty feet natural fall; eight to ten hundred horse-power.) On the Adroscoggin River, ninety-six miles from Portland, on line of the Grand Trunk Railroad. For further particulars inquire of BERLIN MILLS CO., Portland, Maine.

FOR SALE. Three (3) 250-lb. Rag Engines, now running in Highland Paper Mills. Apply to JAMES A. TOWNSEND, Newburg, N. Y.

R. O. MOORHOUSE & CO., Thirteenth and Biltonwood Sts., Philadelphia. MANUFACTURERS OF PAPER MILL MACHINERY Of Every Description. AND STEAM ENGINES FOR PAPER MACHINES. We also make a specialty of the following: Regrinding Rolls of all kinds by latest improved machine; Screen Plates, Gavit Cone Pulley Cutter (improved); White's Improved Stop Cutter.

THE WRITER IS MAKING, TURNING AND Grinding all kinds of Rolls; Making and Repairing Dandies and Cylinders. Paper Knives made and ground. Calenders on hand. Shafting, Gearing and Pulleys; Engines and Pumps; Hydraulic and Screw Presses; machines to test the strength of paper or other material; Power, Hand and Hydraulic Elevators or Hoists. We can furnish any parts for Gavit machines. GEO. C. HOWARD, Eighteenth St., N. of Chestnut St., Philadelphia.

WANTED—To Purchase for Cash, A Second-hand Cylinder or Fourdrinier Machine, 68 or 70 inches wide. Address WAGMAN, THORPE & CO., Fort Miller, N. Y.

FOR SALE. A 48-IN. CYLINDER MACHINE. This machine is in perfect running order, and turns off two tons of light paper per 24 hours, and can be seen running by any person wishing to purchase same at any time until May 1. WALLOOMSAC PAPER CO., North Hoosac, N. Y.

VALUABLE PROPERTY —ON— GRAND, CENTRE and BAXTER STREETS, Known as Odd Fellows' Hall. E. H. LUDLOW & CO.

Will sell at Auction, on Tuesday, March 15, 1881, at twelve o'clock, noon, at the Exchange Salesroom, 111 Broadway (Trinity Building), New York, Sale by order of the Odd Fellows' Hall Association. Grand, Centre and Baxter Sts.—The valuable Plot of Ground, together with the five-story Brown Stone Building, 70 feet 9 inches on Grand Street, 73 feet 8 inches on Centre Street, and 104 feet 11 inches on Baxter Street, containing 7,515 square feet. The Building contains on first floor Stores, with Offices and Lodging Rooms on four floors above.

FOR SALE. 62-inch Fourdrinier Machine. This Machine was built by Rice, Barton & Co.; is in good order, much of it recently new; is now running and can be seen at any time. It has six 36-in. iron driers that take and discharge steam on back side; 14-in. couch and press rolls, with revolving reels and stack chilled calenders, 3 1/2 in. and 4 x 6 in. and one spare 6-in. rolls. This machine will be sold at a reasonable price for cash, and to be delivered on cars at our depot, July 1, 1881. SMITH PAPER CO., Lee, Mass., March 1, 1881.

FOR SALE. One 36-inch Risdon Turbine Water Wheel. MADE BY HOLYOKE MACHINE CO. In perfect order, having been used but a few months. Taken out to make room for larger wheel. Address P. O. Box 1980, Boston, Mass.

FOR SALE. THE EXETER PAPER MILL, located at Exeter, N. H., on the Boston and Maine Railroad. The mill is a one-story wooden building, bleaching house, two stories, one large new stock house and a two-story building for a store house and office; a blacksmith shop, two two-story and two one-story dwelling houses, with barns, sheds, etc., and about 16 acres of land. Having sold most of the machinery, we now offer extra inducements on the balance to close it out, consisting of—one 4 1/2-foot and one 4-foot Tubular Boiler, 16 feet long; Lime Chest and Agitator; one No. 4 Wiswall Force Pump; one 55-inch, one 50-inch, and one 35-inch Upham Water Wheels; one 60-inch and one 30-inch Sanborn Water Wheels; Scales, &c. All communications to be addressed to the BOSTON MACHINE CO., Boston, Mass.

PAPER MILL FOR SALE. Located in Baldwinville, Mass., 71 miles from Boston, at the junction of the Fitchburg and Ware River Railroads, and close to the depot, consisting of Mill Building, large new Storehouse and Office, Power, and the following machinery, viz: Four Pulping Engines, three of them 30 inch, built by the Lowell Machine Shop, and one 35 inch, with an iron tub; Tub Bleaches; One 70-inch Cylinder Machine, with eleven Driers, 36 inches diameter, seven on the main frame and four over them; One Stack of Calenders of three 12-inch rolls; Three Upright Reels; Stop Cutter, with Winder; Rag Cutter, Lowell pattern; One New Corliss Steam Engine, about 80 horse-power, sufficient to run the Mill; Two Boilers, one 4 1/2 feet diameter, 16 feet tubes, and one 4 feet diameter, 14 feet tubes, Jarvis Setting, and in good order. Plenty of water nine months in the year; good dam, 16 feet head. This Mill is in good running order, was built about five years ago, and has run on Sheathing and Carpet Lining. One half of the purchase money will be taken in best quality Carpet Lining at the market price. Will sell the above independent of the Paper Machinery, if desired. Apply to BOSTON MACHINE CO., Granite, cor. First Street, So. Boston, Mass.; J. A. GOULD, Administrator, Boston Water St.; Geo. M. Small, or to H. M. SMALL, at the Mill, Baldwinville, Mass.

FOR SALE. CANADIAN PATENT, Adams Improved Satchel-Bottom Bag, No. 12,033, dated Nov. 27, 1880. The above very valuable Fifteen year Patent is offered at a reasonable price. Address ADAMS & CO., Chagrin Falls, Ohio.

CHEAP GAS. The cost of Gas manufactured by the SPRINGFIELD GAS MACHINE. Will not exceed \$1.00 per Thousand Feet. Send for Circular. GILBERT & BARKER MFG. CO., Springfield, Mass., And 75 Maiden Lane, New York.

HOLLY MFG. CO., SIXTEEN YEARS' Experience in the manufacture of Pumps for Paper Makers enables us to guarantee entire satisfaction in all cases. Our Latest Improved Pumps are perfectly adapted to the requirements of the Paper Manufacturer, and are not equaled by those of any other maker. We point with pride to the fact that there are more HEALD & SISCO PUMPS in use in the Paper Mills in this country to-day than all other kinds combined. Perfect satisfaction in all cases, or Pumps returned at our expense. Send for Illustrated Pamphlet giving full description, prices, &c. Address HEALD & MORRIS (Formerly HEALD, SISCO & Co.) BALDWINVILLE, N. Y.

Holly's Steam, Rotary and Pulp Pumps. LOCKPORT, N. Y. Send for Catalogue and Price Lists. THE HARTFORD GOVERNOR CO., HARTFORD, CONN. SOLE MANUFACTURERS OF THE DIFFERENTIAL GOVERNOR For Water Wheels.

Keystone Felts. L. K. HEATHCOTE & CO., Glen Rock, Pa. FOURDRINER and CYLINDER Wet and Press Felts and Jackets. All Sizes and Styles suitable for the making from the coarsest to the finest paper. All Felts Guaranteed to run well or they can be returned.

For best results from fast running try our XX style Felt for Fourdrinier Machines, and style "C" for Cylinder Machine. Prices sent upon application. BARAGWANATH & PRICE, PACIFIC BOILER WORKS, CHICAGO, ILL.

S.B. WILLIAMS' PATENT. QUALITY the Best. Particularly adapted to Paper Mills. Send for Sample. 65 EXCHANGE ST. ROCHESTER, N. Y.

CYRUS CURRIER & SONS, NEWARK, N. J., General Machinists, Founders and Engine Builders. PAPER MACHINERY A SPECIALTY. Fourdrinier and Cylinder Machines, Chilled Iron and Paper Calenders, Beating and Washing Engines, &c., &c. All Steel Roll Bars and Bed Plates Cheaper and Better than Laid Bars. The Best and Cheapest. Upwards of two hundred in Use.



# Paper Mill Insurance.

## ANDERSON & STANTON,

GENERAL

### Insurance Agents & Brokers,

No. 152 BROADWAY.

New York, May 1st, 1880.

GENTLEMEN:

Feeling the great disadvantage PAPER-MAKERS have labored under for the past few years in procuring good insurance on favorable terms, we were induced to give this class of INSURANCE particular attention, believing that, with the extensive facilities we possess, good paper mills should be looked upon by the Insurance Companies in quite as desirable a light as manufactories of other classes of merchandise. We, therefore, set to work to overcome the feeling that "Paper Mills are burning at the rate of one a minute" (as expressed by one of the leading agents). This prejudice we thought to be unwarranted, contending that good, well-constructed, carefully managed PAPER MILLS could be insured on favorable terms. With this aim in view we determined to make PAPER MILL Insurance one of our Specialties, and have to-day more mills on our books than any other concern throughout the country.

We would ask Paper-Makers to consider these few questions:

*First*—Should not well and carefully managed paper mills be insured upon better terms than others?

*Second*—Will not insurance of this character receive better attention and more just and careful consideration on the part of insurance officers, when brought to their notice by parties doing a large business than if sent through some small agent who cannot PERSONALLY represent the facts to his companies?

*Third*—Are your policies correctly worded, so that YOU ARE POSITIVELY INSURED?

*Fourth*—Are you sure ALL the companies in which you hold policies are sound and solvent?

These questions we desire to ask you as a paper manufacturer.

**Worthless insurance is worse than none. Badly worded policies lead to litigation. Business centres of course have the largest number of insurance companies; hence, better facilities for placing large lines of insurance.**

We now have insurance on property valued at some **forty millions of dollars (\$40,000,000)**, including some of the largest and best known paper mills in the United States, and have yet to learn of any paper-maker who has become dissatisfied with our way of doing business, and we refer to those with whom we have suffered loss as to the prompt and liberal manner in which the same has been adjusted.

We believe that a well-managed paper mill, where the owners have expended large amounts of money for the protection of their property from fire should receive more consideration from the insurance companies than those of careless construction and indifferent management. **Each risk should be placed on its merits, and the good ones should not be compelled to pay for the poor.**

Should be pleased to send you a Paper Mill Survey, and to hear from you regarding any insurance which you may desire for your mill property, and you can rest assured that it will receive careful attention at our hands. **Please write us before renewing any of your policies.**

Very truly yours,

ANDERSON & STANTON,

INSURANCE AGENTS AND BROKERS,

152 Broadway, New York.



The Shortest, Quickest and Only Direct Route  
—BETWEEN—  
**CHICAGO AND NEW ORLEANS,**  
Memphis, Vicksburg and Mobile.

THE ONLY ROUTE RUNNING  
**PALACE SLEEPING CARS**  
—THROUGH BETWEEN—  
Chicago and New Orleans without Change,  
WITH TIME IN ADVANCE OF ANY OTHER.

The Quickest Route between  
**CHICAGO AND ST. LOUIS,**  
Without Change of Cars.  
Palace Sleeping Cars between Chicago and St. Louis,

Making direct connections at St. Louis, in Union Depot, to and from Kansas City, Atchison, Leavenworth, St. Joseph and all points West.

The Shortest and Only Route between  
**CHICAGO AND CAIRO**  
Without Change of Cars.  
Making direct connections at Cairo (or St. Louis), to and from Little Rock, Hot Springs, Dallas, Ft. Worth, Houston, Galveston and San Antonio.

This is the Shortest Route between Chicago and Arkansas and Texas.  
**A Direct Route to Peoria, Springfield and Keokuk.**

The only route running Through Trains from Chicago to Dubuque, Independence, Waterloo, Charles City, Cedar Falls, Ackley, Fort Dodge and Sioux City, making direct connections at Sioux City for Yankton, Fort Pierre, and all parts of Dakota, including the Black Hills Gold Fields. For Tickets and Information, apply to the I. C. R. R. Ticket Office, 121 Randolph Street (near Clark), and at the Depot, foot of Lake Street.

A. H. HANSON. J. F. TUCKER.  
Gen. Pass. Agent. Traffic Manager, Chicago.

### TAKE THE



### THE GREAT BURLINGTON ROUTE.

No other line runs Three Through Passenger Trains Daily between Chicago, Des Moines, Council Bluffs, Omaha, Lincoln, St. Joseph, Atchison, Topeka and Kansas City. Direct connections for all points in Kansas, Nebraska, Colorado, Wyoming, Montana, Nevada, New Mexico, Arizona, Idaho, Oregon and California.

The Shortest, Speediest and Most Comfortable Route via Hannibal to Fort Scott, Denison, Dallas, Houston, Austin, San Antonio, Galveston and all points in Texas.

The unequalled inducements offered by this Line to Travelers and Tourists, are as follows: The celebrated Pullman (16-wheel) Palace Sleeping Cars, run only on this Line. C. B. & Q. Palace Drawing-Room Cars, with Horton's Reclining Chairs. No extra charge for Seats in Reclining Chairs. The famous C. R. & Q. Palace Dining Cars. Gorgeous Smoking Cars fitted with Elegant High-Backed Rattan Reclining Chairs for the exclusive use of first-class passengers.

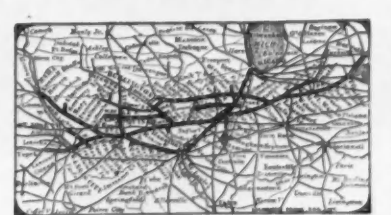
Steel Track and Superior Equipment, combined with their Great Through Car Arrangement, makes this, above all others, the favorite Route to the South, South-West, and the Far West.

Try it, and you will find traveling a luxury instead of a discomfort.

Through Tickets via this Celebrated Line for sale at all offices in the United States and Canada.

All information about Rates of Fare, Sleeping Car Accommodations, Time Tables, &c., will be cheerfully given by applying to  
JAMES R. WOOD,  
General Passenger Agent, Chicago.  
T. J. POTTER,  
General Manager, Chicago.

### Wabash, St. Louis and Pacific RAILWAY.



### The Great POPULAR THOROUGHFARE OF AMERICA.

Reaching in THE MOST DIRECT MANNER all the GREAT CITIES OF THE WEST, and passing through the

### GARDEN OF THE WORLD.

This Company runs the Finest Passenger Equipment, and operates the Most Extended System of Through Cars on the Continent. Tickets to all points North, East, South and West for sale at offices of all connecting lines.

Send Postal for the largest and best county map of the Western States ever published. Sent Free to any address.

J. C. GAULT. H. C. TOWNSEND.  
Gen'l Manager. Gen'l Pass. Agent,  
ST. LOUIS, MO. ST. LOUIS, MO.

T. P. SHEERBORN, JR.

J. B. WILSON.

# STAR CLAY COMP'Y

OFFICE:

WORKS:

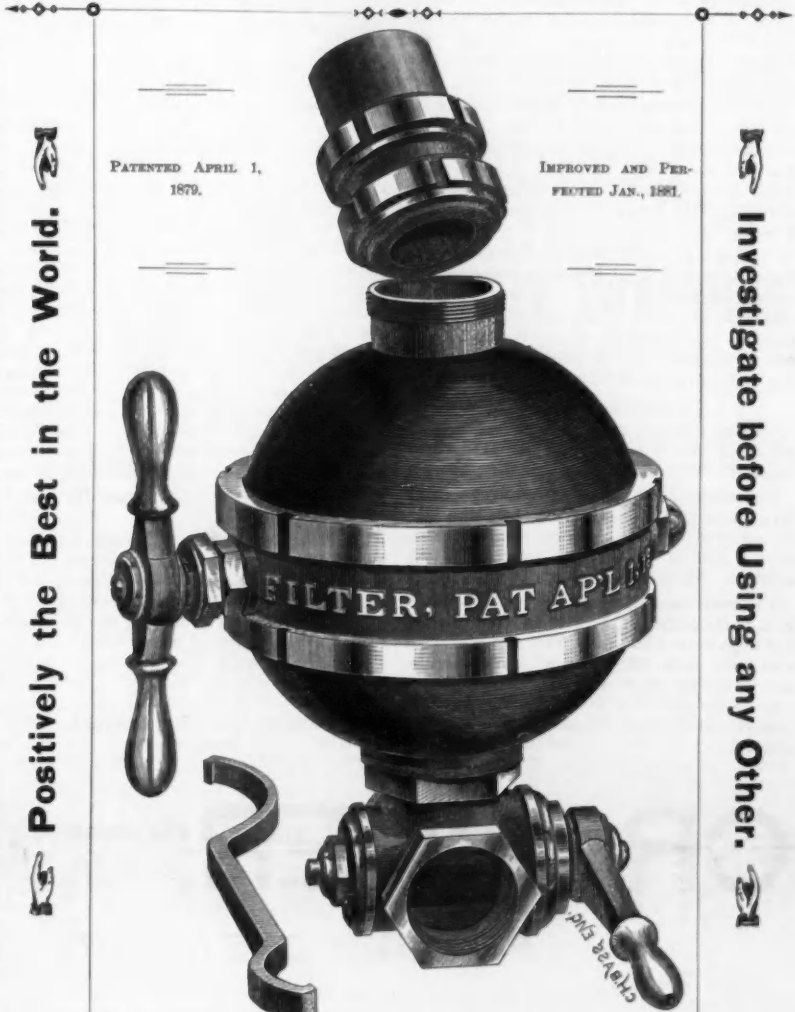
No. 230 South Third Street,  
PHILADELPHIA, PA.



Mertztown, Berks County,  
PENNSYLVANIA.

MINERS AND MANUFACTURERS OF WHITE CHINA CLAY  
Especially adapted to Paper Makers' use.

## THE GRANT Improved Revolving Water Filter.



Positively the Best in the World.

Investigate before Using any Other.

Manufacture all Sizes for Paper Mills, Sugar Refineries, Chemical Works, Steam Boilers and all Manufacturing Purposes.

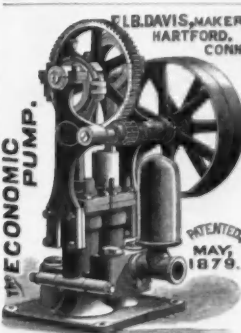
IN USE AND INDORSED BY HUNDREDS OF MANUFACTURERS.

THE GRANT REVOLVING FILTER CO.,  
S. B. WHITTEMORE, Treas.  
No. 30 Central Street, Boston, Mass.

## EWARTS DETACHABLE CHAIN.



Well adapted for various kinds of Paper Machinery.  
THIS CHAIN IS MANUFACTURED OF MALLEABLE IRON AND THOROUGHLY TESTED.



## THE ECONOMIC DOUBLE ACTING PUMP

Simple in its Construction.  
Economical in its Operation.  
Made Interchangeable in all of its Working Parts.  
SEND FOR CIRCULAR.

I. B. DAVIS, Maker, . . . HARTFORD, CONN.

JOHN CARTER & CO.,  
BOSTON,  
No. 123 Franklin Street.

WHOLESALE AGENTS  
—FOR—  
Byron Weston's Ledger Papers,  
Z. Crane Jr. & Bros.' Papers.  
—ALSO DEALERS IN—  
All kinds of Book and News Paper  
Envelopes, Flat Papers, Cards and  
Card Board, Manila and Merchandise  
Tags of all kinds.  
JOHN CARTER & CO.  
No. 123 Franklin Street,  
BOSTON.



**Manufacturing News.**

**EASTERN STATES.**

Z. Crane, Jr., & Brother, Dalton, Mass., took off their second drier felt this week. The first one was put on their new machine in March, 1878. Its size is 80 inches by 42 yards. This is good work for a common canvas felt.

The Valley Paper Company, Holyoke, Mass., will enlarge its mill this spring by building an addition of 100 feet on the end nearest the main road. It will be three stories high to conform to the present structure, and will contain one machine, increasing the capacity of the company to five tons of fine papers per day. New and larger engines will be added and another rotary bleach.

The Nonotuck Paper Company, Holyoke, broke ground on Monday last for a new machine room to accommodate a 72-inch Fourdrinier machine. It has been driven to this sooner than it anticipated by a rush of orders, and hopes to get the new works running before July 1. The new building will be 128 by 34 feet in size, and will stand north of and parallel to the present machine room. The mill has already a very large engine capacity for one machine, so that but two new engines and one Jordan will be needed.

The L. L. Brown Paper Company is making some important changes at its mill, West Cummington, Mass. Foreman Abram Osborn has resigned, and George Thompson, foreman of the farm, expects to leave, as the company wants to sell or rent the farm. Retrenchment in the expenses is the object.

The Seymour Paper Company, Windsor Locks, Conn., is making preparations for remodeling its old stock house.

Vernon Brothers & Co.'s new mill, at Northampton, Mass., started up on Monday. This same firm is about to add another 600-pound beating engine to its Westfield mill.

**MIDDLE STATES.**

Vernon Brothers & Co. are turning out upwards of two tons of paper per day at their Ithaca (N. Y.) mill.

The water power at Wood's Falls, on Black River, near Watertown, N. Y., has been purchased by Rowland Remington, who is about to erect a mill to run on news, using an 84-inch machine. The mill is to be built of brick.

The mill formerly owned by G. Howland & Son, at Mechanicville, N. Y., is now run by the Saratoga Paper Company. This mill is situated two miles from the village of Mechanicville, and takes its water from the Hudson River. During the last year it was thoroughly overhauled and repaired. It has eight beating engines, four rotary boilers, and two Harper's im-

proved Fourdrinier machines, with a capacity of about four tons per day. The mill is under the management of J. W. Bryan and H. J. Medbury.

The mill of the Pennsylvania Pulp and Paper Company, Lockhaven, Pa., has been completed. The main building is 40 by 186 feet, and is used for the pulp engines, drainers, bleaching vats, &c. It contains eight iron pulp engines. The ten drainers are of brick and cemented. The digester building, 40 by 80 feet, contains six digesters, each 6 feet in diameter by 18 feet high, built of iron, double riveted, and safe under steam pressure of 150 lbs. to the square inch. This building also contains six tanks or drainers, built of iron, 8 by 10 feet square, for discharging the contents of the digesters into, after the wood is digested. The alkali building, 30 by 100 feet, contains six tanks, 9 feet in diameter by 11 feet deep, each having mixers in them for the alkali, and two tanks, 8 by 8 feet, for mixing the bleaching powder for bleaching purposes. The basement has large iron receivers for alkali, and brick receivers for bleach. The recovery house, or evaporating building, is 60 by 100 feet, and contains two large evaporating furnaces, each 70 feet long, built of brick and iron, and covered with iron tanks for recovering the waste alkali from the digesters. The machine room is 50 by 144 feet, and contains one 84-inch Fourdrinier machine, with gun-metal press rolls; ten drying cylinders and one stack of five chilled calendar rolls and one stack of nine chilled calendars. These machines were built for the company by the Boston Machine Company, Mass. Alongside of this machine is one 63-inch double cylinder machine, built by the Gavitt Company, Philadelphia, Pa. The boiler house is 32 by 40 feet, and contains three sets of double deck steam boilers, each having a capacity of 60 horse-power, and one additional 40 horse-power boiler, which is used for heating purposes exclusively. The power for driving the machinery is furnished from the basin belonging to the company, which holds nearly ten acres of water, and is passed through one 72-inch Risdon and one 43-inch Risdon water wheel. These buildings cover about two acres of ground, with ample room for storage of wood, and with a canal frontage of about 2,000 feet.

C. P. Markle & Sons are building a new brick mill at West Newton, Pa. It is 268 feet long by 53 wide, and will contain one 72-inch and one 66-inch Fourdrinier. They are also erecting a mill at Markleton, on the Baltimore and Ohio Railroad, for the purpose of making chemical fibre. This mill will contain eight digesters—capacity, 30,000 pounds pulp per day. The property on which this mill is located is a tract of about 10,000 acres, all owned by the Messrs. Markle, and is all timber land, principally spruce, pop-

lar, and other wood suitable for paper pulp. Most of it is underlaid with coal, the opening being within fifty yards of the mill. C. P. Markle & Sons use in all these mills Smith & Goldthorp's gas apparatus, which is said to be very satisfactory. They are going to put it in their new fibre mill.

**WESTERN STATES.**

The Soquel (Cal.) paper mill, which had its flume washed away and other damage done by the recent storm, is in working order again.

The paper mills at Saratoga, Cal., have begun work.

H. J. Rogers talks of erecting an immense straw paper and pulp mill on the old site of Spaulding's stove factory at Appleton, Wis.

Four newspaper mills are said to be projected in Ohio.

**The Straw Board Associations.**

WESTERN OFFICE LOCKWOOD PRESS, }  
8 LAKESIDE BUILDING, }  
CHICAGO, ILL., March 9, 1881. }

As per call published in last week's issue of THE PAPER TRADE JOURNAL, the Straw Board Manufacturers' Association met at the Grand Pacific Hotel, the president, Colonel W. R. Denny, presiding. The mills represented were:

Kearsage Mills, W. S. and H. C. Davis; White & Wells, Alfred Wells; D. W. Cooper & Son, Z. W. Cooper; Edwards & Younglove, Mr. Edwards; Winchester Paper Company, Colonel W. R. Denny; Franklin Mills, J. Heyser; Union Paper Mills, R. S. B. Hartwick; Aqueduct Mills, C. L. Hawes; Eclipse Mills, A. Irgard; Lima Paper Mills, B. C. Faurot and J. N. Harrington; Piqua Straw Board Company, Colonel W. P. Orr; Lockport Paper Company, O. M. Butler and J. M. Norton; Enterprise and Rockland Mills, M. D. Keeney; Globe Mills, A. W. Keeney; Quincy Paper Company, R. T. Newcome; M. T. Close & Son, M. T. Close; Lewis Straw Board Company, Mr. Lewis; Akron Straw Board Company, J. F. Serberling; Kankakee Paper Company, W. Bonfield.

It was unanimously decided to continue the terms and prices now in force.

Reports from all sections show that the mills are not running on an average over two-thirds time.

Straw was reported short in the East, particularly in Baltimore and Pennsylvania; in the West in parts of Illinois.

The association adjourned to meet at Saratoga on the third Wednesday in June.

The Straw Board Dealers' Association met at the same place, Thomas E. Gaskell presiding, J. F. Spalding secretary.

Members were present from New York, Penn-

sylvania, Massachusetts, Ohio and Maryland. It being a quarterly meeting, nothing but routine business was transacted. Chicago, Cleveland, St. Louis, and Detroit were most conspicuous by their absence.

The members of the association present feel somewhat hurt and disappointed at the non-attendance of the Western members, particularly as the meeting was held in the West for their accommodation. Surprise was expressed at the Chicago dealers' lack of attention to their own interests—to say nothing of anything else.

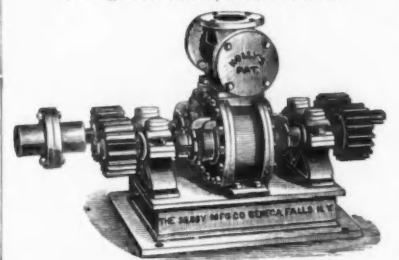
This association also adjourned to meet at Saratoga on the third Wednesday in June.

The Consolidated Lining Association held a meeting of officers and directors at the same hotel on the 8th instant, at which time the arrangements of last December were carried out and the details perfected. There was a full board in attendance. This association also adjourned to meet at Saratoga on the third Wednesday in June.

Your representative is under obligations to W. S. Davis and J. N. Harrington, of the Manufacturers' Association, and to President Thomas E. Gaskell, and Secretary J. F. Spalding of Boston, for courtesies extended and particulars furnished. MONROE.

**HOLLY'S PATENT ROTARY PUMPS**

Arranged for Power, Steam or Hand.



**THE SILSBY MANUFACTURING CO.,**  
Seneca Falls, - - New York.

Send for Catalogue.

**MACHINE TENDER WANTED.**—A FIRST-class Machine Tender of good habits can find a situation with the Sugar River Paper Mill Company, Claremont, N. H. J. T. EMERSON.

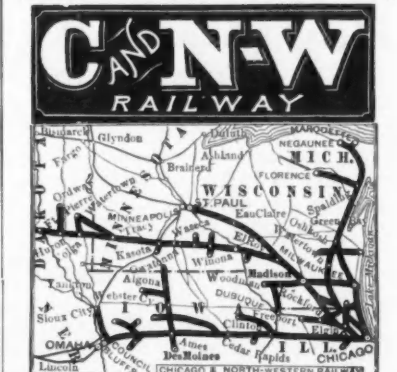
**WANTED—THREE OR FOUR DRIERS,** 84 OR 86 inch face, 28 or 30 inch diameter, with frame, &c. complete, in good running order. Address, with lowest price for cash, FITZGIBBONS, MESSER & CO., 65 and 67 Crosby st., New York.

**FOR SALE—ONE ENGINE,** 38 x 42. PRICE \$250. Apply to PARSONS PAPER CO., Holyoke, Mass.

**WANTED—A POSITION AS FOREMAN** BY A thorough American Paper Maker of twenty-one years' experience and master of the following branches: Engines, Machine, Loft and Finishing Departments; Engine Size and Loft Dried. Strictly temperate and reliable and industrious. Good reference. Address O. A., Paper Trade Journal.

**A RELIABLE, PRACTICAL PAPER MAKER,** OF experience, and a thorough knowledge of his business, familiar in the management of mills, would like a situation as Foreman in a moderate-sized mill having good facilities, or would assist parties who are about building.

Expectations as to salary reasonable. Address NEW ENGLAND, Office Paper Trade Journal.



**The Chicago & Northwestern Railway**

Is the OLDEST! BEST CONSTRUCTED! BEST EQUIPPED! and hence the

**Leading Railway of the West and Northwest!**

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

At Council Bluffs the Trains of the Chicago and Northwestern and the U. P. Railways depart from, arrive at and use the same joint Union Depot. At Chicago, close connections are made with the Lake Shore, Michigan Central, Baltimore and Ohio, Ft. Wayne and Pennsylvania, and Chicago and Grand Trunk Railways, and the Kankakee and Pan Handle Routes. Close connections made at Junction Points.

It is the **Only Line** running PULLMAN HOTEL DINING CARS between Chicago and Council Bluffs. Pullman Sleepers on all Night Trains.

Insist upon Ticket Agents selling you Tickets via this road. Examine your Tickets, and refuse to buy if they do not read over the Chicago and Northwestern Railway.

If you wish the Best Traveling Accommodations you will buy your Tickets by this route, **AND WILL TAKE NONE OTHER.** All Ticket Agents sell Tickets by this Line. MARVIN HUGHITT, 3d V. P. & Gen. Man., Chicago.

**CROCKER Reversible, Self-Packing and Self-Cleansing WATER FILTER.**

READILY CLEANSED WITHOUT REMOVING FROM CONNECTIONS.

MADE IN SIZES AS FOLLOWS:

- 10 inches diameter, 1 1-4 in. inlet.
- 18 " " 2 " "
- 24 " " 3 " "
- 30 " " 4 " "

LARGER SIZES MADE TO ORDER.

Do not mistake this for any other revolving or reversible Filter similar in appearance.

THIS IS THE ONLY ABSOLUTELY

Self-Packing & Self-Cleansing Filter MADE.

For further particulars, address



WARRANTED NEVER TO BECOME INOPERATIVE.

In places where there is not much head of water, can be effectively cleansed by steam without injury.

THE CROCKER FILTER is an ENTIRELY NEW invention. Patented June 29, 1880.

This Filter is especially adapted for **PAPER MILLS,**

Bleacheries, Dye Works, Chemical Works, Sugar Refineries, Breweries, Starch Factories, and for Steam Boilers generally.

**CROCKER FILTER CO., 174 High Street, Boston, Mass.**



**CLEVELAND WIRE WORKS,**  
W. S. TYLER, Proprietor,  
—MANUFACTURER OF—  
**FOURDRINER and CYLINDER WIRES,**  
Dandy Rolls, Cylinders, &c.  
Cylinders and Dandys made, repaired and covered  
Designing and Lettering Dandys a Specialty.  
**CLEVELAND, OHIO.**

**GEORGE HARLEY,**  
Importer of California Rags,  
And Dealer in  
**WOOLEN and COTTON RAGS, and all  
kinds of PAPER STOCK.**  
362, 365 & 367 THIRD STREET  
between Avenue D and Lewis St. **NEW YORK**  
F. GRAY W. C. GRAY H. C. NELLIS.

**PIQUA WOOLEN MILLS.**  
**F. GRAY & CO.,**  
MANUFACTURERS OF  
**FOURDRINER and CYLINDER  
FELTS,**

Press Felts and Jackets  
for all kinds of  
Paper.

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

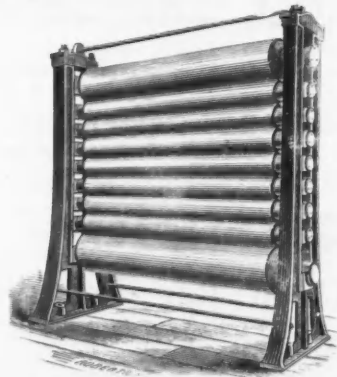
ALSO, TO OUR  
"EUREKA FELT,"  
For Fast Running on Cylinder Machines

Which we have perfected within the last few months,  
and which is rapidly gaining favor with Paper Makers,  
wherever it is used.  
**EXTRA HEAVY CANVAS DRYER FELTS,**  
all widths, cut to any length, at Manufacturers' Prices  
**WE WARRANT EVERY FELT** to work well,  
and if it does not, it can be returned.

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

**F. GRAY & CO.,** Piqua, Ohio.

**THE J. MORTON POOLE CO.,**  
Wilmington, Delaware.



MANUFACTURE

**Chilled Rolls**

GROUND BY THEIR PATENT PROCESS.

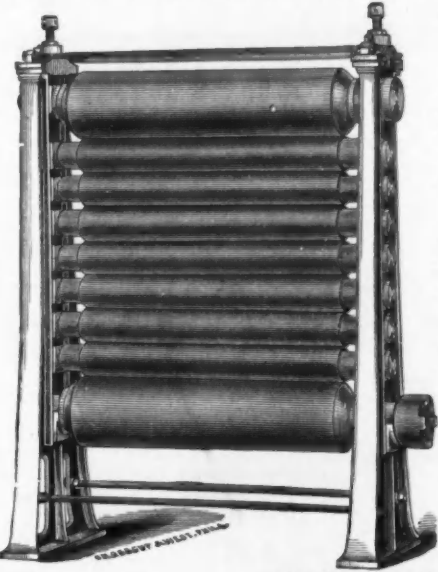
**PRESSES FOR BALING PAPER, RAGS, &c.**



Send for Circulars, Price List, Terms, &c., to the  
Sole Manufacturer, **JAMES N. BALSTON** (Successor  
to Ingersoll & Balston.)  
**Greenpoint, Kings Co. N.Y.**

**LOBDELL CAR WHEEL COMPANY,**  
WILMINGTON, DEL.

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



**EXTRACT OF AWARD ON CHILLED  
ROLLS.**

The undersigned having examined the  
product herein described respectfully recom-  
mends the same to the United States Centennial  
Commission for award, for the following rea-  
sons, viz:

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

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

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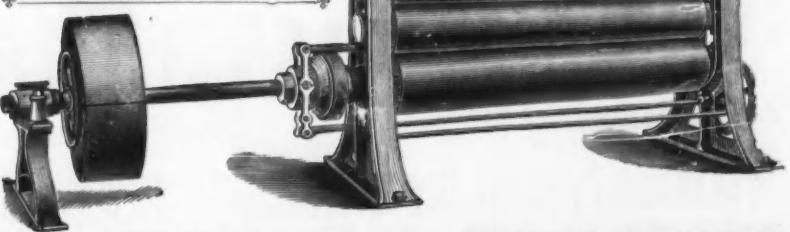
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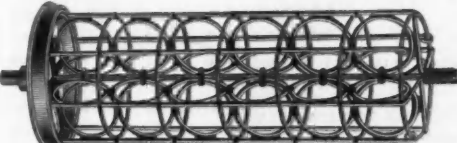
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