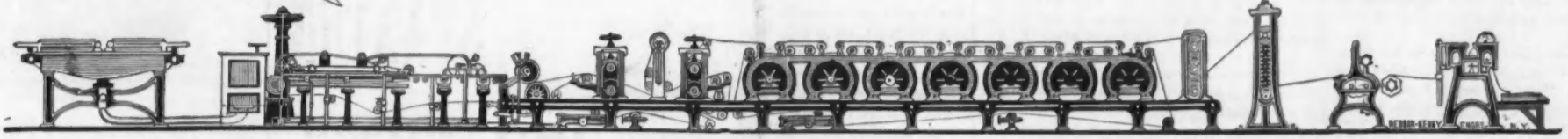


THE PAPER TRADE JOURNAL.



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

VOLUME VI.--NO. 32.

NEW YORK, AUGUST 11, 1877.

WHOLE NUMBER 171.

Trade Topics.

Paper-Making in Spain—Manufacture of Cigarette Paper.

The art of paper-making was introduced into Spain by the Arabs in the fourteenth or fifteenth century. The remains of some of their mills exist to the present day. Spanish paper soon obtained a great reputation, and was shipped to all parts of Europe. On the departure of the Moors, the art gradually fell into neglect, but some specialties remained, one of which, that of the manufacture of paper for cigarettes, has become the leading branch. There is such an enormous consumption of cigarettes in Spain and her colonies that there is a large and regular consumption of this paper.

Two regions—Alicoy in Alicante, and the province of Catalonia—are especially engaged in this manufacture; the productions of the former being much superior to those of the latter, and the beauty of their water-marks can hardly be surpassed. Manufacturers attribute this superiority to their using stampers, the beating engines being only employed for fine papers. The process is very simple; white rags are sorted and cleaned, but not boiled; they are then carefully stamped, washed and slightly bleached. By this system the fibres are better separated, and are not cut up as in the case of beating.

The Catalonian paper is very strong, but not so fine as that of Alicoy, although some smokers prefer it as being softer and less irritating to the throat.

In the Basque provinces a kind of cigarette paper is prepared from straw. It is difficult to manufacture and very dear, but is in good demand in some markets.

The manufacture of writing papers is considerably developed, but not to the same extent as in other countries, although the Government prescribes domestic paper for its own supplies.

The paper-making machine was introduced in 1845, and there are now large mills at Gerona Tolosa, Sarajossa, and at Olot in Catalonia, where the best qualities are produced. Most of the mills are constructed on the French model. The paper machines, though well built, have defective drying arrangements and weak calendars. On the other hand, rags are abundant, and their export prohibited; there is plenty of water power, and labor at moderate pay, and as the consumption is in excess of manufacture there is always a ready market at paying prices. The political condition of the country and the defective railway communications do much to neutralize these advantages.

The paper-makers are now producing very good cigarette paper from old hemp sandals, a material which is very cheap and practically inexhaustible.

Paper Making in France—Taxes and Difficulties.

The position of paper manufacturers and their kindred interests has always been a difficult one in France. All taxes and restrictions on home industry would, one should imagine, be avoided as much as possible by what are termed paternal governments. The disasters of France arose in no slight measure from a want of popular intelligence, and this from the inferiority of French publications and the aversion to reading among the masses. It has always been a surprise to Englishmen and Americans that among the score of daily papers published in Paris there is not really one which comes up to our ideas of a newspaper. The telegrams are meagre and sometimes manufactured; there is little news from home or abroad; the markets and general commercial interests are completely ignored, and the reader has to content himself with some exceedingly thin, if not smutty, gossip and an account of a first representation of a theatrical piece which took place some nights previously. But, in addition to the distaste of the French to advertise their wants, there are other causes for this inferiority of their newspapers. Outside of the continually recurring suppression of papers by the authorities, there are the onerous taxes which are laid on the paper industry, and which tell even on the quality of the manufacture. The paper duties are fixed as follows:

1. Cigarette paper, foreign correspondence, parchment, letter paper of all kinds and sizes, 15 fr. per 100 kilos.
 2. Note paper, printing and drawing papers, music and white hangings, colored and marbled papers for binding, 10 fr. per 100 kilos.
 3. Card and board papers, envelope, wrapping, blotting and kindred papers, 5 fr. per 100 kilos.
- A further tax of four per cent. is ordered to be levied by an act passed December 30, 1873. As an offset to the abolition of the stamp on

newspapers, a special duty of twenty francs per 100 kilos. is levied on printing paper. There are, therefore, two taxes—one paid by the manufacturer, and the other by the printer—and in order to collect these duties the Government, as in the case of a distillery in this country, has to maintain a constant surveillance through its officers. The precautions and restrictions to which mill-owners have to submit remind one of the feudal ages.

A paper manufacturer, according to the decree of 1871, must give the authorities a complete inventory of his establishment, the manufacturing processes and the character of his products. Every machine and vat must have a number legibly painted on it, and no change can be made in the plant or process of manufacture without a notification being previously made to the tax office. In addition to this the authorities may insist on the doors and windows of the mill being furnished with heavy iron screens, that there shall be only one entry habitually open, and that two locks shall be affixed to the other doors, the key of one to remain with the tax collector.

The natural result of the heavy duties and surveillance is now being seen; no new paper mills are projected, and no improvements are announced.

It might be supposed that the consumer pays the duty, but this is not exactly true in the paper industry. The workman suffers in the first instance by having his wages lowered. The consumer in turn has found a way of not paying any more for his stationery; he contents himself with a lighter paper of poor quality, as those having correspondence with France can testify. In the case of the thousands of unsold books and papers there is of course no consumer, and therefore the tax is a definite loss to the publishers.

Paper is so important an accessory in many industries that these in turn find themselves at a disadvantage with foreign goods. Some of the large ribbon factories of St. Etienne use 100,000 francs worth of paper annually, while artificial flower-makers, gilders, fan-makers, &c., employ it extensively; for what are called articles de Paris, 70,000,000 kilos are consumed. The greater part of these manufactures are exported, but not coming under the head of paper goods, there is no drawback allowed.

The tax on printing papers only brings some 5,000,000 francs clear to the revenue, owing to the heavy expenses of collecting drawbacks, &c., and on this account alone it is not likely that the Government will offer much opposition to its abolition.

Paper Imports to Great Britain.

The Paper-Makers' Circular has been going over the ground traversed by the Board of Trade returns, to find out how particularly British manufacturers are affected by the supplies of foreign paper, and the result of the investigations is embodied in the following statement:

"It will probably interest many of our readers to have put before them, 'cut-and-dried,' so to speak, some authentic information as to the amount of paper that our foreign competitors in the aggregate send to us, and the particular quarters from whence it is received. We say 'cut-and-dried,' as we have had to extract it for the convenience of our readers from the very voluminous accounts furnished by the Board of Trade, of our vast commercial dealings with the whole world; and in doing this we have been very forcibly reminded of Sam Weller's simile, of going through a great deal to learn a little, as was this worthy man's notion of learning the alphabet, for we have had to wade through a great deal to obtain a very little; as although perhaps in the minds of many engaged in the trade there is nothing like paper, yet in comparison with the great staples of iron, coal, wool, cotton, produce, &c., paper is but an insignificant item in the accounts with the world—hence it stands out with no gigantic figures that appeal by their prominence at once to the eye of the reader.

"Taking the accounts for the year 1875, which is the latest year for which these accounts are made up complete, we find the first place that is mentioned is the little Yorkshire port of Goole, which figures for the receipt of 44 tons of paper; we are in doubt if this would be really paper or dried pulp declared as paper, for the purposes of the account; in either case it would be pulp for some of the Yorkshire mills or perhaps common news for some of the local newspapers, brought by some vessel from the North seaports, that, blown out of her course has been unable to make her proper destination. Next in importance in the North comes Hartlepool for 53 tons, followed by Newcastle for 146 tons, succeeded by Grimsby for 265 tons. Then we have Liverpool for 660 tons, and completing the northern ports, last, but by no means least, Hull for 3,417 tons. It is impossible to say, as the accounts do not distin-

guish in these respects, what proportions are paper proper and how much are pulp in the shape of dried paper or boards; we expect that a very large proportion would be of the latter kind. Beginning in the opposite direction, we find Southampton down for 84 tons; this would include no doubt a large portion of the fanciful papers sent from China and Japan more as curiosities than as papers intended for general use. We have seen several consignments of leather paper—papers made exactly resembling our fine hard grained morocco, and small-sized small hands, having the color, glossiness, and very nearly the strength of silk; ladies' paper pocket-handkerchiefs and similar fancy articles. Then come the southeastern ports, which receive the great bulk of the German, Belgian and French papers proper that now compete so actively with our own. Newhaven shows a receipt of 885 tons, Dover 1,163 tons, Folkestone 1,329 tons, and last of all, as receiving paper from every part of the civilized world that produces it, and standing out as it does in almost everything far and beyond everywhere else in its gigantic proportions London, for 22,000 tons, all to itself.

"Finally, we have all the stray parcels of all kinds from everywhere lumped under the one head of 'other ports' for some 7,280 tons.

"Anyone who will take the trouble will find these several quantities to 'foot up,' as the Americans say, to the enormous quantity of 38,133 tons; and comparing the quantity as giving an idea as to its effect upon our own production, it may be stated as about equal to the production of thirty-eight paper mills with an output of twenty tons per week—a formidable proportion for our makers to have to contend against."

Paper Manufacture in Sweden.

(Concluded.)

WOOD-PULP PAPER.

In the year 1846, when the German engineer H. Völter began his experiments of using, instead of vegetable fibre from flax and cotton, wood fibre, which he prepared by quite a simple expedient, here was the beginning of a branch of industry which is already of great importance to Sweden, since our country possesses just what is chiefly required for it—abundant supplies of fir-forests and large water-falls. The first factory established on this Völter's system was at Trollhättan, in 1857, and for ten years was the only one of its kind, until here and there in the country they began to establish others, so that in 1870 there were six; but from this time their erection was very rapid till 1875, when there were twenty-seven wood-pulp factories already completed or nearly so; but since that time none have been erected.

This quick development is the more noteworthy as the erection of many of these establishments has cost several hundred thousand kr.

The observations and inventions made in this branch of industry have not been unnoticed, and therefore the manufactures are calculated to be worked, partly on the chemical, and partly on the mechanical method. The chemical method is as yet so new that it is difficult to say what development it will enjoy. It is certainly true that in this way a better and more fibrous pulp is obtained, but in proportion to the ground pulp it is also dearer, especially since caustic soda, which is needed for the manufacture, has considerably risen in price. The grindstones that have hitherto been employed in the mechanical method have as yet been generally obtained from Germany, the cause of which cannot be that the material required for it is wanting in our country, but rather at the new established works they have wished to avoid experiments at first, and hence the stones have been brought from such places where they have already been practically tried. All the machinery, on the other hand, is now made in the country.

The Swedish wood-pulp manufactures extant at the beginning of 1875 may be divided as follows:

I. Mechanical, such of the new works where 100 horse-power is calculated for each grindstone:

(a). Eleven Völter's manufactures with vertical grindstones, and the supplying of the pieces of wood by a screw mechanism. Of these, the oldest (Trollhättan) has twenty stones, of which the greater number are small; but besides, there are several large establishments with from five to six grindstones of from 5 to 5½ feet in diameter.

(b). Two Hartmann's, with small vertical grindstones, and supplied by weights.

(c). Four Siebrecht's, with large horizontal grindstones, and supplied by hydraulic pressure.

II. Chemical, generally provided with two boilers: Ten manufactures constructed on different methods (Sinclair's, Lee's, Fry's, &c.). The boiling is generally done with caustic soda, in weight about twenty-five per cent. of the wood;

besides, the so-called half-chemical method is applied, consisting in boiling or steaming blocks of wood, and then grinding them in the usual manner. Some of the more recent paper manufactures make from such pulp a kind of paper very good for wrappers and sheathings.

The great expectations that were reasonably attached to the paper-pulp industry have, during the last few years, not been quite realized, the cause of which may, in the first place, be looked for in the economical reaction which, in many parts of foreign countries, followed upon the enterprising activity that distinguished the period immediately preceding the year 1873; besides, it ought perhaps, not to be concealed, that there are still some technical difficulties for the chemical manufactures to conquer. It has been calculated that all the Swedish manufactures ought to be able to produce about 480,000 centners of pulp annually, of which 350,000 centners should be mechanical, and 130,000 chemical, but as yet not more than half of that quantity at most has been produced in any year, which, nevertheless, represents a value of several millions of kr. Of the paper-pulp, part is used for the paper manufacture in the country, and part is exported (158,700 centners in the year 1875; 118,100 centners in 1874), mostly to England.

Wall-paper is manufactured in from fifteen to twenty larger and smaller manufactures, and the quantity manufactured in the year 1875, according to their returns, was upwards of 1,338,000 rolls.

Of playing cards, were manufactured in 1875, in four manufactures, 145,400 packs. Every pack of cards is supplied with a 75 öre (=80.21 gold) stamp, and the sale of unstamped cards is prohibited on pain of forfeiting 75 kr. (=80.83 gold). Whoever plays with such cards is liable to a fine of 7.50 kr. The stamp-duty, with which formerly the great orphan asylum was mainly supported, is now paid directly to the exchequer towards the expenditure for the orphan asylum and other charitable institutions.

Ethel-articles, such as small cases and apothecary's boxes, &c., are manufactured on a large scale, by the Joint Stock Lithographic Company, at Norrköping, as well as elsewhere. They also manufacture colored and stained paper, &c.

New Mordant for Fixing Colors.

(TRANSLATED FOR THE JOURNAL.)

It is well known that coloring matters which are soluble in water can absorb pulverable bodies of a certain nature with the same avidity with which the fibres of textiles take up the so-called substantive colors. It has been proved that starch will retain very well the aniline colors, so that by using cold solutions of the latter on starch flour very good colored powders can be obtained, and which can be variously employed in the manufacture of wall papers. We know also that the colorless precipitates which are formed in a liquid in which a coloring matter has been dissolved absorb considerable quantities of these colors. Very beautiful results are obtained with sulphate of baryta in liquors holding aniline colors in solution.

All these precipitates have, however, only a secondary interest for the dyer, and up to the present time we have found no pulverable or porous body which acts exactly like the filamentary matter on the substantive and adjective colors.

From some experiments of M. Reimann in dyeing cotton with aniline colors he has shown the extraordinary absorbing power of silica and analogous bodies for coloring matters. A combination of silicic acid has been colored by substantive matters.

Attempts have been made with more or less success to impart the brilliant colors of aniline to the mica powder which is used for drying ink. Precipitated silicic acid, which is separated from a solution of soluble glass by the addition of an acid, and which is transformed by desiccation into an impalpable white powder, will prove in the most striking manner, when brought into contact with solutions of substantive colors, its property of taking up the coloring matter contained in them, and with adjective colors, after being heated with a mordant, it will dye exactly like textile fibre.

The substantive colors of aniline combine so readily with silica that the latter appears to be dyed permanently. When we shake silicic acid, which has been precipitated and carefully washed, in a glass containing solutions of fuchsine and aniline blue and violet, the acid soon changes to a deep color, which it retains even after washing. It is only by boiling or treating with concentrated alcohol that the color disappears. Dyed textiles do not prove so fast when subjected to the same process. This new mordant is very cheap, and will doubtless give some beautiful novelties in wall papers.—*Journal des Fabricants de Papier.*

Correspondence.

British Notes.

[FROM OUR REGULAR CORRESPONDENT.]

15A PATERNOSTER ROW,
LONDON, E. C., July 23, 1877.

I cannot say that any change has taken place in our trade. About this time most of our paper-makers are busy stock-taking. This operation in most houses must now be over, and business once more is going on as before. I do not hear of anything either interesting or novel in trade circles.

I saw several paper-makers at various times during the past week, but they, one and all, spoke very despondingly of prospects. One maker said so far as he was concerned there was no trade at all, and he might as well close. No doubt there is a severe pinch just now, but we must all hope for the best, at the same time being prepared for the worst. I have a little news this morning from the North, but you will see that it is of a particularly gloomy character. I don't think war news affects business much now, as we have settled down to be spectators of a struggle which is likely to be prolonged for some time to come. This morning advices in the papers indicate some active measures on the part of our cabinet. This step will, doubtless, produce great anxiety as to our policy, and trade is certain to be influenced by any measures which tend to engage this country in the conflict. Our markets are not yet affected and remain as last week. Coals and chemicals are dull and fibres scarce. This statement seems to embrace the entire report of raw materials.

There have been very heavy rains in the north of England during the past week, and all the rivers are much swollen. At Hall-ith-wood Paper Mill (near Bolton) the water rose last Sunday evening to the wet felt, but work was proceeded with on Monday. This happened on the River Eagley. Higher up on the same river is the Belmont Paper Mill (Spencer & Co.), and there work was suspended, owing to the flood. Eagley Bridge Paper Mill is on the same river and escaped damage. Some years ago, they were badly flooded. Consequently they built a wall along the bank which effectually keeps away the enemy.

Standish Paper Mill, near Wigan, also had to suspend work on account of high water which entered the works.

Grimeshaw Bridge Paper Co. (Lim.), near Darwen, have discharged one set of men and are now only running day shift. It is reported that there is a little pecuniary difficulty. If so, the proprietors are very wise to curtail expenses.

I hear White Ash Mill is going.

A correspondent sends me the following: "From what I can gather, Fenniscowles' Paper Company have expended more money upon their new buildings and machinery than they are in possession of, and are unable to meet the calls of their creditors. A meeting of shareholders is to be held to-day or early next week to try and raise the required amount, about three or four thousand I believe. If they cannot raise it in this manner I hear they will try to mortgage it for the amount. The company is doing well as far as regards orders and turning out work, and it is held that if the amount can be raised they will comfortably realize 10 per cent.; but should the money not be raised, and the creditors refuse to hold back, the company will most likely be wound up and sold, and fall into the hands of a few of the larger shareholders. They will keep the mill running, if possible, for fear of losing their orders. They have an order for the *Telegraph* which fully keeps the large machine going (about thirty tons per week), besides several Scotch (web) papers. I shall be able to say more next week, for then its fate will be decided."

So says my correspondent, and I trust that the company will manage this little affair all right, and comfortably realize 10 per cent. It is a great pity that a company doing good business should come to grief in this way. I hope I may hear of a successful meeting.

The Star Paper Company is going on very well indeed, but, they too, have outstripped their boundary line and exceeded a convenient capital. When they get on a bit they will start their new machine.

There is no doubt it is dangerous to create uneasy creditors by overstepping a moderate working capital. If companies were to set aside a portion of their profits as a reserve or enlargement and extension fund, and be content with smaller dividends, there would be much safer business abroad. When a profitable company which is doing good, steady work wishes to increase its operations, it would be far more advantageous if there was a fund on the spot instead of having to raise fresh capital. But, un-

unately, it is impossible to make investors see this. Dividends are all they care about.

ROME MARKETS. Coals.—There was a steady sale this morning, and previous rates were fully maintained.

Fibres.—Prices exactly the same as last week. Chemicals.—Cooper, Bros. & Co., Newcastle-on-Tyne, say: "Our market has experienced very little change this week.

In Liverpool prices are somewhat lower, with a limited demand. For f. o. b. Liverpool, less 2 1/2 per cent. discount: white caustic soda, 70 to 72 per cent., £14 5s. to £14 10s.;

Philadelphia Notes.

ALTHOUGH there is a falling market in many lines of paper stock, there is a marked improvement in book papers of a superior grade, and a steady demand, a square, honest article commanding relatively a better price than an inferior grade made of poor stock, weighing heavier, but not giving equal satisfaction.

The great railroad strikes have hitherto interrupted trade with the West and interior of the State, but as it is now virtually at an end, increased orders are being received and will continue.

The manufacture of what is called lace papers is an important branch of trade in Germany, and even in these times of general depression has maintained its activity.

The great difficulty in manufacturing these papers is to produce a surface which will exhibit, as in real lace, the fine gradations of lines. Small lead hammers are used for punching on stamps.

The paper must be uniform in strength and sizing, and also in color, or it will appear as if composed of different kinds.

The Hampshire Paper Company lately sustained some loss from an overflow in the upper room of its building.

M. L. Bulkeley, of J. G. Ditman & Co., returns to-day, after a few weeks' vacation at the seashore, looking well.

Alfred Ireland is again at his post, after an extended tour in England and the continent.

Mrs. John D. Marker died on August 7.

Charles Knight, Jr., well and favorably

known in the paper trade, died on July 26, aged 52 years. He commenced the paper business at 523 Commerce street, about 1860.

A. W. Carr, of Carr, Bros., South Manchester; Thomas H. Tolson, of J. A. Dushane & Co., Baltimore; E. T. Mudge, Dobler, Mudge & Chapman, Baltimore; Charles H. Mullin, of Mount Holly; C. O. Chapin, of Springfield, Mass., are in Philadelphia.

There are upwards of two hundred firms in Philadelphia engaged in the manufacture and sale of book, news and manilla papers, besides publishers, booksellers, stationers, &c., &c.

Blackley Blue.

Blackley blue is solely manufactured by L. J. Levinstein & Sons, who introduced it first to the paper trade in the year 1870. The process of its manufacture is yet kept as a secret.

The claimed advantages of this color over ultramarine are its considerably lower cost and superior shade. One pound of Blackley blue is said to equal in strength 10.40 lbs. of the very best ultramarine, and hence to be fifty per cent. cheaper than the latter.

It is superficial to dwell at any length upon the merits of this product, as its very large consumption is its best recommendation. In using Blackley blue it is only necessary to add its clear solution to the pulp, and it is completely soluble in hot water.

Lace Paper.

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Manufacturing News.

WESTERN STATES. S. Y. Beach, Seymour, Conn., is running his mill on half time.

The mills at Bridgeport, Conn., are suffering from low water supply.

The Clinton Paper Manufacturing Co., Clinton Conn., is on half time.

H. E. Rogers, South Manchester, Conn., is running his mill on half time.

A. H. Hubbard & Co., Norwich, Conn., are running their mill on half time.

John Robertson, New London, Conn., is running on half time on account of low water.

The Seymour Paper Co., Windsor Locks, Conn., has closed the lower mill for repairs.

The Keeney & Wood Manufacturing Co., North Manchester, Conn., is running on half time.

Ingaß & Co., South Manchester, Conn., are running on half time; short water supply is the trouble.

The Delaney & Munson Manufacturing Co., and the Cowles Paper Co., Unionville, Conn., are both on half time.

Smith's mill, at Seymour, Conn., which has been shut down for about two months, is to be started up about September 1.

The Hartford Paper Co., Poquonoc, Conn., has added a new stack of chilled rolls to the 54-inch machine in the No. 1 mill.

The Plattner & Porter Manufacturing Co., Unionville, Conn., contemplates shutting down its mill until the water supply improves.

F. R. Walker, Burnside, Conn., has added a new stack of chilled rolls to his machine. He will soon put in a new steam engine and boilers.

The Hammer & Forbs Co., Burnside, Conn., is putting in a stack of super-calenders, 44 inches face, to be used in finishing its fine manilla papers.

C. H. Dexter & Sons' 1,000,000 feet of spruce logs have filled the "basin" at Windsor Locks, Conn., so that another boom is to be constructed near the pulp mill.

The Winnipieogee Paper Co., Franklin, N. H., is putting in a new steam boiler in its No. 2 mill. This, with the three already in, will give plenty of steam.

C. H. Dexter & Sons, Windsor Locks, Conn., have completed the construction of the wood pulp works at their mill, and expect to start up soon on the manufacture of chemically prepared spruce pulp.

Joseph Parker & Son, New Haven, Conn., have shut down their mill for six weeks to make repairs. While the mill is idle some new machinery for the preparation of lint for hospital use from blotting paper will be put in.

The Haven & Masten Manufacturing Co. now owns and is operating the mill formerly owned by the Ames Box Board Co., North Bennington, Vt. The product of the mill is leather board and a very good quality of binders' board which is called "Woolloosac."

Among the names figuring in the tax list of Holyoke, Mass., are: Albion Paper Co., \$882.60; Crocker Manufacturing Co., \$742.98; Hadley Falls Paper Co., \$709.57; Parsons Paper Co., \$6,517.87; Valley Paper Co., \$1,840.92; Whiting Paper Co., \$5,761.75; Beebe & Holbrook, \$1,822.39; Franklin Paper Co., \$1,073.23; Massasoit Paper Co., \$1,773.67; Riverside Paper Co., \$1,948.80; Union Paper Manufacturing Co., \$2,226.85; Excelsior Paper Co., \$854.69; Holyoke Machine Co., \$2,223.72; Holyoke Paper Co., \$4,908.84; Newton Paper Co., \$743.85; D. H. & J. C. Newton, \$756.46; Robertson, Black & Co., \$313.20.

The Holyoke (Mass.) Paper Co. is resetting two of its five boilers in the Jarvis style, and has arranged to give the system a thorough trial in comparison with the old, so as to see how much of the advantage claimed can be obtained.

Some time ago all the water put into the two boilers during twelve hours was accurately measured and the exact evaporation ascertained, while the coal consumed was weighed, thus showing how much coal was used to obtain certain results.

Next week, when the boilers get well at work in their new setting, the operation will be repeated, and if the claims of the inventor are borne out the other three boilers will be set the same way.

It is said by those who know that any newly set boiler will give at least 5 per cent. better results at first, and this will of course be considered in figuring the result of the present test.

MIDDLE STATES.

The Jersey City (N. J.) Paper Company is about to put in a new stack of 54-inch chilled rolls and a set of reels.

WESTERN STATES.

A. W. Patten, Neenah, Wis., has recently started up the new Fourdrinier machine built for him by the Rice, Barton & Fales Manufacturing Co., Worcester, Mass. He has also put in a new Jordan engine and an extra stack of calendars.

FOREIGN.

The Sebnitz mill, Germany, produced 3,498,658 lbs. of paper last year, a large increase on previous seasons.

One of the largest paper mills in Germany, that of Oldesloe, Schleswig-Holstein, was to be sold on August 1. It had been in liquidation for some time.

A new paper mill is in course of construction at Alvington, England. It is to be called the Clanna Mill, and will be run on boards.

Frank T. Noble is the owner.

The Siebrecht paper mill, in Wernshausen, Germany, has been bought by Herr Wittich, who had a mortgage on the property. The price was 210,000 marks.

ANDERSON & STANTON

152 Broadway,

NEW YORK, June 1, 1877.

GENTLEMEN: Having given the subject of Paper Mill Insurance special attention, 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 and many others of like character are such as are being asked us constantly by paper-makers. Worthless insurance is worse than none. Badly worded policies lead to litigation. Business centers of course have the largest number of insurance companies, hence, better facilities for placing large lines of insurance.

We now have 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.

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,

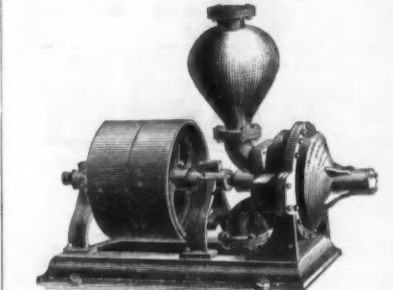
152 Broadway, New York

A. H. GERE & Co.

73 Walnut Street, Cincinnati, Dealers in Paper-Mill Supplies.

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

Bagley & Sewall's Rotary Force Pump



Most Perfect Rotary Pump Ever Offered to the Public.

SPECIALY ADAPTED FOR WORK IN PAPER MILLS.

The following are among the leading advantages of this pump: Its few parts, Simplicity of construction and small space occupied. Its small cost compared with other pumps. The comparatively small power required (using from 30 to 75 per cent. less power than any Rotary Pump now in use.) Its Action is Positive, given an Even and Continuous Stream, being perfectly balanced in the water.

TESTIMONIALS.

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

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

OFFICE OF THE REMINGTON PAPER CO., WATERTOWN, March 31, 1875. We have used two 2-inch Pumps for the past ten months, as Suction or Vacuum Pumps, on our two 24-inch Fourdrinier Machines with entire satisfaction. For this purpose, or for raising and forcing water for general purposes, we regard the Green Pump as vastly superior to anything we have ever seen, and we have made the subject of Pumps one of especial study and investigation. A. D. REMINGTON, President.

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

PATERSON, N. J., October 11, 1875. SIR—The little Rotary Fire Pump (No. 3) is entirely satisfactory. I have connected with it a system of sprinklers on each floor, and a set of hose front and rear, 1 1/2 inch nozzles, from which I am able to throw two streams at once, each 125 feet. J. SWINBURNE.

WATERTOWN, March 22, 1875. In an experience of fifteen years we find this to be decidedly superior to any Pump we have found, and we have tried a large number, both Rotary and Piston. IN FACT IT IS THE ONLY ONE WHICH HAS ENTIRELY PLEASED US. Yours truly, KNOWLTON BROS.

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

WINCHESTER PAPER COMPANY, WINCHESTER, Va., September 14, 1875. We have it in use on our Straw Board Machine (62-inch Fourdrinier) as a Vacuum Pump, connected to an 18-inch box, which is a severe test. We consider it the best pump for that use that we have ever seen used. Yours truly, CHAS. L. CRUM, Sec'y.

These Pumps are now in use as Force and Vacuum Pumps in many of the Leading Paper Mills. Liberal Terms made to First-class Parties.

SEND FOR PRICE LIST OF THE CHEAPEST PUMP IN THE MARKET. Address EDWARD CONLEY, Sole Agent for Paper Mills, No. 74 DUANE ST., N. Y., where the Pump can be seen by parties wishing to examine it.

JARVIS' PATENT FURNACE

For the Setting of Steam Boilers. Will save twenty-five per cent. in fuel, and make an increase of twenty-five per cent. in Steam Power. Will burn coal dust without blast. We guarantee fifteen per cent. increase in evaporation and capacity where we can have evaporative test before and after setting. Boilers set this way can be seen at RUSSELL PAPER CO., LAWRENCE, MASS.

W. W. HARDING'S PAPER MILL, Philadelphia, Pa. HOWLAND & Co., Sandy Hill, N. Y. MONTEAGUE PAPER CO., FURDEN HILLS, MASS. HARMONY MILLS, Cohoes, N. Y. ALLEN PRINT WORKS, Providence, R. I.

A. F. UPTON, GENERAL AGENT, No. 239 CONGRESS STREET, BOSTON, MASS. GEO. W. STORER, 43 S. 4th st., Phila. Agt. for Penn. PINKERTON & JONES, Waterford, N. Y., Agents for New York State. H. A. GLASIER, 8 Adams, Mass., Agt. for West. Mass.

PETER HERDER, Paper Warehouse.

Fine Manillas, Pure Rope, Bag and Tag, Book and News Paper, Mailing Paper. ALL KINDS OF PAPER MADE TO ORDER AT SHORT NOTICE. No. 75 JOHN STREET, NEW YORK.

DIRECTORY.

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

NEW YORK HOUSES.

Paper and Paper-Makers' Supplies.

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

Rags and Paper Stock.

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

Oils.

Table listing Oil suppliers, including Binns & Lea.

Paper-Makers' Chemicals and Colors.

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

Paper-Makers.

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

Jute Butt Brokers.

Table listing Jute Butt Brokers, including Cabot, Bowles & Co., Lacey, Pope & Co., etc.

Straw Boards.

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

Paper-Making Machinery.

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

Water Wheels.

Table listing Water Wheel suppliers, including Stout, Mills & Temple.

Wire Cloth.

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

Felts and Felting.

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

Belt Hooks.

Table listing Belt Hook suppliers, including Wilson, Greenleaf.

BOSTON HOUSES.

Table listing Boston houses, including Blanchard, J. Henry, Chemicals and Wood Pulp, etc.

CHICAGO HOUSES.

Table listing Chicago houses, including Clarke, Friend, Fox & Co., Paper Manufacturers and Dealers, etc.

CINCINNATI HOUSES.

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

PITTSBURG HOUSES.

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

PHILADELPHIA HOUSES.

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

ST. LOUIS HOUSES.

Table listing St. Louis houses, including Graham & Bro., H. B., Paper Warehouse and Stock Dealers, etc.

MANUFACTURERS.

Table listing Manufacturers, including Claremont Manuf'g Co.

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

IMPORTS of Paper and Paper Materials, Books, &c., at the Port of New York, for the week ended Aug. 3, 1877. Quantity given in packages when not otherwise specified.

Table of imports for New York, including Aniline Colors, Alum, Bleaching Powders, Soda Ash, etc.

TOTAL IMPORTS.

Table of total imports for New York, including General Merchandise, Paper, Paper Stock, etc.

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

Table of imports from various ports, including Alexandria, Antwerp, Bremen, Bristol, etc.

EXPORTS of Paper, Books, &c., from the Port of New York to Foreign Ports, for the week ended August 7, 1877, with Aggregates and Values.

Table of exports to various countries, including London, Mexico, Rotterdam, etc.

TOTAL EXPORTS.

Table of total exports for New York, including General Merchandise, Paper, Paper Stock, etc.

Paper, &c., for the week ending July 10, 1877 42,000 Paper, &c., for the week ending July 17, 1877 44,804 Paper, &c., for the week ending July 24, 1877 34,561 Paper, &c., for the week ending July 31, 1877 38,596

NEW YORK IMPORTS.

FROM AUGUST 3 TO AUGUST 10, INCLUSIVE.

Table of New York imports, including Hide Cuttings, Jute Butts, Rags, &c., Paper, etc.

PHILADELPHIA IMPORTS.

Table of Philadelphia imports, including Paper Stock, Soda Ash, etc.

BOSTON IMPORTS.

Table of Boston imports, including Paper Stock, Chemicals, &c., Books, etc.

Table of imports from various ports, including Alexandria, Antwerp, Bremen, Bristol, etc.

Wood Pulp, WET or DRY,

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

IRA L. BEEBE, 60 Duane Cor. Elm St., N. Y.

LACEY, POPE & CO. 133 Pearl St., N. Y.

JUTE BUTTS AND Rejections. P. O. Box 5423.

TISSUE PAPERS

of the CELEBRATED ENGLISH MAKE Trade Mark, "Mill No. 62." White, Colored and Silver Tissue, manufactured expressly for Jewelers' and Silver-Platers' use; guaranteed not to tarnish or discolor the goods. Sole Agent, FRED'K W. SMITH, 351 Canal St., N. Y.

Standard Wire Works, BELLEVILLE, N. J.

Eastwood, Buchanan & Smith, MANUFACTURERS OF BRASS, COPPER AND IRON WIRE CLOTH Of Every Description. FOURDRINIER WIRES, DANDY ROLLS AND CYLINDERS Made, Covered and Repaired BRASS AND COPPER WIRE, WIRE WINDOW SCREENS AND GUARDS.

GEORGE HARLEY, Importer of California Rags AND DEALER IN WOOLEN AND COTTON RAGS, & All Kinds of Paper Stock. 362, 365 & 367 Third Street, Between Avenue 1 and Lewis St. NEW YORK.

CHAMPION (DOUBLE HITCH) BELT HOOK. LEADING MANUFACTURERS and others who have tested it emphatically pronounce it, in all respects, the BEST BELT FASTENING in use.

For sale by the TRADE. Specimen Hooks and United Belt Ends mailed when requested. Address, CHAMPION BELT HOOK CO., 87 Liberty street, New York.

STOUT, MILLS & TEMPLE



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

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

NATRONA POROUS ALUM,

FOR PAPER MAKERS' USE. FREE FROM IRON AND FROM EXCESS OF ACID.

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

Pennsylvania Salt Mfg. Co. 140 South Delaware Ave., Philadelphia. 59 Maiden Lane, New York. 212 Washington Ave., St. Louis, Mo. AGENTS. W. M. ELLICOTT & SON, Baltimore. MOREY & CO. Boston.

RUBBER BELTING GOODS. Warranted best quality, AT LOWEST PRICES. Heavy 5 and 6 ply Belts a Specialty. R. LEVICK, SON & CO. 724 CHESTNUT ST. PHILADELPHIA.

OWEN KEENAN'S SON, Wholesale Dealer, Packer and Importer of all kinds of Rags and Paper Stock 395 PEARL STREET, JAMES T. KEENAN. NEW YORK.

PIQUA FELTS.

Paper-Makers' FOURDRINIER FELTS. Coarse and Fine CYLINDER WET FELTS. Press Felts & Jacketing. F. GRAY, O'FERRALL & CO., Piqua, Ohio.

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

[From The Paper Trade Journal of March 4, 1876.] MIDDLETOWN, O., February 23, 1878. To the Editor of The Journal: Much has been said in former numbers of THE JOURNAL about the running and durability of cylinder long felts. GRAY, O'FERRALL & CO. are supplying the best cylinder long felt I have ever had any experience with for wide machines. I think they decidedly excel. They keep their width under a reasonable strain, and when kept clean never trouble with wind marks, never get sick in the middle or edges; in fact, they make paper, with ordinary care, until they are entirely worn out, and it would be well for any one who is troubled with an unsatisfactory working felt of any other make, to try one, and by all means to do so if there is a necessity for fast running.

IRA L. BEEBE, NEW YORK AGENT.

ARE YOUR MILLS Fully Insured In SOUND Companies?

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

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

Blank surveys sent by mail upon application. ADDRESS, ANDERSON & STANTON, Insurance Brokers. 152 BROADWAY.

BLUE PAPER. TIEMANN'S SOLUBLE BLUE IN POWDER. RED AND BLUE ANILINES. J. H. TIEMANN & CO. 56 Murray Street, New York.

The Paper Trade Journal.

DEVOTED EXCLUSIVELY TO THE INTERESTS OF
The American Paper Trade.
Weekly, \$4.00 per annum.
Single Copies, 10 Cents

NEW YORK: SATURDAY, AUG. 11, 1877.

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

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 raw fibres and other materials, a record of the water supply, with the latest manufacturing news in all parts of the country.

Communications on matters of interest to the trade are earnestly solicited from all quarters, and if used will be liberally paid for.

HOWARD LOCKWOOD,
Publisher and Proprietor,
No. 74 Duane street, N. Y.

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.

THERE are complaints of low water in some sections of the country, but we do not learn that they are general. Will our friends keep us advised?

SEVERAL articles specially prepared for THE JOURNAL appear in this issue. The report on paper-making in Sweden is drawn from the Swedish catalogue at the Centennial.

A CORRESPONDENT in our last issue spoke of keeping a "steady-head of water in the forebay." This, we think, every paper-maker will find to be impracticable.

WE have before us the August number of the American Mail and Export Journal. This paper has taken high rank both at home and in foreign countries and has received many flattering notices, particularly in Great Britain.

WE want to get up a discussion on resins. A French correspondent asks us some questions which we expect to review ere long, and it seems to be a fitting occasion for opening up a feature in paper manufacture which has a wide range, and upon which a great deal can be said.

THE extension of our foreign trade is one of the matters to which the Government proposes to devote specific attention. The Secretary of State not long ago declared that he hoped, through trade conventions with foreign governments, to extend the markets for our products.

presses it when he declares that our surplus must be disposed of. We are now really suffering from excessive wealth, an abundance of riches which reacts upon itself and makes industry poor, and an outlet must be found in order to keep our operatives employed.

THE condition of our foreign trade for the last fiscal year, as shown by the figures of the Bureau of Statistics, is of general trade interest, and we briefly summarize its features. The excess of exports over imports for the fiscal year is \$151,913,482 in goods, \$15,325,762 in specie and \$167,239,244 in total; for the previous year it was \$79,643,481 in goods, \$40,569,621 in specie and \$120,213,102 in total; the excess of exports over imports was, therefore, \$72,270,901 greater in the last than in the previous fiscal year in goods; in specie it was \$25,243,859 less and in total was \$47,026,142 greater.

Correspondence.

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

Pity the Poor Machine Tender.

To the Editor of The Journal:
"O. I. D. Clare" seems to think that "Machine Tender" is responsible for all the mill. The mischief is done before the stuff comes to the machine room, and no amount of treatment there can remedy it.

Chronology of Paper-Making.

To the Editor of The Journal:
I have now before me a book of recent issue, entitled "Paper and Paper-Making," published by Jael Munsell, of Albany, N. Y., in which he gives the chronology of paper-making from the year 670 B. C. to the present time, enumerating the number of different articles, with names of same, which have been used in different countries in the manufacture of paper.

Cleansing Felts.

To the Editor of The Journal:
In reply to the inquiry of your correspondent "Manilla," who is in quest of information relating to Dunn & McAlpine's felt cleansers, I would say that the contrivance referred to is a very simple one, and can readily be applied to either a cylinder or Fourdrinier machine, and consists of vacuum boxes of peculiar construction in connection with shower pipes; also with the ordinary suction pumps already in use.

Resins.

To the Editor of The Journal:
We often receive from the United States resins which we use in sizing our writing papers. We have frequently remarked a difference in the quality of these resins. When used, they develop an odor like absinthine or anise which our French resins do not possess.

quality of these resins. When used, they develop an odor like absinthine or anise which our French resins do not possess. Will you tell us through THE JOURNAL if you know of any extracts from pine trees furnishing the best resins for sizing all kinds of paper; how they can be recognized and what is the name of the pine or fir tree in your country producing the most valued resin for sizing fine papers. Thanking you, &c.

ANS.—The resin used in this country is the product of distilling the turpentine extracted from pine trees native to our Southern States. The darkest resins are the strongest and best for coarse papers, but affect the color. The clearest will not make as strong a sizing, and is apt to produce transparent spots. The medium grades are esteemed the best, if of a clear amber color. We will take up this subject of resins at an early day and try to convey the information demanded by our correspondents.—[Ed.]

Changes, Removals, and New Firms.

R. W. Cram, news depot, &c., Petrolia, Pa., has sold out to Cypher & Co.
Palmer & Austin, books and stationery, Geneva, O., have dissolved partnership.
D. H. Hill, publisher of the Southern Home, Charlotte, N. C., has sold out to F. B. McDowell.

Failures.

John Backup, stationery and books, Boston Mass., is reported failed.
Joseph F. Delano, printer, Charleston, S. C., has been sold out by the Sheriff.

Accidents.

A. C. Bakewell, of the Valley Paper Company, had his arm broken recently while traveling from the mill at Hulton, Pa., to Pittsburg.

Fires.

Longley & Co.'s printing establishment at Foster's, Ohio, was destroyed by fire on August 7. The loss is \$15,000, and is fully insured in Western companies.

Personal.

The death of W. B. Jones, printer, Covington, Ky., is announced.
The death of Charles Knight, Jr., paper dealer, Philadelphia, Pa., has been announced.

New Patents.

Granted July 24.
No. 193,322. Making Hollow Articles of Vulcanized Fibre.—W. Courtenay, New York, N. Y.

In Town.
A. S. Bacon, Richmond, Va.; J. S. Morrison, Roaring Springs, Pa.; W. H. Chatfield, Cincinnati, O.; A. C. Robertson, Montville, Conn.; C. T. Crocker, Fitchburg, Mass.; Wellington Smith, Lee, Mass.; H. B. May, Lee, Mass.; Prentiss Chaffer, Lee, Mass.; S. S. Crocker, Leominster, Mass.; G. W. Wheelright, Jr., Boston, Mass.; T. H. Hulbert, Collins' Depot, Mass.; S. Q. Porter, Unionville, Conn.; J. W. Friend, Pittsburg, Pa.; Leslie C. Wead, Malone, N. Y.; Mr. Masten, North Bennington, Vt.

Chattel Mortgages.
NEW YORK CITY.
Mortgagor. Mortgagee. Amount.
Duffy & Monks, 149 Spring st., J. Royal .. \$250

BROOKLYN.
Joseph D. Robinson, 1091 De Kalb av., J. Conner's Sons, .. 593

EASTERN STATES.
Samuel G. Ames, Boston, Mass., .. 300
Chas. R. Bennett, Boston, Mass., .. 150

WESTERN STATES.
Charles H. Miller, Chicago, Ill., .. 700

Newspaper Intelligence.

The following is a list of new newspapers, furnished from the advance sheets of the American Newspaper Reporter and Printers' Gazette:

Table with columns for Newspaper Name, Location, and Price (Daily, Weekly, Semi-weekly, Monthly). Includes titles like Couriers, Standard, Mission Mirror, etc.

Foreign Notes.

The German paper trade is taking steps for the formation of a protective union such as already exists in Switzerland.
Dresden sent to the United States during 1876 paper, paper manufactures and writing materials to the value of 250,326 marks.

backlash or rear movement after being fed to the cutter.

No. 193,330. Processes and Apparatus for Putting up Caustic Alkali.—H. B. Hall and E. Hine, New York, N. Y.

1. A process of putting up caustic alkali, which consists in compressing the same, in a dry granular condition, into air-tight packages, whereby the alkali will be practically free from water, and will retain its original strength.

No. 193,314. Save-alls for Paper-Makers.—R. A. Morton, Caldwell, New Brunswick, Canada.

A "save-all" consisting of a tank, sieve-covered drum, hollow perforated shaft, and couch-roller and scraper.

No. 193,364. Machines for Lining Paper.—C. L. Cram, Winchester, Va.

1. A reservoir of a pasting-machine, provided with two paste-grinding rolls, which are located within the reservoir in such manner as to divide it into substantially two compartments for containing the ground and unground paste.

2. The combination with a reservoir of a pasting-machine having two compartments formed by the two paste-grinding rolls, as specified, of a pasting-roll, the same being located within one of said compartments for taking up the ground paste.

3. The reservoir of a pasting-machine, having two compartments formed by the two paste-grinding rolls, as specified, in combination with one or more scrapers for taking off the paste from said rolls.

4. The combination, with a reservoir of a pasting-machine, of a pasting-roll, a pressing-roll in direct contact therewith, a guide-roll, over and upon which the two sheets are brought in contact and a drying-cylinder.

No. 193,357. Methods of Making Paper Cans for Petroleum and other Fluids.—E. Waters, Troy, N. Y.

A process of manufacturing square paper cans, consisting in, first, preparing a skeleton framework of the angle and connecting pieces; second, inserting the head and bottom in the upper and lower ends of said frame work; and, third, closing the sides thereof by winding a continuous sheet of paper of a width corresponding to the length of the angle pieces around the skeleton frame until the requisite degree of thickness has been attained.

No. 193,454. Water-Wheels.—J. S. Ladow, Mechanicsville, N. Y.

When the wheel is at rest, the chutes are fully open. The water being let on by a main gate, the suspended gate is controlled by the governor to close the chutes in proportion to the speed of the shaft.

REISSUES.
No. 7,816. Injectors for Feeding Boilers.—W. Sellers, Philadelphia, Pa. Patent No. 75,059, dated March 3, 1868.

The Union of German Paper Manufacturers has offered a prize of one thousand marks for the best essay on the educational effects, &c., of the abolition of the rag duties and custom duties on paper. Essays must be sent in not later than October 1 to Herr L. Keférstein, Crollwitz, near Halle.

The International Association of Cellulose Manufacturers recently held its annual convention at Bingen on the Rhine. The association embraces members from Germany, Austria, Russia, Sweden, Norway and Denmark. The total membership is eighty-six, of whom sixteen were elected at the last meeting. Matters of importance were discussed, but it seems that the tangible results are rather insignificant, taking as the source of information the Papier Zeitung, in a late number of which the full minutes of the convention are published. The association voted 1,000 marks to the author who will present the best treatise on the cellulose industry.

Cocoa Fibre.
Cocoa fibre has only been hitherto employed in the manufacture of carpets and mats, but from some experiments which have been made with it in one of the largest paper mills in France, there is a prospect of its entering into successful competition with esparto or alfa. Good pulp can be obtained, it is said, from the cocoa fibre alone, without any other ingredients, and a trial which is now being made to manufacture it by machinery will doubtless determine the question. Its preparation by hand is costly, and there is a residuum which cannot be utilized except by combustion. By the new process this waste is exactly what is wanted, as it proves to be an excellent succedaneum of rags.

An old gentleman in a New England town who recently became the recipient of his first postal card, placed his specs carefully astride his nasal organ, and eyed the pastboard closely. "What is this thing anyway?" he finally demanded. "Why, a postal card, of course," was the answer. "A post-hole card! What is such a thing good for, I'd like to know?" He was informed that a cheap rate of postage had come into vogue, and writing paper was at a discount. "Blast it all!" flamed the old gentleman in a sudden rage, while his nose described a semicircle with a sharp angle, "they've got ter 'dulteratin' tea with weeds, terbakar with licorice and copper, whiskey with pepper and turpentine, an' now they've got ter 'dulteratin' envelopes tu save the paper! Confound 'em!"—Union.

Texas wheat is so high that grasshoppers have to walk on stilts.

General Notes.

A patent will not be sustained if the claim is for a result, a principle, an idea, or any other mere abstraction.

Combinations consisting of old elements are not the same when none of the devices employed in one can be substituted for those in the other, so as to render the apparatus operative to effect described result without reconstruction and invention.

Where the claim immediately follows the description of the invention, it may be construed in connection with the explanations given in the description, and if the claim contains words referring back to the specification it cannot properly be construed in any other way.

Where the invention is embodied in a machine, the question of infringement is best determined by a comparison of the machine or apparatus constructed or used by the respondent with the mechanism described in the specification of complainant's patent.

A final hearing for the awards of printing and stationery contracts for the State of Vermont was had on July 26 at Montpelier, by the Secretary of State and Auditor. There were six bidders. Tuttle & Co., of Rutland, were awarded contracts, covering a space of two years, for printing the House and Senate journals and the State officers' reports, together with all official printing for departments and officers, as well as the stationery supplies for the same.

A PAPER-MAKING SPIDER.—In central Africa there is a spider which makes paper of a very fair quality. After selecting a spot for her nest, she works backwards and forwards over about a square inch of surface until the space is covered with a pure white paper. In this she places from forty to fifty eggs. She then makes a strip of paper about a quarter of an inch broad, and with it carefully glues the square together. The spider wages a fierce war with cockroaches, or any other insect that comes near. After three weeks of unremitting watchfulness, the mother leaves her nest in the day time to hunt for food, but she always returns at night until the young are strong enough to cater for themselves. What a pity it is that the paper-making spider cannot be taught to place a little strong pepper or arsenic over the paper, when she makes it. She might then dispense with her protracted watch, and go and visit her relations.—Paper and Printing Trades' Journal.

FIRE-PROOF PAPER AND INK.—A patent recently taken out in England mentions for paper 10 parts of vegetable fibre, 30 parts of asbestos, 1 part of borax, and 2 parts of alum. For the ink, 110 parts of pulverized plumbago, 1 part of copal varnish, 10 parts of iron sulphate, and 40 parts of tincture of galuans and indigo carmine, well mixed and boiled in water. It is said that this ink can be used for printing as well as for writing; while for colored inks, instead of the graphite, some colored mineral pigment may be substituted.

SPECIAL NOTICES.

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

Third Edition—Now Ready.

LOCKWOOD'S DIRECTORY OF THE Paper Trade. 1877.

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

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

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

PRICE, - - - - \$2.00.

Address. HOWARD LOCKWOOD, Publisher, 74 DUANE STREET, N. Y.

TO WHOM IT MAY CONCERN.

OFFICE OF THE GAVIT PAPER MACHINE WORKS, AUGUST 1, 1877.

The Trade and all whom it may concern are hereby notified that the "IMPROVEMENT IN PAPER PULP SCREENS," described and illustrated in the Paper Trade Journal of July 28, 1877, and claimed to be invented by William Blizard and Edmund Mather, is an infringement on the Patent granted to Gorton Gavit, Nov. 17, 1874.

All persons are therefore cautioned against manufacturing or using the apparatus referred to and claimed to be invented by the said Blizard and Mather, without the consent or license of the Gavit Paper Machine Works.

GAVIT PAPER MACHINE WORKS, 224, 226, 228 and 230 N. Broad street, PHILADELPHIA, PA.

PAPER-MAKING MACHINERY AND Paper Mill Property FOR SALE.

The undersigned offers for sale, in whole or in part, a large line of second-hand Paper-making Machinery, consisting of

- One 76-in., one 72-in., one 62-in., one 42-in. and one 36-in. Fourdrinier Machine.
One 36-in., one 42-in., one 48-in., one 52-in., one 54-in., two 62-in., one 68-in., and one 72-in. Cylinder Machines.
One hundred and twenty-seven Skeleton Dryers, 36 in. by 80 in., with pulleys, gears, &c., all complete and nearly new, used in drying animal-sized writing papers.
One stack of Chilled Calender Rolls, consisting of two 14-in. diameter and six 7-in. diameter, all 76-in. long on face, together with stands, boxes, &c., all in first-class order.

One stack of seven Super Calenders, 30-in. face.
Four stacks of Straw Board Calenders, from 30-in. to 40-in. face.
Four Daniels Rag Cutters.
One Rope Cutter, one Cane Cutter.
Two Rag Cutters.
One Wood Chopping Machine.
Ten Iron Dryers, 36-inch diameter, 40-inch face, with steam pipes, driving pulley, clutch and pinion, all complete, also Eighteen Brass Paper Rolls (no felt rolls).
Eight Iron Dryers, 14 in. by 36 in. in good order. Price \$150, cash.

Nine Steam Engines, from 10 to 60 H. P.
Four Double Flue Steam Boilers and one large Locomotive Boiler.
One large Steam Pump.
Two Rag Dusters.
One Rag Thrasher.
One 48-in., one 54-in., one 62-in. and one 84-in. Paper Cutters.
One 76-in. Hammond Cutter.
One Gould Patent Engine.
Two Kingsland Patent Engines.
One Standing Press, with gun-metal screw, plate 34 in. by 48 in.

Twelve Cutting Presses, from 27 in. to 45 in. wide.
Six Making Cylinders, of different sizes.
One set of three Reels, 62-in. face; one set of six Revolving Reels, 75-in. face; one 812 for a 62-in. machine; one Winding Machine, one Size Washer, together with an extensive list of Miscellaneous Machinery, including fifteen Rag Engines, including five 36-in. rolls, one 35-in. roll and one 42-in. roll, four Rotary Rag Rollers, 52 in. in.
One large Rotary Globe Boiler 14 feet in diameter, will stand 130 lbs. steam pressure, and well adapted for boiling wood or straw.
Three Wood or Straw Digesters.
One Peasee Straw Washer.
One set of Artesian Well Tools.

Twenty Paper Mills in Massachusetts, New York, Connecticut, Pennsylvania, Ohio, Michigan, Kentucky, Virginia, Georgia and Illinois, containing the following size machines: One mill with two 72-in., one with one 76-in., one with one 84-in., one with one 72-in. and one with one 48-in. Fourdrinier Machine; one with one 72-in. and one 62-in., one with one 72-in., one with one 72-in. and one 36-in., two with one 56-in. each, one with one 52-in., and one with one 48-in. Cylinder Machines.

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

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

He also offers his services as a Consulting Engineer and Expert in the erection, alteration and equipment of paper mills, and in paper-making processes. With an experience of over twenty years in the manufacture of paper, gained both in this country and in Europe, he purposes to make his services valuable to whoever shall require them.

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

Market Review.

OFFICE OF THE PAPER TRADE JOURNAL, FRIDAY EVENING, AUGUST 10, 1877.

THE MONEY MARKET—Shows continued ease, the supply of loanable funds remaining full. The rates for call loans range between 1 1/2 and 3 per cent. The banks and trust companies are loaning at 4 per cent. Commercial paper of prime rating and short date is readily taken, but second-class paper is not much sought. Government bonds are quiet but generally firm, no special feature being noticeable. Railroad bonds are moderately dealt in, and the changes in quotations are slight. State bonds are very quiet.

The gold market has experienced very little change; speculation is rather tame and the price fluctuates within a narrow range. The quotations for the week are:
Aug. 4.....105 3/4 Highest. 105 3/4 Lowest. 105 3/4 Closing.
6.....105 3/4
7.....105 3/4
8.....105 3/4
9.....105 3/4
10.....105 3/4

The Foreign Exchange market is very dull. The mercantile demand is insignificant, and that from bankers is light and scarcely sufficient to keep rates firm. The quotations to-day are: Sterling, 60 days, \$4.85 to \$4.85 1/2; sterling, sight, \$4.86 1/2 to \$4.86 3/4; commercial sterling, prime long, \$4.83 1/2 to \$4.84 1/2; commercial sterling, good long, \$4.82 1/2 to \$4.83 1/2; Paris, bankers', 60 days, 5.18 1/2 to 5.19 1/2; do. sight, 5.15 1/2 to 5.14 1/2; Antwerp, bankers', 60 days, 5.18 1/2 to 5.16 1/2; do. sight, 5.16 1/2 to 5.13 1/2.

THE PAPER TRADE.—The general aspect of the market has not changed since the date of the last review; and there is nothing left but to record the same state of comparative dullness which has ruled during the summer months. As to the future of trade very few are willing to express any decided opinion, but there is a generally expressed belief that the movement of the crops, which on all sides promise to be generous ones, will be the signal for a brisk demand for all classes of merchandise, and the paper market must share in the general improvement of business.

JUTE BUTTS.—The market in this article has

ruled very quiet during the past week. We hear of no large transactions, the trade being exclusively in jobbing lots at 3 1/2 to 3 3/4 c. cash and time, at which figure several hundred bales have been taken, the market closing steady at quotations. The only arrival thus far this month has been the Cape of Good Hope, with 4,008 bales, at this port. Advices from Calcutta still continue to quote high prices in that market. Cables of 1st. proximo will probably throw more light on this subject and give a better idea of the course of the market for the next three or four months.

FOREIGN RAGS AND PAPER STOCKS.—Nothing new has been developed in the market during the week just passed. Neither the volume of trade nor the average of prices show any improvement over the weeks immediately preceding. Most buyers keep their purchases down very close to the margin of actual wants, and so throw the burden of carrying stock on the importers. There is, of course, some movement in Linsens, but it is small, and so far as prices are concerned very unsatisfactory to the owners of stock. Cotton Rags remain in a very inactive state, and can hardly compete with the present low prices for domestic stocks. Waste Papers still meet with a limited amount of attention, the different grades of Shavings being about the only stock inquired for. Baggings have a less animated inquiry and there is more of a surplus in market at present than at any time during a number of months past; this applies more particularly to the lower grades of stock. No. 1 is held with some show of firmness and thus far only moderate concessions have been made, but No. 2 and under has been offered quite below quoted rates. Late London advices report a very quiet market. Strong Linsens move some, but Cottons are much neglected and are offered lower. Waste Papers are dull but held quite steadily.

DOMESTIC RAGS.—The improvement in demand which obtained last week has slackened up and the movement has settled back in the same quiet lines as was noted a few weeks since. The stocks are tolerably full and some lots are offered at what appears to be very low figures. Reliable packings are, however, held for the full quoted prices and holders seem confident of an increased demand and better rates at no distant date. Sales include 200 bales City Stock at 2c.; 50 bales No. 2 Whites at 3 1/2 c.; 25 bales City Whites at 5 1/2 c.; 25 bales New Seconds at 4 1/2 c.

WOOLEN RAGS.—There is a well defined inquiry for almost all grades of Woollen Rags and the movement is quite full and steady, prices being firm at quoted figures.

OLD PAPERS.—The market continues in pretty much the same condition as has been recently reported. There is an easy but reasonably steady movement at the low figures ruling. The stocks in hands of packers are not over-large and do not appear to accumulate materially. The hanging mills have not been in the market to any great extent, as so far in the season they have only been running on small orders. What the effect on the classes of stocks used by them will be when they become larger purchasers remains to be seen, but no one seems to be holding on for an advance. Good No. 1 Shavings are moving off in a quiet way at about quoted rates, but other grades are not much sought. Pure Manillas are selling steadily at old prices, and good lots are not over plenty. Sales are noted of 50 bales Pure Manillas at 3 1/2 c.; 10 tons Solid Stock at 4c.; 50 bales No. 1 Light Stock at 2 1/2 c.; 10 tons Common at 7c.; 10 tons Newspapers at 2 1/2 c.

BAGGINGS, &c.—While there is still considerable movement in Baggings the inquiry has lessened very materially from what it was a few weeks ago. Many of the largest purchasers are fully supplied both for present wants and for some little time to come, and so are out of the market. The supply of strictly No. 1 is in advance of the demand, but is not particularly large, and the quoted price is held with considerable degree of steadiness, an occasional lot only being offered under the old rate. No. 2 and poorer is being offered in quite liberal quantities at some concession from the figures recently asked; this is especially the case with some of the very poor stock which has been received, most of it having to be sold at less than invoice price. Rope does not develop any new activity and is still offered at low rates. Sales are reported of 25 tons No. 2 Bagging at 2 1/2 c., 60 days; 25 tons No. 1 English Bagging at 3 1/2 c.; 20 tons Manila Rope at 3 1/2 c.; 20 tons No. 1 Manchester Bagging on private terms; 10 tons Manila Rope at 3 1/2 c.; 5 tons Hemp Twine stock at 4c.

STRAW.—Is still neglected and in quite full stock. The prices have not changed much, and quotations remain at Long Rye, old, 60c. to 70c.; new, 45c. to 60c.; Short Rye, 50c. to 55c.; Oat, 45c. to 50c.

ROSINS.—The lower grades are in fair demand and continue quite steady in price. Fine grades are in good inquiry, and are quoted rather firm.

CHEMICALS.—The tone of the market is rather better; there is more inquiry for some of the heavy chemicals and holders do not appear willing to offer such liberal concessions as have been made of late. Carbonated Ash is held pretty firmly and has moved in quite liberal quantities. Caustic Ash has a fair share of inquiry. Caustic Soda continues dull and is reported in full stock. Sal Soda is strongly held. Bleaching Powders have been in more demand during the week, but are not materially improved in position. Other kinds do not show any change worth speaking of. Sales include 150 casks Bleaching Powders at 1.56 1/4 c. currency; 80 tons Soda Ash at 1.96c. gold; 50 drums 60 per cent. Caustic Soda at 4 1/2 c. gold; 25 tons Sal Soda at 1.35c. gold; 200 barrels Lump Alum at 2 1/2 c. currency; 100 barrels Ground Alum at 2 1/2 c. currency; 50 barrels Concentrated Alum at 2 1/2 c. currency; 25 barrels Natrona Porous Alum at 3 1/2 c. currency; 25 tons Aluminous Cake at 2 1/2 c. currency; 15 casks Yellow Prussiate at 24c. currency; 10

casks Bichromate at 13 1/4 c. currency; 50 tons English China Clay at \$18.50.

THE COAL MARKET.—Considerable activity has manifested itself in the market for Anthracite during the past few days, and in cases where sales have been made the prices obtained have been at an advance of from 50c. to 75c. per ton over those prevailing previous to the strike. This advance, however, is considered only temporary, and a lower range is anticipated as soon as the troubles existing come to an end. There is at present no scarcity of stock, as the supplies are abundant at all the shipping points—the present advance is due to the excitement existing, caused by the efforts made by many dealers, who look for a still higher range, to increase their stock. Bituminous remains quiet, prices not being quotably higher. Seward's Coal Trade Journal of August 8 says: "Since the date of our last, Anthracite has advanced and it has also declined. The maximum was reached on Thursday afternoon last, when it was stated that the Reading Co.'s men were to go out next morning. Prices were stated to be \$4 for Stove coal, but buyers were not plenty. On Friday and Saturday a calmer feeling prevailed and the market has now settled down to the prices quoted elsewhere. From these rates there will not be much decline we fancy, no matter what may come to pass. Regarding the situation, we find that the Lackawanna men, and also those of Wilkesbarre, are out for an advance in wages, with no great prospect of receiving it; particularly if the Reading keep at work. If these men do continue at work, we cannot see that the Wilkesbarre and Lackawanna can make anything by standing idle."

NEW YORK MARKET.

PRICES CURRENT.

Table with columns for Paper Market, Dealers' Selling Prices, and various types of paper and rags. Includes items like Flat Caps and Ledger, Book, super-sized and calendered, etc.

Table listing various types of Shavings and Paper, including Hard White Shavings, Soft White Shavings, Mixed Shavings, etc.

Table listing English Rags and Cotton, including New Cuttings, Essex Fines, London Fines, etc.

Table listing English Old Papers and Shavings, including Hard Shavings, Soft Shavings, White and Colored Shavings, etc.

Table listing Hamburg Rags and Cotton, including Linen Cuttings, S P F F F square bale, etc.

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

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

Table listing Leghorn and Genoa Rags, including P P, No. 1 Linsens, S S, No. 2 Linsens, etc.

Table listing Alexandria Rags, including Whites, Blues, Colors, etc.

Table listing Memel Rags, including S P F F, S P F, F F, etc.

Table listing Trieste Rags, including S P F, S F, S F X, S F B, etc.

Table listing Japanese Rags, including Whites, Blues, Colors, etc.

Country Mixed Rags, City Whites, Second, Country, Colors, Manila Rope, Binders or Tar Board Cuttings, Common Papers, Oakum Junk, Hemp Rope, Gunny Bagging, Kentucky Bagging, Hard Woollens, old, Soft Woollens, old, Hard Woollens, new, Soft Woollens, new, Jute Butts, White Collar Cuttings, White Envelope Cuttings, Hard White Shavings, No. 1, Soft White Shavings, No. 1, White Shavings, No. 2, Mixed Shavings (3/4 white), Imperfections, Light Prints, Manila Envelope Cuttings, new, Manila Papers, old, Hardware and Manillas, Straw Board Cuttings.

Leghorn Rags, P. P. No. 1 Linens, S. S. No. 2 Linens, T. T. No. 3 Linens, P. No. 1 Cottons, S. No. 2 Cottons, T. No. 3 Cottons.

Alexandria Rags, Whites, Blues, Colors.

Smyrna Rags, Whites, Blues, Reds, Mixed, Canvas, No. 1, Canvas, Good, Tarred, Hope.

Constantinople Rags, Whites, Blues, Reds, Mixed.

New Papers, Superfine Book, Fine Book, Rags News, No. 1, Ordinary Rag News, Straw News, Manila, Cream, No. 1, Ordinary Wrapping Manila, Manila, No. 2, Bogus, Straw Wrapping, Hardware, No. 1, Hardware, glazed, Straw Boards, air-dried, 7/8 ton, Straw Boards, steam-dried, 7/8 ton, Binders' Boards, 7/8 ton, Leather Board, No. 1, Leather Board, counter, Leather Board, No. 2, Leather Board, No. 3.

Boston Chemicals, Aluminous Cake, gold, Alum, English lump, Alum, English ground, Alum, American ground, Alum, American lump, Alum, American Potash, Alum, ground, Concentrated, Anti-Chlorine, Bi-Chromate Potash, Scotch, cur'y, Bi-Chromate Potash, American, cur'y, Bleaching Powders, gold, Blackley Blue, gold, Caustic Soda, 60 cent, gold, Caustic Soda, 70 cent, gold (for 60 cent), Clay, English, 7/8 ton, gold, Clay, American, 7/8 ton, Coppers, American, Prussian Blue, Prussiate Potash, American, Rosin, common strained, Rosin, No. 2, Rosin, No. 1, Rosin, pale, Rosin, extra pale, Sal Soda, N. C., gold, Sal Soda, American, currency, Soda Ash, gold, Soluble Blue, Sugar Lead, white, Sugar Lead, Brown, Sulphuric Acid, 66 degrees, Terra Alba, 7/8 ton, Ultramarine, 7/8, gold, Venetian Red, 7/8, Vitriol Blue, Yellow Ochre.

PHILADELPHIA MARKET.

Paper Stock, White Rags, Mill Assorted White Rags, White Shirt Cuttings, No. 1, Cotton Canvas, No. 1, Cotton Canvas, No. 2, Blues and Thirds, Colors, Jute Butts, Gunny Bagging, Kentucky Bagging, Manila Rope, Soft Woollens, Hard White Shavings, No. 1, Soft White Shavings, No. 1, Mixed Shavings, No. 1, White Collar Cuttings, paper, White Collar Cuttings, cloth, Solid Imperfections, No. 1 Prints, News and Writing, Ordinary Prints, Manila Envelope Cuttings, Manila Papers, No. 1, Hardware and Manillas, Straw Board Cuttings, Binders' Board Cuttings, Common Papers.

Leghorn Rags, P. P. No. 1 Linens, S. S. No. 2 Linens, T. T. No. 3 Linens, R. R., P. No. 1 Cotton, S. No. 2 Cotton, T. No. 3 Cotton, T. No. 4 Cotton, Hard Woollens.

New Papers, Tiltston Plate, Plate, No. 1 Book, white and tinted, Superfine Book, white and tinted, Fine Book, white and tinted, No. 2 Book, Colored Glazed Mediums, Rag News, No. 1, Ordinary Rag News, Straw and Wood News, Bleached Manila, No. 1, Ordinary Manila, Bogus Manila, Straw Wrapping, Glazed Hardware, Unglazed Hardware, Tissue Manila, 34-36, Tissue, white, 30-30, Tea Papers, 14-30, Tea Papers, 13-18, Tea Papers, 12-16, Straw Boards, air-dried, 7/8 ton, Straw Boards, steam dried, 7/8 ton, Binders' Boards, 7/8 ton, Binders' Boards, Extra, Leather Boards.

Chemicals, Elephant Aluminous Cake, currency, Alum, Red Star Concentrated, Alum, lump, currency, Alum, ground, currency.

Alum, porous, currency, Anti-Chlorine, Bleaching Powder, currency, Caustic Soda, gold, China Clay, English, 7/8 ton, currency, China Clay, American, 7/8 ton, cur'y, South Carolina Clay, 7/8 ton, Terra Alba, English, 7/8 ton, Terra Alba, American, 7/8 ton, Prussiate of Potash, yellow, Bichrome of Potash, Scotch, currency, Coppers, American, prime, Extract Logwood, Orange Mineral, gold, Rosin, good strained, Rosin, No. 2, Rosin, No. 1, Rosin, pale, Sal Soda, Albusen's or Deacon's, cur'y, Soda Ash, gold, Spanish Brown, Sugar of Lead, brown, Sugar of Lead, white, Sulphuric Acid, Ultramarine Blue, gold, Venetian Red, American, Venetian Red, English, Blue Vitriol, Yellow Ochre, American, Yellow Ochre, French.

CINCINNATI MARKET.

Paper Stock, City, No. 1 Whites, Mill Assorted Whites, White Cotton Canvas, No. 1, White Shirt Cuttings, Country Whites, No. 1, Country Whites, No. 2, Country Mixed Cotton Rags, City Mixed Cotton Rags, Colored Cotton Rags, Manila Rope, Gunny Bagging, Hard Woollens, old, Soft Woollens, (Mill).

CHICAGO MARKET.

Rags and Paper Stock, City Whites, No. 1, Second & Blues, Print Rags, No. 1, Manila Rope, Gunny Bagging, Hard Woollens, Soft Woollens, clear, Wrapping Wins, New Clips (free from sat).

FOREIGN MARKETS.

London Market Report, LONDON, July 28, 1877. Trade during the week was without any particular change. Orders were received in our market for a limited amount only from home consumers; while from America there were some rather large orders here at a little under market prices, which holders, however, declined to accept, and the latest cable news is somewhat unsatisfactory, as buyers, on account of the railway disturbances, withhold their orders for the present. RAGS.—Of strong linens a few contracts were closed, while Cottons were neglected, and although holders in some instances made a reduction in prices there was a want of buyers. WASTEPAPERS.—In these not much was done, holders insisting upon full prices, while several offers were in the market at a little under quotations.

The French Market.

PARIS, July 28, 1877. PAPER AND PAPER STOCKS.—Owing to the combined influence of the elections and the Exhibition the paper market is somewhat more active. Rags, on the contrary and despite of this, are neglected, except white Linen rags. WOOLEN RAGS.—The week has been fully as dull as last. Merino and old Stocking rags are, however, in tolerable demand, but all others are little sought after.

Advertisements.

WANTED—A FOREMAN FOR A SMALL MILL on Colored Papers. Address for particulars, with real name, BOX 2137, Philadelphia P. O.

WANTED—FOREMAN THOROUGHLY ACQUAINTED with the manufacture of Book and Newspaper from Straw, Rags, Wood Pulp and Imperfections. Best of references required. Address BEACH & KIPP, Mechanicville, N. Y.

Mill and Machinery AGENCY.

For the purchase, sale, or exchange of Paper, Cotton, Woolen, Grist and other Mills, together with Mill Sites and Privileges. The undersigned, having unusual facilities for advertising and bringing Mill Property favorably to the notice of Capitalists, offers his services to parties having such property to dispose of. For particulars apply to or address EDWARD CONLEY, Consulting Engineer, 74 DUANE STREET, NEW YORK CITY.

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Is something entirely new. What every Paper-Manufacturer wants and cannot afford to be without. It will wash as fast as three of the cylinder washers so long in use, and one in an engine will do the work much better than two of the others. All paper-manufacturers know the importance of washing the lime from stock as quickly as possible. It is also a great improvement in the washing of papers. Good second-hand washers for sale at a low price. Address J. T. EMERSON, Claremont, N. H., Sole Manufacturer.

WANTED—A POSITION AS FOREMAN BY A man thoroughly acquainted with the manufacture of book and news from straw, wood pulp, rags, and imperfections, also manilla papers of all grades. Best of references furnished. Address R. J., office Paper Trade Journal.

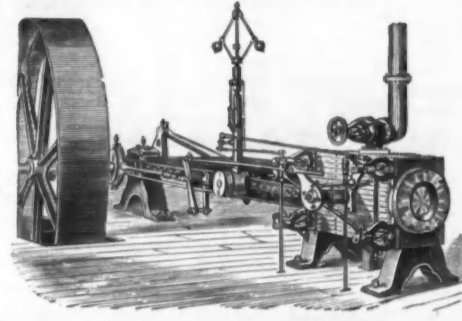
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PAPER. RAGS.

KNIVES FOR PAPER MILLS

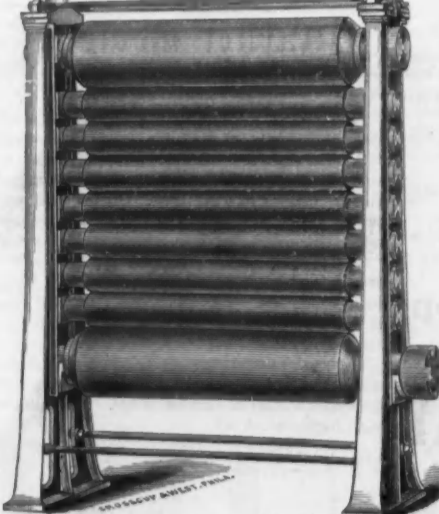
Paper Cutting Machinery. PAPER MILL FLY BARS AND BED PLATES. RAG CUTTER AND TRIMMING KNIVES. LARGE AND DIFFICULT KNIVES A SPECIALTY. All Work Fully Warranted in Every Respect. Send for Cuts of our IMPROVED ANGLE BED PLATE, THE BEST BEATING PLATE IN USE.

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LOBDELL CAR WHEEL COMPANY,

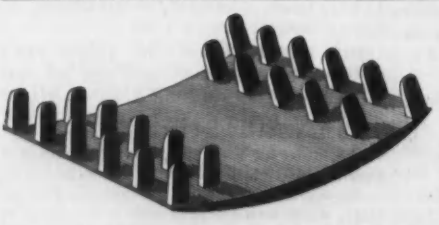
WILMINGTON, DEL. The Oldest and Most Extensive Manufacturers of Chilled Car Wheels in this or any other Country. EXTRACT OF AWARD ON CHILLED ROLLS.



The undersigned having examined the product herein described respectfully recommends the same to the United States Centennial Commission for award, for the following reasons, viz: This exhibit contains a stack of calendering rolls intended to be part of a complete paper machine. These rolls are of cast-iron, chilled at the surface in casting, and thereby made hard, like tempered steel. They are separately ground according to a highly improved plan, and are so true that, when placed together, they bear upon each other throughout their entire length. This exhibit has the exceptional merit that the rolls are not only GROUND true but CAST by the exhibitor. (Signed) JAMES M. WILCOX, Signature of the Judge.

ALSO MANUFACTURERS OF CHILLED ROLLS

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



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

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ESTABLISHED 1872.

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FOR 1877.

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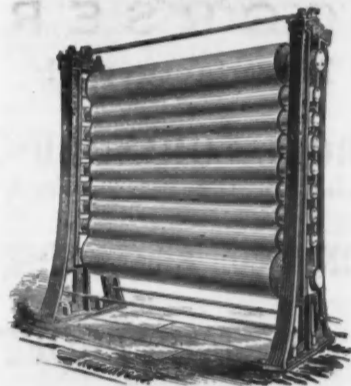
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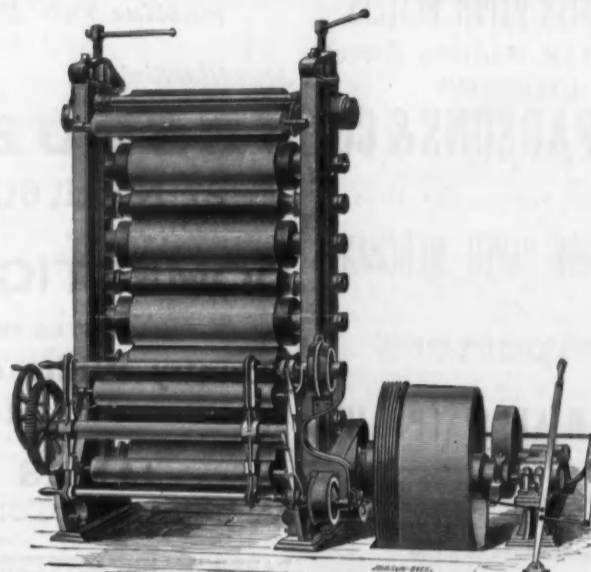
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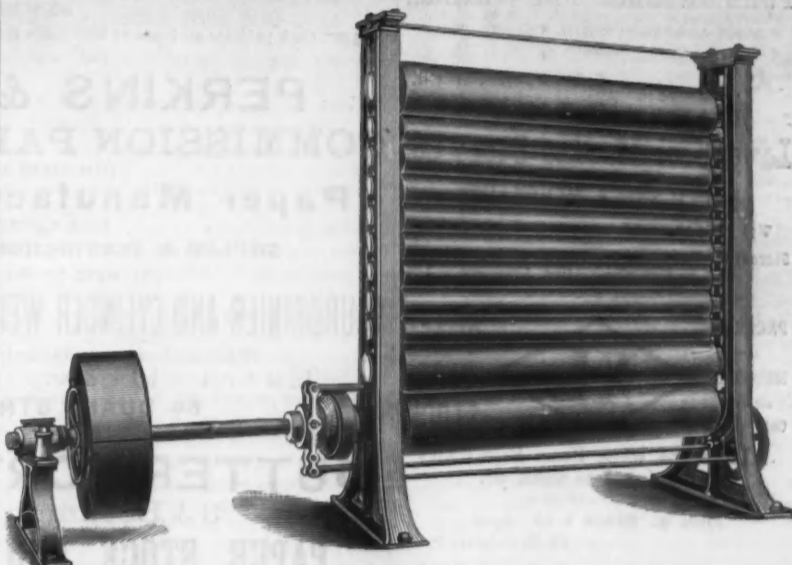
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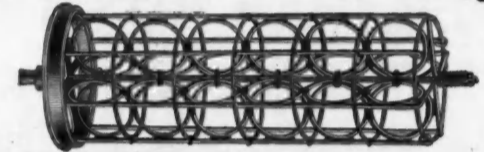
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