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Vol. LXIX. No. 5

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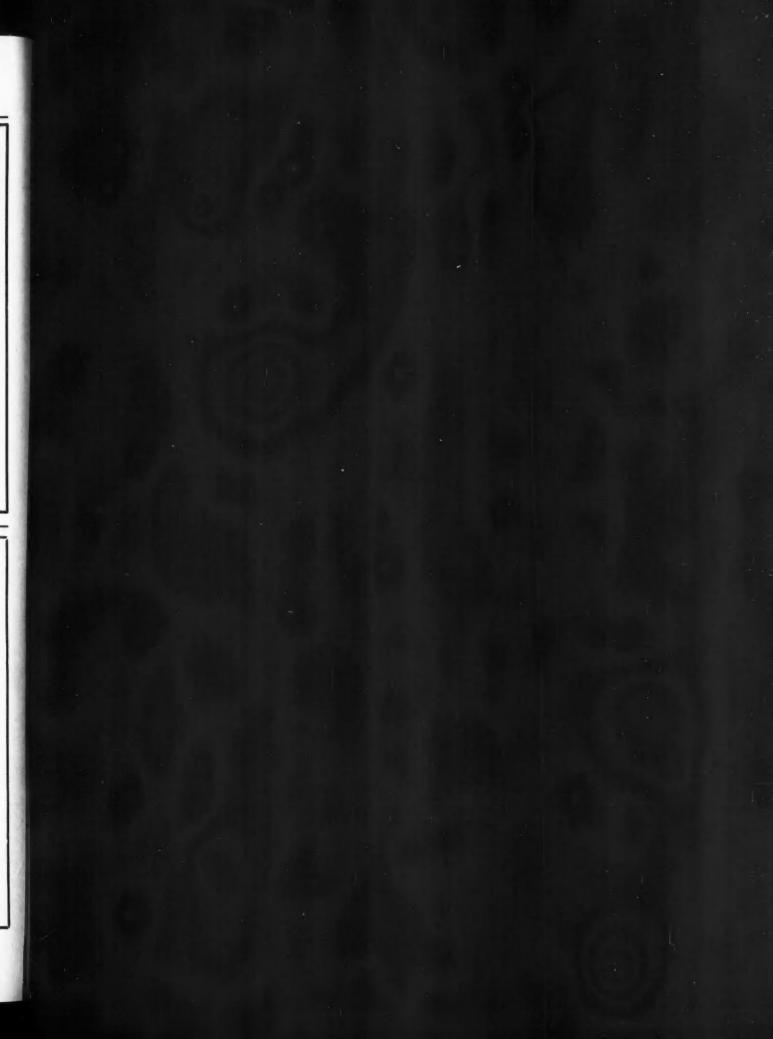


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UNITED STATES PATENT OFFICE

ANTON A. GEHRLEIN, OF ERIE, PENNSYLVANIA PROCESS OF DYEING.

1,292,453.

Specification of Letters Patent
Application filed May 2, 1918. Serial No. 232,038.

Patented Jan. 28, 1919

No Drawing.

To all whom it may concern:

Be it known that I, ANTON A. GEHRLEIN, a citizen of the United States, residing at Erie, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Processes of Dyeing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use

My invention relates to dyeing cloth, paper and other fibrous material and has for its object improvements in the method of setting and fixing the color after the material to be dyed has been saturated with the color.

I have discovered that by subjecting the colored mate-15 rial to a bath of acid sodium sulfate I am enabled to se-cure a brighter and more permanent color in the finished material than has been heretofore attained by the use of alum and other materials ordinarily used for fixing dyes.

I accomplish the desired result by subjecting the material 20 to be dyed to a bath of saturated coloring material, preferably an anilin coloring material, and after the material to be colored is thoroughly saturated by the dye I preferably

remove the material from the coloring bath and then immerse it in a bath saturated with acid sodium sulfate for a sufficient time to permanently set and fix the color in 25 the material, after which the material to be colored is removed from said bath and washed in water until the surplus fixing material is freed therefrom. I can, however, if desired, insert the fixing material directly into the coloring bath after the material to be colored is sufficiently saturated 30 with the color, and thereby fix the color with good results. I, however, prefer the first named method of carrying out my invention.

What I claim is new and desire to secure by Letters-

1. The method of dyeing and fixing colors in material, 35 consisting substantially in subjecting the material saturated with the color to the action of acid sodium sulfate, substantially as set forth.

2. The method of dyeing and fixing color in material to be dyed, consisting substantially of subjecting the material 40 after it is saturated with the color, to treatment with acid sodium sulfate, substantially as set forth.

In testimony whereof I affix my signature.

ANTON A. GEHRLEIN.

The Erie Vicarialum Company have acquired this patent and will protect the same. All communications regarding license to use same for setting colors, should be addressed to

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FORTY-EIGHTH YEAR

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LESLIE R. PALMER, President

J. W. VAN GORDON, Vice-President

2380 2381 2382 Vanderbilt

10 EAST 39TH ST., N. Y., U. S. A.

Cable Address: Catchow, New York

Western Publication Office—431 S. Dearborn Street, Chicago Washington Office—L. M. Lamm, 63 Home Life Bldg.
New England Office—Room 46, 127 Federal Street, Boston
London Office—Stonhill & Gillis, 58 Shoe Lane

The PAPER TRADE JOURNAL is the pioneer publication in its field, and has for many years been the recognized Organ of the Paper and Pulp Industry. Its circulation is greater than the combined circulations of all other publications in the field. Entered at New York Post Office as second-class mail matter.

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Other Publications of Lockwood Trade Journal Company, Inc. AMERICAN STATIONER AND OFFICE OUTFITTER (Weekly)........ Per year, 88 LOCKWOOD'S DIRECTORY OF THE PAPER, STATIONERY AND ALLIED TRADES (Annual)

Vol. LXIX. No. 5

NEW YORK AND CHIAGO

Thursday, July 31, 1919

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BILL IS REPORTED TO REPEAL CANADIAN RECIPROCITY ACT

Committee Hopes in View of the Formal Rejection by Canada of the Proposed Reciprocal Arrangement That the Bill May Be Considered Without Partisanship and Speedily Passed—As the Wood Pulp Provisions Was Reinacted in the Underwood Tariff It Is Not Affected By This Repeal Bill—Arrangement Was Negotiated at Washington During the Month of January, 1911.

[FROM OUR REGULAR CORRESPONDENT.]

Washington, D. C., July 28, 1919.—The Ways and Means Committee of the House on Sacurday reported favorably out of committee the bill recently introduced to repeal the Canadian reciprocity act. The committee's report on this repeal is as follows:

Report of the Committee

"The Committee on Ways and Means having had under consideration the bill H. R. 7779 to repeal the Act entitled 'An Act to promote reciprocal trade relations with the Dominion of Canada, and for other purposes,' approved July 26, 1911, report the same back with recommendation that the bill do pass.

"The so-called Canadian Reciprocity agreement was negotiated at Washington during the month of January, 1911, between representatives of the American and Canadian governments. Diplomatic forms and ceremonies were dispensed with. There was very little official correspondence, and the negotiations were almost entirely verbal as well as formal. After the arrangement had been concluded, Mr. Fielding, Canadian Finance Minister, and Mr. Peterson, Minister of Customs, addressed a formal letter to Mr. Knox, Secretary of State, setting forth their understanding of what had been agreed upon. The arrangement was to take the form of concurrent legislation instead of a treaty, for the reason that it was said Canada wished to be free to annul it at any time if it should prove to be against its interests.

"It was agreed that wood pulp and paper made of wood pulp when valued at not more than four cents a pound should come into the United States duty free, upon condition that no export duty should be imposed by Canada upon these articles. This provision became Section 2 of the Act, which later passed Congress, and which was approved on July 26, 1911. The operation of that section was not made dependent upon the fate of the reciprocity measure in the Canadian Parliament, so it went into effect.

"The proposed changes in the general tariff rates were listed in four schedules. Schedule A embraced the articles that were to be duty free in both countries. It included practically all agricultural products, except wool; fish and fish oil of all kinds (except sardines and fish preserved in oil); hewn timber, sawed lumber, posts, ties, poles, staves and palings; manufactured asbestos, gypsum, talc, mica, felspar, and fluorspar. Very few manufactured products were included in this schedule, the most important of those that were included being galvenized or tinned iron and steel sheets, galvenized wire and wire rods of certain gauges, all barbed fencing wire, cream separators, carbon electrodes, typesetting and typecasting machines, coke and cotton-seed oil.

"Section B included articles to be admitted into each country from the other at identical rates of duty, which were generally lower than those at the moment then prevailing in either country. Many of the items were secondary products and manufacturers of which the chief component materials were made free in Schedule A. Under this head came such articles as flour, barleymalt, canned vegetables, fresh and canned meats, lard, bacon,

prepared cereals, biscuits and fruit juices. Schedule B also included agricultural implements and machinery, monumental and building stone (except marble and onyx), cutlery, and plated ware, clocks and watches, motor vehicles, bathroom fixtures, and some other manufacturers of minor importance.

"Schedule C included six articles that were to be admitted at special rates by the United States: Aluminum, laths, shingles, planed or finished lumber, iron ore and coal slack.

"Schedule D contained seven articles upon which Canada was to make reductions: Cement, fruit trees, condensed milk, unsweetened biscuits, canned fruits, peanuts and bituminous coal.

"On January 26, 1911, like bills were introduced in the American Congress and Canadian Parliament to carry the arrangement into effect. Both these bills met a storm of opposition. In our country protest came from every industry where the duties had been lowered. Among those opposing the bill, the farmers, particularly those in Maine, northern New York, Montana, Washington and Oregon, were the most pronounced in their opposition. While the measure was sponsored by a Republican President, it was opposed by a majority of the Republicans in Congress, and went on the statute books only because of the united support of the Democrats.

"The speeches made in the Canadian Parliament demonstrated beyond a doubt that the proposed Reciprocity agreement was, from the economic standpoint, a decidedly one-sided arrangement, for the benefit of Canada. But political issues were raised in Canada which diverted the attention of the people from the commercial and economic phases of the agreement, and resulted in the defeat of the bill in the Canadian Parliament.

Repeal Bill Does Not Affect Wood Pulp

"The wood pulp provision was reenacted in the Underwood tariff law, and is not affected by this repeal bill.

"The Underwood tariff law contains reciprocal provisions as to wheat, flour, potatoes and potato products which were complied with last year by Canada, and therefore wheat, flour, potatoes and potato products are now on the free list from Canada. The passage of this bill will not affect the status of these commodities. The writer of this report has introduced a bill to repeal sections 581 and 644 of the Underwood tariff law, which relate to wheat and wheat products, potatoes and potato products, and imposes duties upon these commodities, and he hopes that bill will soon have the consideration of the committee. Importations of wheat have been temporarily suspended during the operation of the food control law.

"It is the belief of the committee that the time has come when the so-called Canadian Reciprocity Act should be repealed, and it is hoped, in view of the formal rejection by Canada of the proposed reciprocal arrangement, that the bill may be considered without partisanship and speedily passed."

Suggestions in "Misbranding" Case

The Federal Trade Commission has written a formal letter to the committee of paper manufacturers which was appointed by the trade to represent them in the so-called misbranding case. In this letter the Commission sets forth what it believes the trade should do in connection with the practices which do not seem right to the commission. The committee has formally answered the commission and in accordance with the commission's letter it is understood that copies will be sent to all of the trade affected.

The letter sent to the committee by the Federal Trade Commission is as follows:
"Dear Sir:

"The attention of the Federal Trade Commission having been called to a condition existing in the paper industry in regard to the use of certain classes of names for papers, which it is believed could be improved, a conference was arranged with your

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Committee, consisting of Messrs. S. L. Willson, Walter J. Raybold, William C. Ridgway and yourself, representing the industry. At this conference it was thought that certain changes would be beneficial; therefore, the Commission suggests the adoption of the following:

"(1) Papers not to be labelled "hand-made" unless actually made by hand and not by machine processes.

"(2) Papers that are given fabric or other material names because of a finish applied to them intended to resemble such fabric or material, not to be labelled, advertised, or sold under such name, unless a qualifying word, or words, be used to indicate that such fabric or other material name is applied to such paper to indicate such finish only; thus, 'linen finish,' 'Nainsook finish,' 'Onyx finish,' etc.

"(3) Papers not of foreign make not to be labelled, advertised, or offered for sale under a foreign geographical name, or under a partly foreign geographical name, without the use in conjunction therewith of properly qualifying words indicating its domestic manufacture; thus, 'Made in U. S. A.,' etc.

"(4) Papers sold as parchment paper not to be labelled, advertised, or sold without the use in its name of a qualifying word or words to indicate its true character; thus, 'artificial parchment,' 'vegetable parchment,' etc.

"It is hoped that the paper industry will realize as did your Committee and the Commission when in conference on the subject, that the changes suggested in the names of papers are reasonable and equitable, and will be of real benefit to all concerned, and that the industry, wherever affected, will be pleased to embrace them at an early date.

"It might be further suggested that as to stock on hand, the change of the label on the exterior of each package or carton to comply with these suggestions would be sufficient; but that after reasonable time, water marks and dandy-rolls would show proper qualifying words to indicate the real character of the product.

"We desire to congratulate you on the spirit of fairness shown by your Committee in the conference on this subject, and trust that the results desired will soon follow.

"Very truly yours,
"(Signed) VICTOR MURDOCK,
"Acting Chairman."

To Continue Government Publications

At a meeting of the Joint Congressional Committee on Printing last week it was decided that all Government publications can be continued until October 1. Some time ago the Committee sent out notice to all Government departments that all Government publications would have to cease on August 1 unless they had special permission to continue from the Committee. The action taken at the meeting last week merely postpones this order with a view of getting further details before such drastic action is taken. If many of these publications are discontinued it will mean that there will be considerable less paper bought by the Government.

Commander J. M. Hancock to Resign

It is understood that Commander John M. Hancock, U. S. Navy, who has been in charge of purchases for the Bureau of Supplies and Accounts of the Department and who is very well known to the trade, will resign. Commander Hancock's resignation will probably become effective as of December 1. Commander Hancock will become associated with a big New York bank.

Hammermill Outing to Be Held in August

The annual outing of the representatives of the Hammermill Paper Company will be held at Erie, Pa., from August 21-23 this year.

Paper Man Remembers Soldier Son

[FROM GUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, July 28, 1919.—An unusual will was probated this week when the instrument signed by the late John P. Keogh, president of the Keogh & Rice Paper Company, was admitted to Probate Court. It bequeathed one-third of his estate, valued in excess of \$70,000, to Robert M. Keogh, a soldier son. There are several other children.

The will was drawn up May 11, 1918, when Robert was away at war. The provision in the will pertaining to his valiant son read as follows, and is a tender tribute to a lad who offered his life, if need be, to his country's service: "My son, Robert, has entered the service of his country, being now enlisted and in camp. His devotion to me and especially to his country, in whose latter behalf he may risk his life or the use of his limbs and means of livelihood, has appealed to my sense of justice, to the extent that I wish him taken care of under any adverse situation. If he survives the war, whether harmed or unharmed, he will have deserved this remembrance from a father who is proud and grateful for the sacrifices endured to protect his country and home. These are my reasons for this provision."

Beaver Board Strike at Thorold Settled

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., July 24, 1919.—After a strike of more than four weeks the 127 men who quit work at the Beaver Board Wood Fibre Company plant in Thorold, Ont., are back at work today. The company and the strikers came to terms and the big mill has again been put in operation. The working hours have been divided into three shifts of eight hours each, with a working agreement of six months to give the arrangement a thorough test.

The men are invited to form shop committees, which will meet with officials of the company at intervals to discuss conditions and grievances. The company refused to recognize the union, although accepting Jeremiah Carey, of the Brotherhood of Papermakers, as arbitrator in case of deadlock.

This was practically the offer of the company to the men at the beginning of the strike. There were a number of clashes between the armed guards which protected the company's property, and the strikers, but it is not believed that the court cases will be pressed, as no damage was done.

Ontario Paper Company Suffers Fire Loss

[FROM OUR REGULAR CORRESPONDENT.]

NIAGARA FALLS, N. Y., July 28, 1919.—Between \$5,000 and \$10,000 worth of damages was done to the Ontario Paper Company plant at Thorold, Ont., last week by a fire that started in the basement of the mill.

The fire is believed to have been caused by an overheated journal. It was believed to be too much for the mill department and the Thorold firemen to handle, and an emergency call for aid was sent out to St. Catharines, Merritton, Niagara Falls, Ont., and Niagara Falls, N. Y. They all responded, the department from across the border sending a big pumping engine and hose truck in remarkably quick time. The flames made their way through the roof, but the mill and Thorold firemen had them under control before the other departments arrived.

Less than a year ago fire, believed to have been of incendiary origin, destroyed the company's mammoth wood pile, with loss reaching close to the six figure mark.

American Strawboard Company Floats Loan

The American Strawboard Company recently floated a loan of \$1,500,000 in 7 per cent gold bonds maturing in ten years. This loan will give the company a much needed working capital. They will hereafter be able to carry on much more extensive operations.

TAXATION SCHEME DISTURBS OWNERS OF PULP WOOD TRACTS

Frank L. Moore, of the Newton Falls Paper Co., Intimates
That the New Plan Being Promulgated by the Internal
Revenue Department of the Federal Government Does
Not Meet With the Approval of the Paper Industry—Island Paper Co. of Carthage Buys Big Power Plant of S.
R. Cleveland, Purchase Price Said to be About \$60,000
—Knowlton Bros. Cooperative Association Outing.

[FROM GUR REGULAR CORRESPONDENT.]

WATERTOWN N. Y., July 28, 1919.—All timber land owners in this section, especially the paper manufacturers with extensive pulp wood tracts, are particularly interested in a new scheme of taxation on such property now being promulgated by the Internal Revenue Department of the Federal Government. The receipt of a questionnaire the size of a book is the first shock, and the plan to value all forest and timber lands as of March 1, 1913, does not meet approval. Federal control of all forest lands, under either public or private ownership now being advocated, is another annoving problem.

Frank L. Moore, one of the most widely-known forestry and paper manufacturing men of the country, has just received the voluminous questionnaire. With it is the announcement that the country is to be divided into districts, and that committees of lumbermen are invited to meet representatives of the department

to discuss the form of the questionnaire.

George W. Sisson, of Potsdam, president of the American Pulp and Paper Association, has just appointed Mr. Moore at the head of a special committee of the association which will act in the capacity of an advisory board for state organizations and, if necessary, to harmonize any differences that might arise regarding various legislative problems, and particularly regarding the agitation going on now about Federal control of all forest lands. On the committee with Mr. Moore are named R. S. Kellogg, secretary of the News Print Service Bureau, of New York; C. W. Wooster, of Chicago; Col. E. H. Haskell, of New York, and G. A. Crocker, of Bangor, Me.

The Western and Southern timber owners are already very active, according to Mr. Moore. He said they held a meeting in Chicago early in June, and late in June a meeting of the American Pulp and Paper Association with 30 present was held. Mr. Moore was temporary chairman of the New York meeting, and he appointed a committee to go to Washington to discuss the subject with the department.

That the proposed system does not meet the approval of those of the industry who are familiar with it, is evident from what Mr. Moore said. The Empire State Forests Products Association is alive to the situation and is following it up actively, although few owners are aware of just what it means. It is pointed out that under the questionnaire plan important objections on the basis of unfairness will readily be observed.

Island Paper Co. Buys Power Plant

The big power plant owned by S. R. Cleveland, of this city, located at High Falls, has just been sold to the Island Paper Company, of Carthage, and the transfer will take place at once. It is another of the several power deals that have taken place in this section within the past few months.

About 10 years ago S. R. Cleveland and his son, L. B. Cleveland, erected the power plant. There is a 75-foot head, and a large figure of hydraulic power is available at that point. A transmission line connecting the plant at the Island Paper Company mills at Carthage was installed shortly after the plant was developed, and much of the electric current generated has been sold to the

paper company since that time. The village of Copenhagen, near the plant, has been supplied with electric lights from this power.

Officials of the Wool Products Company, of this city, made an effort to purchase this plant recently, but were unsuccessful. Mr. Stabinsky, of the company, said that he understood the property sold for about \$60,000, but Mr. Cleveland declined to state the figure.

. The Island Paper Company will now own its own power plant, but it is understood that the service rendered Copenhagen will not be discontinued under the new ownership.

Plans for Knowlton Bros.' Outing

The sixth annual outing of Knowlton Brothers' Co-operative Association will be held this year on Saturday, August 16, at Montauk Point. A meeting of the officials of the association was held Friday afternoon and the date and place determined.

This event has taken its place as the real bright spot in the year for every one in any way connected with the Kamargo paper mills. It not only brings the employees and their families together for a jolly rollicking day in which pleasure and good fellowship unites them, but it throws them into intimate association with all the officers and owners of the company. It makes the entire institution like one big family. About 225 are expected to attend the outing.

For five years the outing has always been held at Campbells Point, but this year a change was thought advisable and the resort on the St. Lawrence River was selected. As always, the company bears the entire expense of the affair. Better than that, the company pays the employees full time for the day.

There will be an additional reunion feature this year, for 11 of the 12 members of the association who went away to war are back and will be on the outing. A sad touch will be injected into that feature, for James Jarvis has not returned. He gave his life for his country and lies buried beneath the poppies of Flanders Field. But one of the women in the employ of the company entered service, and she is back in her former position.

Start Work on National Pulp Corp. Plant

Westfield, Mass., July 28, 1919.—Work has been started in connection with the construction of the pulp mill of the National Pulp Corporation, on the north bank of the Westfield River, about a quarter of a mile above the Boston & Albany Railroad station. Workmen are now engaged in the construction of a tunnel, or subway, under the railroad tracks, and doing the grading necessary for laying sidetracks to the site of the mill.

The property owned by the National Pulp Corporation extends from the river to the railroad tracks of the main line of the B. & A. In order to avoid crossing the railroad at grade and to avert a dangerous crossing, a roadway is being extended from Pochassic street to the mill property under the tracks.

This roadway and the side tracks that are being constructed are necessary to convey to the mill site the materials needed for the construction of the plant.

Plans have been prepared for a mill with a capacity of producing 100 tons of pulp daily. The mill is to be used for the operation of the corporation's process of reclaiming waste paper.

Elam Paper Company Start Soon

[FROM OUR REGULAR CORRESPONDENT.]

Marion, Ind., July 28, 1919.—The Elam Paper Company, a newly organized corporation, will begin the manufacture of paper within the present month. The company has leased a building at Third and Nebraska streets. S. L. Elam, formerly of the Midwest Paper Company, of this city, is at the head of the concern, and his brother, A. S. Elam, will act as the factory manager. The output will be 10,000 boxes of correspondence paper daily. About seventy-five men and women will be employed at the beginning.

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WOOD PULP PRODUCTION FOR THE MONTH OF JUNE

Statistics Prepared by the Federal Trade Commission Shows
That Stocks of Ground Wood for the Month Equals
Slightly Less Than Forty-Six Days' Average Output—
Bleached Sulphite Mill Stocks Equalled Slightly Less
Than Eleven Days' Average Output—Sulphate Mill
Stocks Equalled Slightly Less Than Seventeen Days'
Average Output—Other Mill Stocks.

FROM OUR REGULAR CORRESPONDENT.

Washington, D. C., July 28, 1919.—In connection with the Federal Trade Commission's current statistics on the paper industry a summary of the monthly reports required from manufacturers of wood pulp and other kinds of pulp used in paper making is submitted herewith for the month of June, 1919. The table shows the kind of pulp, the stocks, production, pulp used and shipments for the month. The pulp shipped during each month represents only pulp shipped to a concern different from the one producing it. Loss of production is shown by giving the idle machine time reported by each company for each kind of pulp.

Pulp Production

The following is a tabulation of the production, pulp used by the company producing it, shipments to outside concerns, and stocks of finished pulp, in tons of 2,000 pounds on an air dry basis, for June, 1919, for the operating mills. For comparison purposes the average production and stocks based upon the 9months' period ended April 30, 1919, are shown:

FINISHED PULP-TONS-AIR DRY BASIS

	Number	On hand	Produc-	Used		On hand
Kind of Pulp	of mills	first of month	month 121.659	during month 109,892	month 7.010	end of month 199,837
Average		195,080	109,350	49,377	8.933	135,807
Average		16,431	57,050 42,185	21,761	20,145	19,123 16,710
Average		2,919	38,250 5,552	3,875	2,117	7,365 2,479
Average Sulphite, Mitscherlich	. 7	1,792	6,625 5,915 6,250	3,692	2,953	1,567 1,062 1,573
Average	. 22	9,221	12,410	9,134	4,565	7,932 3,149
Soda pulp	27	9,033	30,656 28,850	14,785	15,926	8,978 5,132
Other than wood pulp.	. 7	98	1,056 850	645	363	146 152
Total for all grades		261,264	277,142	213,161	62,012	263,233
Average		******	259,050	******	******	173,868

Note—A slight variation will be noted between the monthly reports of May and June in the matter of the stock on hand for each grade on account of corrections received from the mills.

Total Stocks in the Mills

Total stocks of all grades of pulp in the mills on June 30 amounted to 263,233 tons. Stocks of news grade sulphite, easy bleaching sulphite, Mitscherlich sulphite and soda pulp decreased during the month. There was an increase during the month in the stocks of ground wood, bleached sulphite, sulphate and "other than wood pulp."

Comparing the stocks on hand at the domestic pulp mills at the end of the month with their average daily production based on the 9-months' period ended April 30, 1919, the figures show

Comparison of Stocks on Hand

Groundwood mill stocks equal slightly less than 46 days' average output. News grade sulphite mill stocks equal slightly more than 11 days' average output. Bleached sulphite mill stocks equal slightly less than 11 days' average output. Easy bleaching sulphite mill stocks equal slightly more than 9 days' average output.

Mitscherlich sulphite mill stocks equal slightly more than 4days' average output.

Sulphate mill stocks equal slightly less than 17 days' average output.

Soda pulp mill stocks equal slightly less than 8 days' average output.

Mill stocks of "other than wood pulp" equal slightly more than 4-days' average output.

Total mill stocks of all grades equal slightly more than 25 days' average output.

Loss of Production

The number of grinders and digesters showing lost time during the month of June in operating mills was 1,267. These figures do not include the machines in five mills that were not in operation during June chiefly on account of lack of orders, repairs and lack of power. The number of hours lost for various reasons is shown in detail in the following tabulation. The total time lost in May is also shown by grades and reasons for purposes of comparison.

Grade Ground wood pulp:	Lack of labor	Lack of orders	Repairs	Other	(June)	Total (May)
Total hours idle	5,265	3,981	301 44,401	579 112,219*	914 165,866	744 163,574
Sulphite, news grade: Number of digesters. Total hours idle Sulphite, bleached:		2,280	78 6,119	5,462†	136 14,781	31,170
Number of digesters. Total hours idle Sulphite, easy bleaching:	200	144	30 2,656	25 1,358	59 4,358	61 6,443
Number of digesters. Total hours idle Sulphite Mitscherlich:	0	0		395	395	917
Number of digesters. Total hours idle Sulphate pulp:	0	0	5,094		5,118	
Number of digesters. Total hours idle Soda pulp:	0	2,544		1,627		6,744
Number of digesters. Total hours idle Other than wood pulp:	2,295	594	1,020		9,509	14,741
Number of digesters. Total hours idle	0	2,530	432	444	3,406	
Total number of grinders and digesters—June Total hours idle for all	38	52	460	717	1,267	******
grinders and digesters —June Total number of grinders	8,680			127,129		
and digesters—May Total hours idle for all grinders and digesters		104	345	495	******	1,106
—May	45,130	24,244	63,375	96,108	******	228,857

*Includes 87,937 hours due to low water and other water conditions. †Includes 1,660 hours caused by lack of power.

Production of Wood Pulp

In connection with the Federal Trade Commission's statistical service for the paper industry the following special tabulations are presented which show the production of wood pulp, the pulp used by the company producing it, and shipments of pulp, by months and grades for the six months' period ended June 30, 1919, together with graphic charts showing the trend of stocks.

Comparison of the Monthly Production of Wood Pulp by Grades for the 6 Months' Period Ended June 30, 1919

Grade	Jan. Tons	Feb. Tons	Mar. Tons	Apr. Tons	May. Tons	June. Tons	Total.
Ground wood Sulphite N e w s	122,469	101,009	137,766	146,396	144,146	121,659	773,945
Grade Sulphite, Bleached	61,430 42,708	53,576 35,627	54,598 35,644	50,059 37,610	52,740 39,994	57,709 42,185	330,112 233,768
Sulphite, E a s y Bleaching Sulphite, Mitscher-	4,968	5,140	5,632	4,296	6,421	5,552	32,009
lich Suiphate Pulp Soda Fulp	6,392 12,172 32,503	6,432 8,712 27,262	6,627 8,627 29,696	6,322 10,651 28,225	6,363 12,848 30,539	5,915 12,410 30,656	38,051 65,420 178,281
Other than wood pulp	628	470	685	925	1,016	1,056	4,780
Total	283,270	238,228	278,675	284,984	294,067	277,142	1,656,366

(Continued on page 60.)

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STRATHMORE PAPER CO. WILL ENLARGE MITTINEAGUE MILL

An Addition to Cost \$100,000 Will Be Erected to Take Care of Increasing Business—New Addition Will Be Equipped in a Thoroughly Modern Manner—James Lemmon, Manager of the Chicago Branch of the American Writing Paper Co. Is Injured in Automobile Accident—W. T. McCorkindale Resigns as Head of Maintenance Department of American Writing Paper Co.

[FEOM GUE REGULAR CORRESPONDENT.]

HOLYOKE, Mass., July 28, 1919.—With the boom of business in the paper industry now making itself felt in this locality the Strathmore Paper Company at Mittineague made it known last week that it would build a \$100,000 addition to its plant in Mittineague. This expansion is necessary so that the company can cope with the unprecedented increase in business. As soon as the officials of the concern can make the necessary arrangements the contract for the new mill will be let and plans and specifications will then be made public.

The Strathmore Paper Company, which is one of the most modern paper plants in the country, although equipped with efficient machinery, finds it a tremendously difficult task to fill all its orders, hence the expansion. Part of the new addition will be used for manufacturing purposes, and some of the floors will be petitioned off and used as offices for those departments which have outgrown their present quarters.

In the new addition will be installed modern factory appliances and machinery. The Strathmore Paper Company, besides having its main factory and offices in Mittineague, has also a large mill building in Woronoco. Approximately 2,500 employees are working in both mills.

James Lemmon in Auto Accident

James Lemmon, manager of the Chicago branch office of the American Writing Paper Company narrowly escaped serious injury last week when an automobile in which he was a passenger was struck by another. He was thrown out of the touring car and rushed to the hospital, where it was discovered that, although he was suffering from painful cuts and injuries, these were not internal. He will recover.

Strike at Japanese Tissue Mills

About forty shippers employed at the Japanese Tissue Mills went out on strike last week Wednesday for a 25 per cent increase in wages and a 48-hour week. The following morning a committee of the shippers waited on officials of the company with regard to their requested increase and shorter hours. It became known later in the week that the Japanese Tissue Mills had adopted the 48-hour law, and had also increased wages 15 per cent, but had failed to recognize 41 shippers, who walked out, declaring that they had struck.

To Represent Main Paper Stock Co.

Michael E. Griffin, an officer of the Eagle Lodge of Paper Makers, has accepted a position as New England representative of the Main Paper Stock Company of New York. He will establish an office in the Marble Hall building. Later Mr. Griffin expects to have his territory extended to the Middle West, where there are many paper mills.

W. T. McCorkindale Resigns

William T. McCorkindale, head of the maintenance department of the purchasing end of the American Writing Paper Company, has tendered his resignation to the company, to take effect August 1. Mr. McCorkindale is a member of the prom-

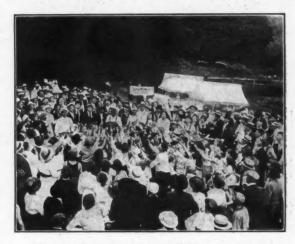
inent Holyoke family of paper makers, and is widely experienced in the paper field.

Mr. McCorkindale has been employed in various paper mills in this city for many years and goes west to accept the more lucrative position as purchasing agent for the Escanaba Pulp and Paper Company, at Escanaba, Mich.

Crocker-McElwain Field Day

On Saturday, July 19, nine carloads of employees of the Crocker-McElwain mill and their families left the mill about 9 A. M. for Aldrich Lake on their first annual outing. The trip was made in good time, and the cars reached the grounds at 9.45 A. M.

Preparations had been made at the park to receive the crowd, with the Stars and Stripes waving a welcome to all. The grounds were in good condition for sports, and there was something doing every minute all day long. Every one's chief source of worry was trying to decide whether to participate in the



PICTURE TAKEN AT CROCKER-McELWAIN OUTING.

athletic events or to stay in the water and keep cool. Many made use of all the canoes that were available.

Lunch was served at noon; beside the neat and satisfying box lunches, there were cigars, large cakes of chocolate, soda and milk, and ice-cream cones. About 780 lunches were served. Big tubs of lemonade were placed under a tent, and it is very much to the credit of the refreshment committee that all through the long hot day the lemonade never gave out. Something like 3,500 cupsful were served.

The World War Veterans' Band furnished lively music all day. Swings and teeters had been set up for the little ones, and were much enjoyed.

At 5 o'clock the return trip was made, and though every one was tired, it was the unanimous opinion that this was the best time they ever had. All expressed their appreciation of the kindness of the management in making this picnic possible.

Paper Men's Protest Successful

The protest of the local paper mill shippers that the new tariff was discriminatory bore fruit last week when Congressman Allen T. Treadway sent word that the ocean-rail rates would be allowed to stand as they are. Congressman Treadway succeeded in securing from the Railroad Administration an amendment in the matter of rail-ocean rail rates from this city to points in central freight association territory, so as to provide for application from points on and east of the Connecticut River. This amendment will take care of all points on the Connecticut River, whether on the east or west banks by equalizing the east and west side rates.

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Manufacturers of Paper and Pulp Mill Machinery

PRICES STILL ADVANCING IN PHILADELPHIA TRADE

Most of the Mills Are Giving Quotations Only on Immediate Business—Paper Stock Market Also Is Showing Constant Improvement—Thomas W. Price Co. Is Making Extensive Alterations and Improvements.—D. L. Ward Co. Announces That It Has Secured Control of Practically All the Lines Formerly Carried by the Megargee-Hare Co. General and Personal News of the Trade.

[FROM OUR REGULAR CORRESPONDENT.]

PHILADELPHIA, July 28, 1919.—Prices were the most active element in the week's paper situation here. Fortunately, however, orders followed them very closely indeed. Just as the jobbers had been advising their patrons, prices moved upward on bonds and book papers, due, the mill men say, to the scarcity and high price of raw materials and the advanced wages which they find it necessary to pay. Most of the mills will not make quotations save for immediate orders. They have generally withdrawn their standing prices.

Roofing and building papers are considerably higher. The result came immediately after the increase of orders due to the resumption of activity in building operations. In the paper stock trade, all grades save sulphite shavings are reported to be moving along actively. The mill men are no longer disposed to turn a deaf ear to the importunities of the stock men. Now they are seeking out the dealers and are willing to listen to their quotations. Cardboard for boxmakers' use is not very active in sales, but straw news and wood pulp boards and chip boards are in good demand at higher prices.

T. W. Price Co. Make Improvements

Extensive alterations are under way in the warehouse and main offices of the Thomas W. Price Company, Fifth and Ludlow streets. Removal of a stairway gave additional room in the second floor offices, and these have all been enlarged. The warehouse on the first floor also had its available area increased. Throughout the building new electrical fixtures are being installed and paint and paper is brightening up everything. The present enlargements are the necessary result of the recent increase of storage facilities by taking over the fourth floor, the equipment of all their ruling machines with self-feeders and other improvements following a decided increase in business.

To Continue Old Standard of Cover Paper

Announcement is made by Charles Megarge Levis, vice-president of the Curtis Bros., Inc., that the firm will continue to make cover papers of the old standard of size, 20 x 25 and 221/2 by 281/2 at their Newark Mills. The fact is of importance in view of the recent meeting of mill men and jobbers at which representatives of the Western mills particularly advocated a change in standard sizes and suggested they be 20 by 26 and 23 by 33. Mr. Lewis said today: "Our mills will continue on the old standard. If there is a sufficient demand on the part of the trade for the other standard, as was suggested at the New York meeting, it will be easy for us at any time to make them up. But we feel that at the present time it is only right to the many jobbers who are heavily stocked up with the old standards to maintain them at least until all supplies are worked off. If the changes were made at this time it might mean a heavy loss to the jobbers, who are heavily stocked up, and who have their sample books all made up. In my opinion, there is not yet sufficient demand for the proposed new sizes to warrant the change." The firm's mills at Newark, Del., have added a mill staff mechanical engineer in the person of Robert Levis, who is a graduate of the Engineering Department of Delaware College. He has just returned from overseas, having seen service

with the United States Army Engineers. Next month the firm proposes to install new style beating engines. All prices have been withdrawn on high-grade wedding stock and high grade offset papers.

George Kerr, of Kerr Mills, Injured

George Kerr, president of the Kerr Paper Mills at Downingtown, Pa., is in the Chester County Hospital, West Chester, suffering from severe burns all over the body, received July 24 by falling into a vat of boiling water at his plant while on a tour of inspection. Though he has a fighting chance for recovery, his escape from death was probably due to the heavy clothing he wore and also to his rubber boots. And yet, these were in part to blame for the accident. For, while making the inspection, he slipped and plunged into the vat.

Gets Megargee-Hare Lines

Formal announcement has been sent to the trade by President George W. Ward of the D. L. Ward Company, that it has secured control by purchase of practically all the lines formerly carried by the Megargee-Hare Company. The firm has thus taken over all trademarks, watermarks, copyrights, rights in trade names and symbols owned by the Megargee-Hare Company, with the exception of five lines of writing unwatermarked and of quality similar to that already carried by the Ward Company. The Ward Company has been appointed the distributing agent for all the important mill owned lines which do not conflict with its own. Announcement is furthermore made, as already reported in these columns, that almost the entire Megargee-Hare personnel became attached to the Ward Company, which "has been greatly strengthened by the addition of these sixty-three experienced paper people." The firm says growth of its fine paper business has been very rapid, and that it has been difficult to train people as fast as they are required, and as it was a rule not to take employees from competitors, the addition of the trained Megargee-Hare force makes the increased Ward organization wonderfully effective. The latest announcement is that A. J. Meyers, former advertising manager for the Megargee-Hare Company, will take a similar position with the firm.

A. S. Datz & Son Increase Lines

A. S. Datz & Son, Marshall street, below Market street, has increased its stock by the addition of an extensive line of fine papers and covers. The department will be in charge of Howard Marcus, who recently returned from overseas. The firm is featuring four of its own special brands, the Marshall Conveyance, Datext and Rancocas, and two lines of special make of cover papers, Wicker and Elite. The growth of the new department has been such that the firm contemplates taking additional space to accommodate it. The firm has completed its sample books of boxmakers' papers, including special holiday effects. To the box paper line there has been added a new brand, the Airochrome, a light weight box cover of its own Quaker quality.

Completes Warehouse Arrangements

Edward Grossman, formerly with the D. L. Ward Company, and now in business for himself, with offices in the Denckla building, eleventh and Market streets, has completed arrangements to carry in stock at the warehouse he recently acquired at 1621 Bainbridge street, a complete line of No. 1 Kraft wrapping paper, as well as a full line of white and all colors of Gropace Bond, which is his own special brand of unwatered bond. The Kraft brands will be called the Parcel Post. Mr. Grossman also will deal in envelopes and in book, glassine and onion skin papers. Splendid delivery service can be given from the new Grossman warehouse, because it occupies part of the building in which Hugh Gannon, who does draying for nearly all the paper firms, has his headquarters. Mr. Grossman was with the Ward Company for four years, and for fifteen years previously with the Wilkinson Bros. & Co.



English and American

Uniform Quality Reliable Service

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The JOHN W

LICMANY, INC.

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Western Representative CALE B. FORSYTHE NewYorkCity

902 Hanselman Bldg., KALAMAZOO, MICH.

CHICAGO PAPER SITUATION IS HIGHLY SATISFACTORY

Mills Are Far Behind on Orders and Prices Are Being Advanced in Some Cases to Stave Off the Avalanche of Orders That Is Hitting the Manufacturers-Coating Mills Have Announced New Prices Which Are a Half-a-Cent Higher Than Formerly-Trade Is Surprised at the Merger of Thoms Bros., Coarse Paper Dealers, With the Whitaker Bros. Paper Co. of Cincinnati.

[FROM OUR REGULAR CORRESPONDENT.]
CHICAGO, July 28, 1919.—The general condition of the paper business of the city is highly satisfactory at the present writing. The demand being experienced by both mill representatives and paper dealers is far ahead of the same season last year. Business is so brisk that members of the trade are finding it necessary to alter their vacation plans to some extent. The past week has seen a few new price lists announced, and a further withdrawal of old prices. Every branch of the paper trade seems to be affected. The mills are far behind on their orders, and mill representatives are frankly admitting that prices are being advanced to stave off the avalanche of business which is hitting the manufacturers. However, prices seem to make little difference to those who want the paper. The coated paper mills have announced their new prices, which are from a half cent to a cent higher on both one-side and two-side coated paper. The mills which specialize in book paper have all announced new prices, which range considerably higher than the old. The market, from the standpoint of the printer who is buying paper, must seem somewhat chaotic. The paper dealers who have stocks of paper at the old mill price are in some instances neglecting to advance their quotations, as



A. L. WHITAKER

they might easily do, and really should do. The jobbers who reached the recently developed series of price advances with light stocks are, of course, forced to ask a higher price, as they have paid more for their paper.

Paper Merger Causes a Surprise

One of the most important events in the coarse paper business of the city in several years is the merger of Thoms Brothers, coarse paper dealers of this city, with the Whitaker Paper Com-

pany, of Cincinnati. The trade at large was taken somewhat by surprise when the combination was announced, but to a few it has been generally known for some time that the merger was under

"The merger of Thoms Brothers with the Whitaker Paper Company makes us the largest coarse paper firm in the United States, and therefore in the world," said Mr. Thoms.

General News of the Trade

"Bob" Butterworth, of the Chicago office of the Champion Coated Paper Company, went to Hamilton, Ohio, last week to



THOMS

attend the funeral of his father-in-law, who died in New Orleans. Miss Helen Tockstein, of the Chicago office, leaves this week on her vacation, which will be spent in Michigan.

Harold Helmer, of Beecher, Peck & Lewis, paper dealers of Detroit, was a visitor in the city during the week.



THOMS BROS. CO. DIVISION, WHITAKER PAPER CO., CHICAGO.

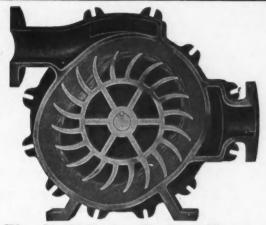
C. F. Thoms, of Thoms Brothers, coarse paper dealers, has returned to the city after a business trip to Cincinnati.

W. P. McNulty, of the McNulty Paper and Twine Company, is back in the city after a trip among the twine mills in Kentucky.

B. M. Anderson, of the Carpenter Paper Company, Omaha, has returned home after a short business trip to this city and the paper mills of the northwest.

(Contnined on page 24.)

A A TOTAL TO THE PARTY OF THE P



The Nash Hydro-Turbine Vacuum Pump and Its Advantages

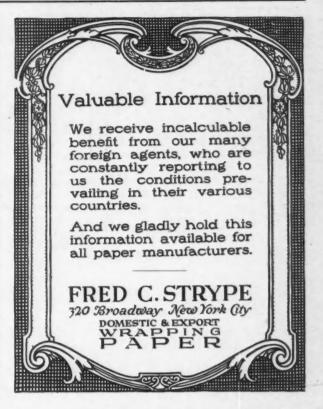
Only three principal parts. Only one moving part, the rotor. Shaft is mounted on high grade annular ball bearings outside of casing. No valves, pistons, rods, crank shafts, loose vanes or gears. Compression is balanced, eliminating side thrust on the rotor. Note that rotor runs in casing with large clearance.

High Efficiency. Absolute Reliability. Air delivered entirely free from pulsation, and therefore can be measured with a Venturi meter. Air is washed as well as compressed and can contain no oil or other impurities. Can be constructed of Acid-Resisting Metal. Upkeep cost is practically nothing. Expert attendant not required. For Particulars Address

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Chicago, III



Use "NATIONAL" Colors For Your Papers

The dyes offered by the National Aniline & Chemical Company cover every special requirement of the paper manufacturer.

Acid Colors

These colors are adapted to a wide variety of uses, and are noted for their fast qualities.

Metanil Yellow 1955
Croceine Orange Y Conc.
Croceine Scarlet M O O
Fast Red S Conc.
Wool Scarlet B R
Alkali Blue 2 G P
Alkali Blue 3 R P
Nigrosines

Basic Colors

Basic Colors combine brightness of shade with good tinctorial power, but are not so impervious to light.

Auramine N A C
Bismark Brown 53
Victoria Green W B
Safranine A
Methyl Violet 2 B
Methylene Blue 2 B
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National Aniline & Chemical Company

Incorporated

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BIDS AND SPECIFICATIONS FOR GOVERNMENT PAPER

Purchasing Officer of the Government Printing Office Opens
Bids on Various Lots of Paper for the Use of the Department—Awards Are Made on Several Lots of Paper
by the Purchasing Officer of the Government Printing
Office—Purchasing Officer of the Panama Canal Opens
Bids and Makes Awards on Paper and Paper Products—
Other Bids and Awards.

[FROM OUR REGULAR CORRESPONDENT.]

Washington, D. C., July 29, 1919.—Bids will be opened by the Purchasing Officer of the Government Printing Office on August 1 for 5,000 lbs. (100 reams) of 20 x 25 — 50 wove smooth teacover paper.

Government Printing Office Awards

The Purchasing Officer of the Government Printing Office has opened the following paper bids:

111,200 pounds of No. 1, 41 x 52 — 112, and 32 x 42 — 72 white machine finish printing paper; American Writing Paper Company, at \$0.0845 per pound; and Dobler & Mudge, at \$0.085.

50,000 pounds (325 reams) of 38 x 48 — 154, of halftone printing paper; Tilleston & Hollingsworth Company, at \$0.10 per pound; and American Writing Paper Company, at \$0.092.

2,000 pounds (20 reams) of 26½ x 41 — 100, light green coated cover paper; D. L. Ward & Co., at \$0.16½ per pound; Franklin Coated Paper Company, at \$0.11; Dobler & Mudge, at \$0.109; and R. P. Andrews Paper Company, at \$0.113.

10,000 pounds (200 reams) of 20 x 25 — 50, granite wove smooth cover paper; Dobler & Mudge, at \$0.11; Niagara Paper Mills Company, at \$0.14; Graham Paper Company, at \$0.185; Whitaker Paper Company, at \$0.13; D. L. Ward Company, at \$0.143; Knowlton Brothers Company, at \$0.10125; B. F. Bond Paper Company, at \$0.121; Mathers-Lamm Paper Company, at \$0.115; American Writing Paper Company, at \$0.1045; and R. P. Andrews Paper Company, at \$0.106.

3,600 pounds of 24 x 36 — 86, oiled manila tympany paper; Paper Manufacturers Company, at \$0.10½ per pound; George W. Miller & Co., at \$0.09½; Whitaker Paper Company, at \$0.0924; Dobler & Mudge, at \$0.09; and Domestic Mills Paper Company, at \$0.0855.

The Purchasing Officer of the Government Printing Office has announced the following awards:

The Graham Paper Company will furnish 36,500 pounds (500 reams) of 32 x 48 — 73, white S. & S. C. printing paper at \$0.0842 per pound, bids for which were opened on July 9.

36,425 pounds (350 reams) of 21½ x 30½ in., and 21 x 32½ in., No. 60, white ledger paper will be furnished by the R. P. Andrews Paper Company, at \$0.238 per pound, bids for which were opened on July 11.

Panama Canal Bids and Awards

The Purchasing Officer of the Panama Canal will open bids on August 8 for the following:

10,000 47/8 x 101/4 in. plain manila containers.

300 reams (150,000 sheets) of 17 \times 28 in., No. 13, white bond paper.

500 reams (250,000 sheets) of various colors 24 x 36 in., No. 25, sulphite bond paper.

2,000 reams (100,000 sheets) of 8 x 10½ in. mimeograph paper. The Purchasing Officer of the Panama Canal has awarded to the Republic Bag and Paper Company the contract for furnishing 1,000,000, 14 x 14 in. plain white crepe paper napkins at \$1,020.

The George W. Millar & Co. will furnish 1,200 sheets of

 32×44 in., 5/32 in., thick heavy binder board, at \$460. Bids for these items were opened on July 7.

The Purchasing Officer has also awarded to Alling and Corry the contract for furnishing 100 reams (50,000 sheets) of 17 x 28 —, No. 20, white bond paper at \$435. The same firm will also furnish 600 reams (300,000 sheets) of 17 x 22 in., No. 13, white bond paper at \$1,560. Bids for these items were opened on July 9.

Surplus Property Division Bids

The Surplus Property Division of the War Department has received bids for 204,000 pounds of cellucotton as follows: Pioneer Paper Stock Company, 95,000 lbs., at 2½c. per lb.; Marion Paper Company, all at \$0.116, \$0.126, \$0.096, and \$0.106; Diamond State Fibre Company, at \$0.04, and Sere Brothers Company, at \$2.72½ per hundredweight.

CHICAGO PAPER SITUATION

(Continued from page 22.)

E. A. Julius, of the J. W. Butler Paper Company, has returned from a trip among some of the branch houses of the firm.

Peter King, of the Empire Paper Company, is returning today from his vacation, and Ed Giblaro is leaving. Mr. King spent his rest period in the vicinity of Springfield, Mass.

Harry Rowley, of the Chicago Paper Company, has returned from a short out-of-town business trip.

C. H. Phipps, of the Watab Pulp and Paper Company, Sartell, Minn., was in the city for several days on business last week.

J. M. Abell, of the J. W. Butler Paper Company, has returned from his vacation.

Fred White, of the James White Paper Company, has returned from a combined business and pleasure trip among the mills.

E. U. Kimbark, of the Paper Mills Company, is out of the city this week on a business trip.

John Swigart, of the Swigart Paper Company, has just returned from a visit to the mills.

Ed Schmidt, of Parker, Thomas & Tucker Paper Company, has returned from a trip among the mills of the Miami Valley.

W. S. Rhoades, of the Carpenter Paper Company, Omaha, was

a recent visitor in the city.

F. L. McClellan, of the McClellan Paper Company, Minneapolis, was a visitor in the city for a couple of days during the week.

Ed French, of the French Paper Company, Kalamazoo, was among the visiting mill men here last week.

George Gephide, of the Bardeen Paper Company, Otsego, Mich., has returned home after a short trip among middle western cities, including Chicago.

W. E. Perry, of the Crocker-McElwain Company, Mt. Holyoke, Mass., is making a western business trip.

H. W. Suter, manager of the carboard department of the Champion Coated Paper Company, recently paid a visit to the city.

Oscar Gumbinsky, of Gumbinsky Brothers Company, has returned from an out-of-town business trip.

D. F. Peck, of the D. F. Peck Paper Company, was recently visiting at the mills.

Sweet Brothers Paper Mfg. Co. Incorporates

PHOENIX, N. Y., July 28, 1919.—The Sweet Brothers Paper Manufacturing Company has been incorporated under New York State laws, with capital stock placed at \$500,000.

The officers are T. C. Sweet, of Phoenix, president; Walter A. Bradley, of Fulton, vice-president, and K. N. Sweet, secretary and treasurer. These, with Richard W. Sweet and Homer K. Sweet, form the board of directors.

The company is rebuilding its plant, and hopes to be running with one 92-inch cylinder machine by November 1, and one 92-inch Harper Fourdrinier by February 1, 1920.



PAPER MAKERS' ALUM

(Both Commercial and Free from Iron)

CASEIN, SATIN WHITE **ENGLISH CHINA CLAY BORO PHOSPHATE** (Crystal)

The Kalbfleish Corporation 31 Union Square West, New York, N. Y.

"AMERICAN" TWINES



Paper Makers' Twine Tube Rope Wall Paper Twine Hay Rope Fine and Coarse Polished Twines Manila Rope Transmission Rope



For Prices Write Department M

American Manufacturing Company

Largest Makers of Commercial Twines and Rope in the World

Mills and Sales Office:

NOBLE AND WEST STREETS, BROOKLYN, NEW YORK CITY

PAPER PLANTS IN THE WEST MAKING MANY IMPROVEMENTS

Work Is Progressing Steadily on the Plan to Make Three Rivers
Plant of the Eddy Paper Co. One of the Finest and Biggest Board Mills in the Country—Interlake Tissue Mills
at Merritton, Ont., Make Plans for Extensive Enlargements—Western Board and Paper Co. Has Plans Drawn
to Improve Its Plant—Convention of Paper Mill Superintendents at Green Bay, Wis., July 31 to August 1.

[FROM GUR REGULAR CORRESPONDENT.]

KALAMAZOO, Mich., July 28, 1919.—The campaign to make the Three Rivers plant of the Eddy Paper Company one of the biggest and finest board mills in America is going steadily forward, and the casual observer is now able to appreciate the work at hand. The construction of the big carton plant has progressed to a point where the side walls are up and the steel work is done. The building is now ready for the roof and the laying of the concrete floor.

The next step to be undertaken immediately is the erection of the power plant. Billingham & Cobb are working out the engineering details of this structure. It will be of brick, concrete and steel and about 56 by 88 feet in dimensions. Five 300-horsepower Wickes vertical boilers have been ordered for this unit. Immediately adjoining will be the great concrete coal storage bunker, equipped with a locomotive hoist for the efficient handling of the fuel to the overhead hoppers. The ashes will be removed by an air system and dumped by cars into the bed of the old millrace. No definite decision has been reached regarding the equipment for the power plant proper, but this will be known in a comparatively short time.

With the completion of the carton plant and the boiler house and power plant, work will then start on the board mill. It will eventually have four machines and auxiliary equipment. The first unit for two machines will be erected next year. All details regarding the board mill are held in abeyance.

Improvements by Interlake Tissue Mills

Billingham & Cobb, paper mill architects and engineers, have prepared plans for extensive improvements and enlargements that are to be made by the Interlake Tissue Mills, located at Merritton, Ont. These plans have been forwarded to the officers of the company for their final approval and acceptance.

A new beater room will be 70 by 109 feet in dimensions and three stories high. It is located on low ground, and railroad approach will be provided by means of a trestle about 30 feet high and 130 long, running to the top floor, where the raw stock will be unloaded and sent to the tanks, pumps and chests in the basement by means of elevators. The second floor will be the beater room proper and will house several beating engines and jordans, which are yet to be ordered. Both the beater room building and trestle will be of concrete and steel and the highest type of construction. A steel building will protect the unloading dock from inclement weather.

Another proposed change is to put a concrete floor in the present machine room and install a Harper Fourdrinier. The mill at this time has one 116-inch Yankee tissue machine, and produces 20,000 pounds of light specialties every 24 hours. With the second machine the output would be doubled.

Western Board Co. Improvements

In addition to the erection of a large storage warehouse for its plant, the Western Board and Paper Company is taking steps to improve greatly its boiler house and coal handling facilities. Billingham & Cobb, mill engineers, have completed plans for the crection of a large concrete coal storage bunker, 28 by 60 feet in dimensions, and the installation of a bucket conveying system to carry the coal to hoppers above the furnaces. The three boilers in the boiler house will also be equipped with Murphy stokers.

Kalamazoo Stationery Co. Expands

The Kalamazoo Stationery Company, which has in course of erection a large brick and concrete building immediately adjoining its plant on Harrison street, has so changed the plans for this structure that over 18,000 square feet of floor space will be added. This is done by the addition of another story and the erection of a wing, 11 by 32 feet in dimensions, to carry a fireproof stairway, and all toilet facilities. The main building is 80 by 222 feet in dimensions.

Lee Paper Co. Improvements

The Lee Paper Company, at Vicksburg, is now boring for water with the idea of establishing several artesian wells in the immediate future. While this concern has had a good water supply from its pond in years past and an excellent filter system in conjunction therewith, it is deemed advisable to have a well supply for the future. The plant uses from 3,000,000 to 4,000,000 gallons daily.

Manistique Paper Co. to Expand

Word has been received from Manistique, Mich., that the Manistique Pulp & Paper Company is planning to increase the capacity of its pulp mill from 20 to 80 tons of pulp a day. In addition to the two wood grinders and three wet machines now in operation, three wood grinders and two wet machines are to be added.

Mill Superintendents to Meet

A supper and smoker will be given the evening of August 19 by the Kalamazoo branch of the Paper Mill Superintendents Association of America. It was also decided that certain members from this section will attend the superintendents' convention at Green Bay, Wis., July 31 and August 1.

George H. Pountain, secretary and treasurer of the local branch, reports that nearly every mill in this section of Michigan and northern Indiana is now represented in the organization and that during the fall and winter months regular monthly meetings will be held. Speakers will be secured and addresses given on topics of vital interest to the clan. The organization promises to become a valuable adjunct in promoting acquaintance and presenting valuable suggestions in general efficiency.

General News of the Trade

Coming in an aeroplane for his business call, C. J. McKinney was the guest of Frank B. Eilers, of the Eilers Mill Supply Company this week.

Fred M. Hodge, president of the Kalamazoo Paper Company, is north for a month with his family.

C. H. Wright, of the C. H. Wright & Son, paper dealers, is spending his time this summer in his office, also at Ohekama, Mich. His wife and daughter are at the latter place.

The many friends of Louis P. Simon, secretary and general manager of the Bermingham & Prosser Company, will regret to hear of the sudden and unexpected death of his wife, following an operation. In addition to her husband, she leaves two small children. She was but 30 years of age and very popular in Kalamazoo.

Dodge-Smith Co. Incorporates

JERSEY CITY, N. J., July 28, 1919.—The Dodge-Smith Company of 15 Exchange Place has incorporated to carry on a paper manufacturing business. Frank G. Smith is named as statutory agent. The authorized capital stock is \$100,000. The incorporators are: Frank G. Smith, 40 shares; John G. Flanigan and David H. Stemer, 30 shares each.

M. GOTTESMAN & COMPANY

Incorporate

18 East 41st Street, New York

Bleached and Unbleached

WOOD PULP

of Every Description

SOLE SELLING AGENTS FOR THE UNITED STATES

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Ekman & CompanyGothenburg, Sweden Bleached and Unbleached Chemical Pulps
Bengtsfors SulfitaktiebolagBengtsfors High Grade Bleached Sulphite
Eds Cellulosafabriks Aktiebolag
Forsmarks CellulosafabrikJohannisfors, Forsmark Easy Bleaching and Strong Sulphate (Kraft)
Hellefors Bruks Aktiebolag
Frederiksberg Sulphate MillsFrederiksberg Strong Sulphate (Kraft)
Laxa Sulphite MillLaxa High Grade Easy Bleaching Sulphite
Gustafsfors Fabrikers AktiebolagGustafsfors Easy Bleaching and Strong Sulphate (Kraft)
Hjerpen Sulphite MillsJarpen Mitscherlich Strong Unbleached Sulphite
Holmens Bruks Och Fabriks AktiebolagNorrkoping Strong Unbleached Sulphite
Wermbohls Fabriks Aktiebolag
Konga Aktiebolag
Nyhamns Cellulosa AktiebolagSundsvall Easy Bleaching and Strong Unbleached Sulphite
Ohrvikens Aktiebolag
Stromsnas Bruks AktiebolagStromsnasbruk Easy Bleaching and Strong Sulphate (Kraft)

THE ABOVE MILLS HAVE A TOTAL PRODUCTION IN EXCESS OF 200,000 TONS ANNUALLY.

Obituary

John C. Knowlton

[FROM OUR REGULAR CORRESPONDENT.]

WATERTOWN, N. Y., July 28, 1919.—John C. Knowlton, one of Watertown's oldest and most highly esteemed citizens, prominent paper manufacturer and banker and a faithful city official for many years, died early Sunday morning at his home in Sterling Place. The infirmities of old age had enfeebled him for some time, and a fall in his home a few days ago which fractured his collarbone only hastened the end. He had been confined to his bed since the accident and his vitality gradually ebbed until the end came.

In the passing of John C. Knowlton there is a general expression that the city has sustained a distinct loss that will never be replaced. This does not apply alone to the members of the many institutions and organizations with which he has been identified for so many years, but to all who had the pleasure of his acquaintance. He was loved and admired by all who knew him intimately and never knowingly offended anyone with whom he came in contact. It seemed to be his daily ambition to do something that would make someone else more happy, and he served the best that was in him when called upon to assume public office.

John Calvin Knowlton was born in Watertown, December 22, 1837, the son of the late George Willard and Elizabeth Carroll Knowlton. Had he lived until his next birthday he would have been 82 years of age. He was the fourth child of the family of five children, only one brother, George W. Knowlton, the youngest,

In his youth and to the time of his death, he was always very quiet and unassuming. His early education was obtained in the local schools and the Cortland Academy at Homer, N. Y., which latter institution he left at the age of 17 years to begin in this city his business career, which was rewarded with success from the first. His first position was in the old Wooster Sherman Bank, located where the Watertown National Bank now stands, and later was connected with the National Union Bank.

In 1877 he became a director of the Jefferson County National Bank, and soon after was made vice-president, becoming president and manager in 1897. In January, 1904, he resigned the presidency and again was made vice-president, the position which he held at the time of his death.

Several years ago Mr. Knowlton took an interest in the organization of the Thousand Island Bank at Alexandria Bay, and was a director at the time of his death. He felt that while he held office he should continue to perform the functions of that office, and despite his feeble state of body he journeyed to Alexandria Bay only last month to attend a meeting of the bank directors. Never has he held an office when he felt that he was not able to give it the best there was in him.

The father of Mr. Knowlton was one of the early residents of the city. He came here from Vermont in 1826, and at the time of the birth of John C. Knowlton the family resided in High street, then recognized as the select residential section of the city. His father died at age 92 and his mother at age 94.

Chamberlain & Farwell & Company operated a paper mill on the site of the present Knowlton Brothers, Inc., plant at the beginning of the 19th century. This was purchased by the father of J. C. Knowlton and Charles Rice, who sold out in 1854. In 1861, John C. Knowlton and George W. Knowlton, brothers, purchased the paper mill, and under the name Knowlton Brothers the plant has been operated since. There is still a portion of the original mill in the present structure in Mill street.

John C. Knowlton retained an active interest in the paper company affairs until about 1890. Since that time he had continued as a stockholder and director, but not as an officer. To the last this interest in the mill never slackened, and almost every day,

until the infirmities of old age prevented, he would walk through the mills and renew his intimate acquaintances with the employees. They all loved him and today are deeply saddened by his demise.

He was married in 1863 to Miss Susan M. Fisks, daughter of the late Isaac H. and Mary S. Fiske, of this city. In 1869 he built the magnificent big brick residence in Sterling Place, which they since occupied.

From 1880 to 1910 Mr. Knowlton traveled very extensively. He made several trips to Europe, visiting various countries there, and one very extended trip through South America. He traveled throughout the United States as well.

Charitable and philanthropic causes always met the hearty support of Mr. Knowlton. He was ever a friend to the needy and those in distress. He was honest himself in all things and was one of those men who expected to find the same trait in everyone else. Of him it has been said since his death, that "If men were all like John C. Knowlton in this world the millenium would be at hand."

No better nor more faithful public servant ever held office in this city. He was not an officer seeker, but when called upon to fill offices he accepted out of the feeling that it was his duty to the community. For 45 years he served on the city Water Board, and for 32 years he filled the office of president of that board, resigning against the protests of his associates, and later being permitted by Mayor I. R. Breen to withdraw from the board when his health forbid him to continue in office. His wise councils were always given first consideration on all large matters.

For many years he served as supervisor from the old First Ward in which he lived, and he was recognized as one of the most influential members of the board.

Many years he served as president of the Bureau of Charities and devoted much energy and time to the requirements of the institution. He served on the Board of Trustees of the Flower Memorial Library for many years, and until the time of his death. He was president of that board for a number of years. For 50 years he had been an Elder of the First Presbyterian Church.

He is survived by his widow, Mrs. Susan M. Knowlton, and one brother, George W. Knowlton, of this city.

Frank H. Hesse

St. Louis, Mo., July 28, 1919.—Frank H. Hesse, 53 years old, founder of the Hesse Envelope & Lithographing Company, died last Sunday afternoon. He had been ill for several years, retiring from active business in 1916. The funeral was held last Tuesday, with interment in Calvary Cemetery.

Mr. Hesse was a native of St. Louis and always had lived here. He was born in October, 1865. He early learned the printers' trade, and in March, 1888, started his first printing business in a small room at 314 North Third street. His capital then was \$103.

His business grew rapidly. The location was changed several times. In 1908 the Hesse Envelope & Lithographing Company was organized, and the concern purchased the building it now occupies at 501 North Main street. Hesse also established the Hesse Envelope Company at Dallas, Tex.

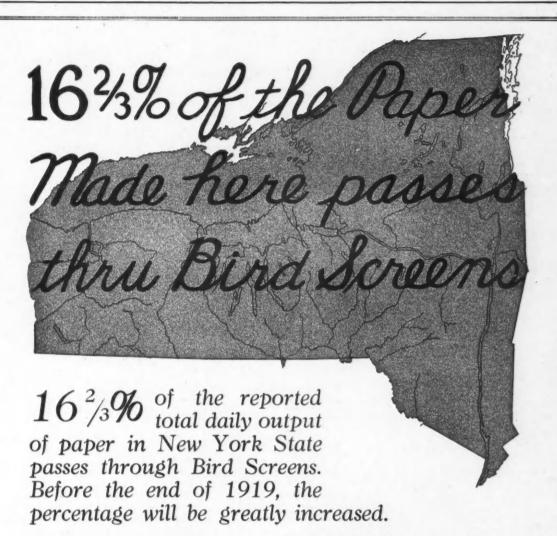
Mr. Hesse is survived by his widow, Mrs. Annie McDonald Hesse, and three brothers, William, Carl and Otto Hesse.

To Advertisers

The Ticonderoga Pulp and Paper Company is sending out to its clients a card on which is printed the following clever toast to women:

"To advertise to women, in the zenith of her glory, tell the perfect living truth, in a simple little story.

"Then gently strike the sweetest chords you can; for she's the gods' one greatest gift to man."



And yet less than three years ago, not a single Bird Screen was in operation in the Empire State. The reason for the sudden popularity of this very different screen is a simple one. Paper makers have found that when they use a Bird Screen they get clean paper, few breaks, long runs and with less cost for running screens.

For this same reason you should be interested in our Catalog IA, which describes the Screen in detail.

Bird Machine Co., East Walpole, Mass.

T. H. Savery, Jr., Western Representative 1630 Republic Bldg., Chicago, Ill.

New York Trade Jottings

Clarence Beebe, New York representative of the Appleton Wire Works, of Appleton, Wis., is visiting the paper mills in Maine this week.

Walter H. Rice, buying for the Paper Section of W. R. Grace & Co., has left that concern to enter the Foreign Department of Henry Lindenmeyr & Son.

J. C. Deery, formerly connected with the sales department of the Seaman Paper Company, has accepted a position as sales manager of the Majestic Mills Paper Company, of 462 Broome street. Mr. Deery is at present on a trip through New England, but he is expected back at his desk next Monday morning.

* *
The Paper Traffic Association reports twelve claims filed by members for overcharges in freight made up of excessive rates or wrong classification amounting to \$109.15. Some of this might have been discovered but the fact that \$100 was charged to two paper dealers shows the value of this organization.

**

H. L. Derby, vice-president of the Kalbfleisch Corporation, dealers in chemicals of 31 Union Square, left New York Friday night for a motor trip to Lake George. Mr. Derby, with the members of his family, left this city at 6 o'clock in the evening, motored all night and arrived at Lake George early Saturday morning.

The business of the William G. Willmann Paper Company, of 51 Beekman street, has been incorporated with a capital of \$100,000. Mr. Willmann states that he now intends to expand his business, and he has already added several new lines of paper to those he formerly carried. The incorporators, in addition to Mr. Willmann, are D. and L. Greenbaum.

Charles B. Carpenter has been appointed to succeed Gustav Wuerst, as head of the board department of the Seaman Paper Company at their New York offices, 200 Fifth avenue. Mr. Carpenter was connected formerly with the Philadelphia offices of the United Paperboard Company, and he has only recently been discharged from the United States Marine Corps.

A new booklet, entitled "The Modern Manufacture of Writing Paper," has just been sent to members of the trade by the New York office of the Eastern Manufacturing Company. The book is well bound, printed on high-class paper, and generously illustrated. It traces the history of the manufacture of writing paper from the time of primitive man down to the present.

The two soldier sons of L. B. Steward, secretary of the American Paper and Pulp Association, were both recently mustered out of the service, and they are now enjoying a brief vacation with the members of their family in Maine. The oldest one, Lieutenant Blake Steward, returned unexpectedly last week, and he and his father left almost immediately after his return for Maine.

Upon examination it was found that the petition in bankruptcy which was filed on July 18, against Louis, Morris, and William Schneider, doing business as the French Paper Box Corporation, should have been filed only against the corporation and not against the three men individually. The creditors of the concern are Charles W. Williams, \$281, and Gustave Lindenmeyer, \$761.

* * *
The American Soda Pulp Exporters' Association, a combination of soda pulp manufacturers formed under the Webb-Pomerene law, has started business and is occupying office space at the New

York and Pennsylvania Company's suite in the Fifth Avenue building. The association has received the approval of the Federal Trade Commission. A. G. Paine, Jr., is president of the association, and A. G. Paine, 3rd, is secretary.

Lewis Sussman, executive manager of the Columbia Paper Company, who has been in the firm's employ for the past eleven years, has resigned his position and has gone into business for himself as the Sussman Paper Company, located at 101 Greene street.

Condition of Canton Paper Market

Before the war the market for foreign paper in Canton was practically controlled by German firms, which secured their supplies direct from Sweden, Norway, and Germany, according to Consul Albert W. Pontius, Canton, China. Soon after the declaration of war the Japanese, realizing the futility of any further attempts on the part of the German firms to import foreign paper, were not slow in seizing the opportunity to establish themselves firmly in the market. The result is that now nearly 80 per cent of the imported goods comes from Japan. With the exception of a small quantity of news print, cardboard, and lithographic paper, American paper finds little market in the Province of Kwangtung, owing to its high price and unsuitability for coloring purposes, the exorbitant freight rates from the United States to Canton, and the absence of special agencies and native brokers at Canton for marketing the American product.

Paper dealers at present do not feel inclined to place any large orders for American paper, notwithstanding offers of lower prices, as they are afraid that, owing to the reported accumulation of a large unsalable stock in Japan, the Japanese would suddenly lower prices and flood the market with their goods as soon as they learn of the expected arrival of any large consignment of American paper.

There are no discriminating duties which could operate against American paper, and if American manufacturers can secure lower freight rates and proper representation in Canton and will specialize somewhat in the kinds of paper demanded by this market, there is no reason why they should not enjoy a larger share of the paper business.

Arrowhead Mills Get a New Plant

FULTON, N. Y., July 28, 1919.—Announcement was made at the meeting of the creditors of the Eureka Paper Company, of Fulton, before Referee in Bankruptcy A. S. Wright, that the plant had passed to the control of the Arrowhead Mills, Inc., of which F. A. Emerick is the head.

This gives the Arrowhead four big plants in Fulton, the Volney Paper Company, the Granby Paper Company, the old Battle Island Paper Company, Battle Island, and the Eureka. The latter plant was sold at auction recently for about \$115,000, and was bid in by Harry Colin, of Syracuse, who later turned it over to the Arrowhead Mills. It will be operated by them in connection with their other plants.

W. C. Powers Sails

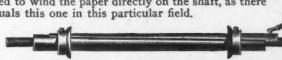
After many postponements, William C. Powers, formerly sales manager of the Great Northern Paper Company, sailed for England last week. Immediately upon his arrival on the other side Mr. Powers will become active head of W. C. Powers & Co., Ltd., a concern which represents the mills which sell throughthe Canadian Export Paper Company, Ltd.

The offices of the concern are located at 180 Fleet street, London, and will represent the Eastern Manufacturing Company, and the Groveton Paper Company, in addition to the mills represented by the Canadian Export Paper Company.

THE BAKER & SHEVLIN

Patent Split Winder Shaft

There are now over 600 of these shafts in use. We have lately secured a number of new customers for them due to renewed selling efforts. Several of these new customers have already sent us repeat orders, this keeping up the record this shaft has always had which is, that as soon as a concern installs one of these shafts, they lose no time in placing orders for their full requirement of shafts for either making paper cores or use where it is desired to wind the paper directly on the shaft, as there is no shaft in the market which equals this one in this particular field.



BAKER MANUFACTURING CORPORATION

Formerly BAKER & SHEVLIN Co.

SARATOGA SPRINGS, N. Y.

Fourdrinier and Cylinder Paper Machines

Why Enlarge Your Beater Room?



All infrangements on present patents and patents to be issued will be vigorously prosecuted

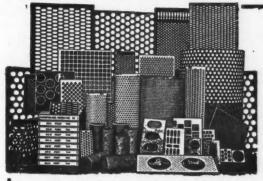
Why Add More Power?

This beater reduces stock to fibre of equal or better quality in half to one quarter of the time and with a saving of power which is remarkable. Do not take our word. Investigate. Manufactured by

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PAPER-MAKING MATERIALS OF THE PHILIPPINES

WRITTEN BY J. F. BOOMER, CORRESPONDENT, MANILA, P. I.

The Philippine Islands produce an abundance of fibers and other raw materials suitable for the manufacture of paper pulp on a commercial scale, but at present none of these is being utilized for this purpose. So far as can be learned, no paper has ever been made in the Philippines except for experimental purposes. The country also contains plenty of the raw materials required for the manufacture of the chemicals used in paper pulp making, but none of these chemicals is now being produced locally.

More than a decade ago George F. Richmond, for several years attached to the chemical laboratory of the Philippine Bureau of Science, made a very careful survey of the materials available in the Philippines for the manufacture of paper pulp. The results of his investigations have been published from time to time in the Philippine Journal of Science, in press bulletins issued by the Bureau of Science, and in other publications, but no practical use of this valuable data has yet been made in the Philippines. Other tropical regions, however, have availed themselves of it. Mr. Richmond himself was called to Indo-China to take charge of a paper mill, which, after many vicissitudes, is now reported to be doing an exceedingly profitable business in the manufacture of paper from bamboo.

Philippine Government Aid for Paper Mill

In February, 1918, the Philippine Legislature passed an act guaranteeing a profit of 4 per cent. on money invested in the first factory in the Philippines to make paper from local materials. This guaranty holds good for from three to six years. Recently a corporation was formed, having among its numerous specified purposes that of manufacturing paper from local materials. This project has got no further than the formal incorporation. Nor is it the intention of the company, so far as can be learned, to undertake the manufacture of paper in the near future.

This report is based on the data gathered by George F. Richmond while he was connected with the Bureau of Science. Since he made his investigations further facts concerning the deposits of the raw materials for the manufacture of paper-making chemicals have been obtained. These more recent data are also made use of here.

Demand for Print Paper Growing

Aside from the foreign market, which might be found for paper and paper pulp successfully manufactured in the Philippine Islands, the domestic market for paper would, of itself, justify the investment of capital in a paper mill, could such market be controlled by the locally manufactured product.

The use of print paper in the Philippines has grown very rapidly during the last ten years, and the prospects are that it will expand even more rapidly in the immediate future. At present there are, in Manila, 11 daily and 8 weekly papers and nearly as many monthlies and quarterlies. There are also 10 or 12 weekly papers published in the different provincial capitals. The public schools are creating a generation of readers that is bound to multiply the demand for local periodical literature. Also, book and pamphlet publishing is making a good start.

Many Paper-Making Materials in the Islands

There are almost innumerable substances in the Philippine Islands out of which it is possible to make paper. This article will concern itself only with those materials that appear, from the investigations already made, to be available in sufficient abundance to form the basis of a paper-making industry, and will limit itself to the discussion of a few of the more general aspects of these, namely, their kinds, quantity and general availability.

The experiments made by the Bureau of Science were undertaken with the object of determining the commercial availability, for paper-making, of the fibers from members of the plantain family, such as abaca (manila hemp), banana, and plantain; of maguey (Agave cantala); of certain palms; of bamboo; of grasses; of certain woods; and of other less important plants. These materials will be considered in the order of their apparent importance to those contemplating the establishment of a paper or pulp-making industry in the Philippines.

Bamboo the Most Important Source of Paper Pulp

Of all the materials for the manufacture of paper found in the Philippines, the bamboos are the most important, considered from every standpoint. Not only is the paper made from bamboo of excellent quality, but a constant, adequate and accessible supply of this material could be made available for a paper or pulp factory more readily than could such a supply of any other material. Distributed over the Tropics there are about 20 genera and 200 species of bamboo which have been classified by botanists. The following botanical description of bamboos is taken from Watt:

"Tall, bushy grasses with woody stems or culms, for the most part growing in clumps. The bamboo stem, as is the case with all other grasses, consists of a more or less hollow culm with transverse, solid joints or nodes. Great variation exists among the various species with respect to the size of mature stems and the thickness of shell walls.

"This giant grass is remarkable for its rapid growth under favorable conditions of heat and moisture. Much has been written as to the rate of growth of the shoot. It is probable that an average of 7.5 centimeters (1 centimeter = 0.3937 inches) per day would not overstate the growth of the young shoot of the more important species. Until the branches have been fully developed, the culm is not mature. This generally occupies a variable but considerable period, the shoot attaining its full height in from one to three months."

This rapidity of growth is an important item among the various qualities that render bamboo valuable as a paper-making material

Chinese Paper-Making Methods-Experiments in India

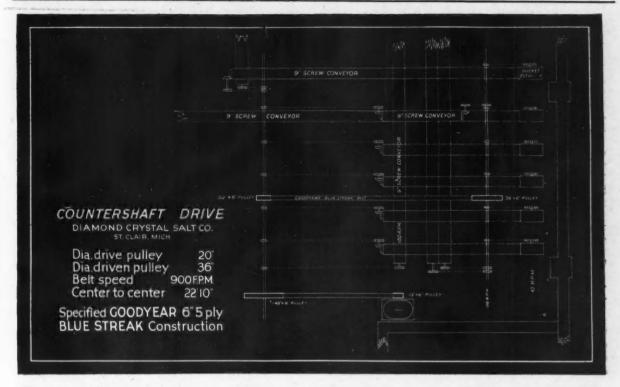
The Chinese have long used bamboo in the making of paper, and this plant is still the chief paper material used by them. Mr. Richmond says of the Chinese process of making paper from this material:

"The Chinese employ the native bamboo, which they split into lengths of from 1 to 1.3 meters (1 meter = 39.37 inches) each, and then place in a vat or tank with alternate layers of lime. Water is then run in to cover the stems, and the whole is left for from three to four months. When the bamboo has become sufficiently rotted, it is pounded in a mortar, mixed with water, and molded into square sheets."

As long ago as 1875 Mr. Routledge, an Englishman, made a study of bamboo as a paper-making material in India, although it appears that no practical effort was made to employ the material in a commercial way until 1890, when a factory for the making of paper from elephant grass (Ochlandra travancorica) a species of Indian bamboo, was started at Travancore, British Burma. This factory did not succeed. Of this British effort to manufacture paper from bamboo, it is said:

"The material proved difficult of treatment. A very large quantity of caustic soda was required to reduce the fiber to stock, and an unusually large quantity of bleaching powder had to be employed to make white paper out of the yellow-colored stock. Then, experiments had to be carried out to ascertain what aged culms gave the best results, no experience being obtainable from

(Continued on page 34.)



Saving \$444.38 on a Countershaft Drive—and the G. T. M.

The Diamond Crystal Salt Company of St. Clair, Mich., had been having a lot of trouble—and paying many high belting bills—because of a motor drive to a countershaft operating five elevators. The expensive standardized belt they had been using cost in 1917, \$1.60 a foot—\$84.80 for the 53 feet required. It generally lasted about three months, and required many take-ups at that.

One day a G. T. M.—Goodyear Technical Man—called and explained the Goodyear Plan of selling belts to meet conditions instead of as a hardware man sells nails. The Purchasing Agent, Mr. Engelgau, was interested, told him about the countershaft drive that cost \$28.26 a month, and asked him to look it over.

The G. T. M.—our Mr. J. G. Taylor—studied that drive, studied all the conditions carefully and in detail. After making his measurements he told the P. A. he recommended for that drive a certain type of Goodyear Belt costing then 68c per foot—\$36.04 for the belt. The P. A. thought he couldn't lose anything at that price—even if the belt ran only five weeks—and told him to send it along.

On December 1, 1917, that belt was installed. At the time this advertisement goes to press the belt is still running and in good condition. It

has already given 17 months' service for the \$36.04 spent for it. That seventeen months' service for the standardized \$1.60 belt would have cost at the prices of the time at least \$480.42. The G. T. M.'s service in specifying the right belt for the service represents a saving of \$480.42 minus \$36.04, or \$444.38.

The belt has also reduced slippage and take-ups to a minimum never before attained on that countershaft drive. Not only does it save money, but it saves trouble and prevents interruptions formerly customary.

If you have a belt-devouring drive that is eating too many dollars, ask a G. T. M. to call. He'll do it without charge when next he is in your vicinity. There are many of them—all trained in the Goodyear Technical School—all with experience in plants similar to yours—all selling belts to meet conditions and not as a grocer sells sugar. The G. T. M.'s services are free simply because the savings they effect for purchasers are so considerable that a gratifying volume of business from the plants served is certain to come to us within a few years.

THE GOODYEAR TIRE & RUBBER COMPANY AKRON, OHIO



PAPER-MAKING MATERIALS OF THE PHILIPPINES

(Continued from page 32.)

clsewhere on this point. The cost of erecting the works, moreover, far exceeded the estimates. The business was carried on for about five years, and information on many points recorded, but then funds ran out, and just as there seemed some prospect of the concern paying, work had to be stopped for want of money.

"This was very unfortunate, for the experts all agreed that for strength and durability, the paper made from the Ochlandra was superior to the best esparto. For cotton-mill wrappers and purposes for which strength is a desideratum, this material stands unrivaled."

Bamboo Pulp Makes Good Blend with Sulphite Wood Pulp

In 1904 C. D. Eleman, a noted advocate of the sulphite pulp process and a prominent figure in the paper industry in Europe, called attention to the special fitness of bamboo fiber for blending with sulphite wood pulp to improve the quality and to remove the woody appearance of that pulp. For this purpose the length of fiber and the softness and whiteness of the bamboo pulp are equal to those found in the best cotton pulp. Concerning the economic phase of the use of bamboo, Ekman says:

"Bamboo could not be transported to Europe at a profit, but would have to be pulped where it grows. Every species of bamboo is not equally suited for pulp making. The pulp is generally difficult to bleach and requires a large proportion of bleaching powder. Some species can be bleached a good white with 10 per cent. of bleach, while others treated in the same way give a poor color with even 25 per cent. of bleach. Only full-grown culms can be treated economically."

Causes of Failure of Indian Experimenters

Mr. Richmond expresses the opinion that the failure of the early experiments with bamboo as a paper material was due to lack of data to guide the experimenters. For example, it was the belief of some of the early English experimenters with the material, that only the young shoots collected before the plant had arrived at maturity would serve for paper making. The mature culms were supposed to contain too much silicious matter. Most of the objections to bamboo as a paper material were based upon this assumption. The difficulty of obtaining enough young shoots at a sufficiently low cost naturally put the success of the proposed industry out of the question. Especially was this so when it was discovered that the gathering of the young shoots was fatal to the parent stock and threatened to wipe out entire bamboo forests, while the cost of transporting the young shoots to the mill from the jungle would be such as to make their use impossible. On the other hand, it was found that the cutting of full grown culms did not injure the parent plant any more than the mowing of grass injures the grass roots.

Experiments with Philippine Bamboos

In view of the fact that the only practical attempt made to manufacture paper from bamboo was that in which elephant grass was employed in British Burma, investigators in the Philippines determined to experiment with two or more varieties of bamboo, in order to ascertain whether all varieties would give the same results. Accordingly, the two most important and widely distributed Philippine bamboos were chosen. These are the common, thick-walled variety (Bambusa blumeana), and the thinwalled, dwarf bamboo, also known as caña bojo of the genus Schizostachyum.

The thick-walled variety is that commonly employed for building purposes throughout the islands. It is planted as a crop slong the river bottoms of the Pampangan plain, on Luzon, and in other sections of the Philippines as well. Propagated from cuttings, the plants are set out in rows from 60 to 90 centimeters apart. Marketable culms are produced in from one to two years. The caña bojo, or dwarf bamboo, is that employed throughout the Philippines for the manufacture of woven products used for furnishing the interiors of nipa houses and for other purposes, such as the sauale, quisame and amatong. The caña bojo is found almost entirely within the forested regions of the country and is a veritable forest pest. It is never cultivated, but is cut without restraint in the forest regions to prevent its deleterious effect on forest growth. H. N. Whitford, formerly of the Bureau of Science, says of this variety of bamboo, in an article on the vegetation of the Lamao Forest Reserves (Phil. Journ. Sci., 1906, 1, 386):

"The species called 'bojo,' probably Bambusa lumanpao, is the characteristic form. Clumps composed of 15 or 20 culms, . . . and 12 to 18 meters in height, are, on on average, set at a distance of from 3 to 4 meters apart, not infrequently growing so close together that it would be found difficult to wedge one's way between the individual colonies."

Per Acres Pulp Yield of Caña Bojo-Estimated Cost

In the Province of Bataan, just across the bay from Manila, there are two contiguous areas of caña bojo, one of them containing 1,200 hectares (1 hectare = 2.47 acres), 800 hectares of which are covered with a dense stand of caña bojo. The other area includes about 650 hectares, of which over 40 per cent. is covered with this variety of bamboo. Small areas of caña bojo are found in the same Province along the Bamban, Buasao, Pinulot and Bacan rivers, in the basin of the Colo River, and in the basin of the Mababo or Balsic River. Some of these areas contain a higher percentage of timber trees than do others, and are, consequently, less thickly studded with bamboo. In an average stand of this variety of bamboo, there are about 9,000 culms to the hectare. An ordinary green cane weighs 7.2 kilos (1 kilo = 2.2 pounds), and an air-dried cane, without the nodes, weighs 3.75 kilos. A hectare would therefore produce about 33.75 metric tons (1 metric ton = 2.204 pounds) of dried material. Richmond calculated from his experiments that 2 metric tons of airdried material would produce about one short ton of pulp. The yield of pulp would, therefore, be approximately 17 tons to the hectare, or nearly 8 tons to the acre.

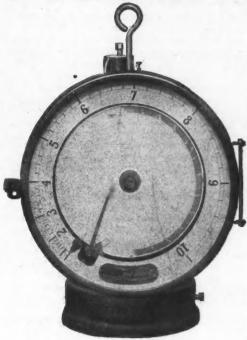
By actual experiment Richmond determined that one-tenth of a hectare near Lamay, in Bataan Province, planted to caña bojo, yielded 4 metric tons of air-dry paper material free from nodes. This weight of material represented about 1,075 stems of bamboo.

The average market price of bamboo stems in Orani, Bataan, at the time the experiments were made (1910) was \$5 per thousand, and prices are practically the same today. Reckoning at this rate, the cost of enough bamboo to make a ton of pulp would be \$1.25. Presumably, were the land owned or leased by the factory for the purpose of producing bamboo for the mill on a large scale the cost per thousand could be materially reduced.

Areas of Bamboo Available

In order to make a general survey of the supply of bamboo for paper making in that region, Mr. Richmond, in 1909, traveled extensively over the trails of Bataan Province and found several areas of bamboo within three or four miles of the sea coast, each of sufficient extent to supply a mill of 20 tons daily output for an indefinite time, taking into account the new growth after each cutting. Each of these areas is located near a stream of good water, with an abundance of wood for fuel close by. Those areas of bamboo are still untouched. Moreover, cafia bojo is very easily propagated. It is calculated that one person can plant in a day 400 prepared tubes, or prepare from 10,000 to 12,000 such tubes daily, provided the growing areas are reasonably close together.

(Continued on page 36.)



G.E. Indicating-Recording Flow Meter

80 Pulp and Paper Mills G-E Steam Flow Meters

These meters have been installed to assist and check the firemen and to prevent wasteful uses of steam. G-E Flow Meters are simple and require only a reasonable amount of attention to secure satisfactory results.

G - E Flow Meter Specialists will assist you gladly in determining the best equipment for your conditions. Write our nearest office for Bulletin 46501B on "Feed Water Meters" and the Booklet "A Guide to Boiler Economy."

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Chattanooga, Tenn. Chicago, Ill. *Southwest General Electric Company. For CANADIAN BUSINESS refer to Canadian General Electric Company, Ltd., Toronto, Ont. GENERAL FOREIGN SALE. OFFICES: Schenectady, N. Y.; 120 Broadway, New York City; 83 Cannon St., London, E. C., England.

Recent Incorporations

BAYOR PAPER COMPANY, Delaware. Capital, \$150,000. Incorporators: M. M. Lusey, L. N. Jennings, E. V. Darlington of Wilmington.

ELAM PAPER COMPANY, Marion, Indiana. Capital, \$150,000.
Paper products. Directors: S. L. Elam, John H. Schaumleffel,

D. L. Keen.

Peter Houschild & Sons, Inc., 354 Broadway, Long Branch, New York. Manufacture paper and cardboard products. Capital \$25,000.

Pfingst & Rand, Brooklyn, New York. Embroidery paper. Capital, \$5,000. S. Pfingst, J. Rand, R. G. Peters, 62 Rutland Road, Brooklyn.

EAGLE WOOL STOCK COMPANY, INC., Brooklyn, New York. Capital, \$5,600. Incorporators: Benjamin Cohen, 506 Pitkin avenue; Max Ostrinsky, 536 Hinsdale street, Brooklyn; I. Wladinersky. Bronx.

AMERICAN PAPER PRODUCTS COMPANY, Delaware. Capital, \$500,000. Incorporators: M. L. Rogers, T. A. Irwin, W. G.

Singer of Wilmington.

SHEPHERD PAPER COMPANY, Rochester, New York; 250 shares preferred stock, \$100 each; 300 shares common stock, no par value; active capital, \$28,000. Incorporators: M. M. Shepherd, R. B. Griffith, G. V. Holton, Rochester.

JAMES E. GLEDHILL & SONS, INC., Cohoes, New York. Manufacture wall papers. Capital, \$250,000. Incorporators: J. E. Gledhill, 43 West 94th street; J. H. Gledhill, 175 West 109th street, and W. R. Gledhill, 465 West 152d street, New York City.

THE RAINBOW PAPER MILLS COMPANY, Windsor, Connecticut, to engage in the general paper manufacturing business. Incorportors: William Liebman of Boston, Mass., P. E. Haskevitch of Melrose, Mass., David E. Greenberg, F. Bert Oldham and Francis E. Jones of Hartford.

PHILIPPINE PAPER MATERIALS (Continued from page 34.)

It is estimated by Richmond that a tract of 1,000 hectares of bamboo would supply a 20-ton mill for a period of three years of 300 working days each, taking no account of the new growth during this period. It is calculated that 1,000 hectares could be made to supply a mill of the above capacity for an indefinite period by careful rotation in the cutting. With the mill located near the centre of such an area, the matter of transportation of the bamboo to the mill would be placed upon a very practical basis, as the area would have a radius of but little over a mile.

Superiority of Caña Bojo for Pulp Making

The experiments made by Mr. Richmond developed the following important facts in respect to bamboo as a paper-making material:

1. The dwarf bamboo (caña bojo) is better than the variety used for building purposes, in that it yields more unbleached pulp and requires less of the bleaching agent to give the best results. The structural bamboo requires from 20 to 25 per cent. of bleach to give but poor results, but a satisfactory white is obtained from dwarf bamboo with from 10 to 20 per cent. of bleach. This compares well with the results obtained from straws of various kinds.

2. A well-digested pulp is obtained from bamboo by the use of from 10 to 20 per cent. of caustic soda, calculated on the

gross weight of the stems.

3. The time required for digestion, the pressure, and the temperature employed are materially less than those required in making pulp from soft woods by the same process. In fact, in these particulars, bamboo compares favorably with straw and similar materials.

4. Both the sulphite and soda processes may be employed in working up caña bojo. By the former process fully 50 per cent. of unbleached pulp may be obtained, and that with the use of much less sulphur than is necessary for the making of wood pulp. By the latter process 43 to 45 per cent. of air-dry, unbleached soda pulp is obtained. The use of caustic soda is recommended for bamboo because of certain difficulties to be overcome in the use of the sulphite process. The results described were obtained by the use of caustic soda under the following conditions: (a) Upright cylindrical stationary digesters; (b) direct live-steam heat; (c) 15 to 20 per cent. of 76 per cent. caustic soda, calculated on the air-dry weight of the raw material; (d) a duration of cooking of from 4 to 6 hours; (e) a maximum temperature 160° C. (320° F.) corresponding to a steam pressure of 45 kilos.

Qualities and Uses of Bamboo Pulp

5. Pulp obtained by the sulphite process is not light enough in color to be mixed with mechanical wood pulp in the manufacture of news print paper. It is, however, entirely suited, in point of color, for use as a wrapping paper, but is too valuable, by reason of its fiber, to be used for wrapping paper or for the making of newspaper stock. The strength of bamboo fiber makes it especially adapted to the manufacture of book paper and certain grades of writing and lithographic papers. For these purposes it may be used alone or mixed with rag or sulphite wood pulp.

6. If the bamboo pulp is to be used in the making of book and lithographic papers, the soda process should be employed in its manufacture, because bulk, softness and opacity are the chief features of soda pulp. This pulp bleaches to an excellent white with from 12 to 15 per cent. of bleaching powder. The resulting sheet is more bulky than that from wood pulp, and possesses a strong fiber 2.5 to 3 millimeters in length—longer and narrower than spruce fibers—and of good felting capacity. In the words of the Bureau of Science: "The fiber possesses the requisite length, strength and felting capacity to meet the paper maker's demands, and the quantity of resistant cellulose per unit weight of raw material is sufficient to warrant its extraction."

(To be continued.)

B. D. Rising Paper Co. Elects Officers

HOUSATONIC, Mass., July 29, 1919.—The annual meeting of the stockholders of the B. D. Rising Paper Company was held at Housatonic, July 28, and the following officers elected:

President, Charles McKernon; vice-president and treasurer, W. J. Raybold; vice-president, R. O. Harper; manager of sales, H. H. Reynolds; secretary, R. B. Rising.

The directors are: Chas. McKernon, W. J. Raybold, R. O. Harper, O. A. Miller, R. B. Rising.

Upson Co. to Build New Plant

Boston, Mass., July 25, 1919.—The Upson Company of Lockport, N. Y., manufacturer of wall board, has let a contract for a new mill, consisting of beater room, machine room, engine room, boiler room and roll paper stock room, to the Aberthaw Construction Company of this city.

The new plant is of reinforced concrete and will cost between \$250,000 and \$300,000. Work is to commence immediately and

be pushed as rapidly as possible.

Burnside Paper Co. Incorporates

NEENAH, July 28, 1919.—Articles of incorporation of the Burnside Paper Company, a new project here, have been filed. The company is incorporated at \$50,000 and will conduct a wholesale paper jobbing business here.

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HOWARDBOND

WATERMARKED

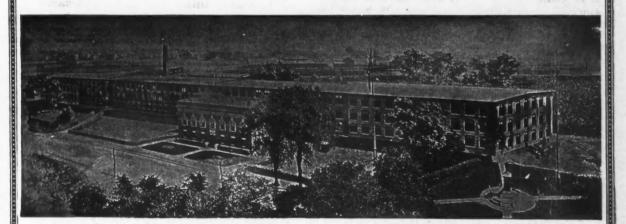
Color Brilliant

: Strength Wonderful

THE HOWARD PAPER CO.

URBANA, OHIO

F. C. HUYCK & SONS ALBANY, N. Y.



Manufacturers of Kenwood Felts and Jackets for all kinds of Paper and Pulp Seamless Felts both for high speed machines and fine papers

PLAN TO ELIMINATE INDUSTRIAL STRIFE

To what extent the readjustment of working conditions in the industries of the United States is giving the workers a voice in management at the moment is difficult to determine. The effort to democratize the industries is making steady progress, but so far results are not conclusive.

Studying Problems of Wealth Distribution

The National Association of Corporation Schools, with headquarters in New York City, which is studying the problem of a more equitable distribution of created wealth, through industrial pursuits, and also attempting to eliminate present wastes, due to lockouts, strikes and other forms of industrial strife, through scientific employment, training of the industrial workers and other personnel problems, and in which some 133 of the larger industrial institutions of the United States have membership, advises that a recent inquiry among several hundred industrial corporations reveals that there are three plans that are being used, all designed to give employees more voice in management, especially as relates to working conditions, hours and wages. The results of the inquiry indicate that a considerable majority of the larger industrial institutions have either inaugurated some one of the three plans or are studying the various plans and gathering data on results so far obtained, with a view to determining which of the plans they will inaugurate. The plans are known as the "Works' Committee" plan, the "Industrial Council" plan and the "House and Senate" plan. The purpose of the three plans are practically the same, but the method of operation differs. So far as known, none of these plans involve direct representation on the part of the workers on the board of directors. However, it is anticipated, if it is found as a result of experiments, that employees assume the responsibility, which logically they must assume if they are to have a continuing voice in management, that ultimately employees will be permitted to name a minority representation upon the board. Such action probably will occur only in industrial institutions where a considerable number of employees are stockholders, and the representation which they secure upon the board of directors will be dependent upon the amount of shares of stock represented by the employees who have a right to vote for such representation.

Immediate Result Selfish

In one of the largest industrial institutions, where the "industrial council" plan has been made effective, the immediate result was a request on the part of the employees' representatives in the industrial council for an increase in wages and shorter working hours. This was followed by an avalanche of requests from individual employees for increases in wages. When it was pointed out to the representatives of the employees by the members of the industrial council representing the stockholders and management, that such action would necessarily involve an increase in the cost of the product of the company, and that this increase would bring the selling price of the company's product to figure considerably higher than the selling price of their competitors, the request for shorter hours and increased wages was temporarily, at least, withdrawn. In other words, the immediate results of giving a voice to employees through delegated representatives were wholly selfish and not based upon investigation as to conditions, and were made without any assumption of responsibility whatsoever.

Introduction of Plans Followed by Strikes

In at least three large industrial institutions where some one of three plans has been introduced, strikes have followed within a period of one month. In other companies the plans have worked well, although the period of trial is of too short duration to admit of any conclusions as to what will be the final results and as to what definite attitude the representatives of

employees may ultimately take. The assumption may be safely made, however, that employees of industrial corporations will continue to demand a voice in those problems of management which affect wages, working conditions and hours of labor. Whether or not the representatives of the workers in industrial councils will assume a fair portion of responsibility remains to be determined. So long as shorter hours and higher wages can be secured through strikes, it is probable that the new cooperative plans will make slow progress, but when the time arrives, as it inevitably must arrive, that strikes are no longer successful, and when the public will demand to be heard in the settlement of wage disputes, it is believed that more constructive progress can be made in the working out of cooperative management, and that the workers will then assume a more definite responsibility for production. It is obvious that responsibility must be assumed by the workers if the industries of the United States are to be placed upon a more democratic or cooperative basis. Efforts to introduce better training systems and more scientific employment methods are meeting with no opposition and are progressing steadily. Also, efforts to encourage thrift (to include home owning), group insurance and sick and death benefit features are meeting with encouragement,

Stock Ownership for Employees

The survey also disclosed that plans to insure stock ownership by employees in the company by which they are employed are rapidly becoming installed, the number of companies now installing this feature, being far in excess of the number that were working on similar plans prior to the reconstruction period. Stock ownership plans almost invariably include provision for service annuities or retirement pensions.

The belief expressed by Judge Gary, chairman of the United States Steel Corporation, that efforts to unionize the employees of the various subsidiary companies of that corporation, would not succeed because the men realize they are better off under "open shop" conditions than they would be under the control of unions, is assumed, by many other industrial executives. In fact, the present effort is not only to secure employee or cooperative effort in management, with proportionate responsibility, but also to provide conditions whereby the workers of the large industrial institutions will receive a greater degree of advantage than would be possible under the unions' control and direction.

The crux of the situation seems to be acceptance of responsibility by the representatives of the workers for greater output commensurate with shorter hours and higher wages.

Guy Tombs Goes with Canadian Export Co.

Mr. Guy Tombs, who is perhaps the best known railway man in Eastern Canada, with an office at Montreal, has resigned his position as assistant freight traffic manager of the Canadian Northern Railway to become manager of transportation for the group of paper companies operating the Canadian Export Paper Company and allied interests.

Mr. Tombs has been the backbone of the railway, and as a traffic manager is without many equals. He is, too, one of the best liked men in Montreal.

"I have always been greatly interested," he said, "in the development of our export, and consider Canada's paper and pulp interests at the present time as a great rock in a weary land. On several previous occasions I have withstood tempting offers to leave the railway, but this last is too flattering."

He "grew up," as it were, with the old C. N. R., and since the line passed into the hands of the Canadian Government a few months ago there has been a constant impression that Mr. Tombs would seek new fields of employment.

GOODRICH

RUBBER GOODS for the PAPER MILL INDUSTRY

NOTICE the CONSTRUCTION of this DECKLE STRAP

There's the fabric in the center, equi-distant from every side, perpendicular to none-

YOU CAN USE ALL FOUR SIDES OF A GOODRICH DECKLE STRAP

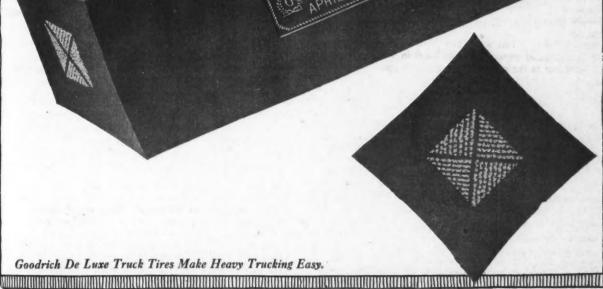
No expensive regrinding as with the old two-sided strap. Our strap is a better one, it runs smoothly, it is flexible, it wears remarkably.

This is typical of the care we have taken in designing and making Paper Mill Supplies. Goodrich Hose for every purpose, Goodrich Transmission Belts, Rubber covered rolls, Pump valves, Screen disphragms, etc., have cut down costs in scores of Paper Mills—

and they'll do it in yours. Send for our special Paper Mill catalog and investigate.

THE B. F. GOODRICH RUBBER CO.

The City of Goodrich— AKRON, OHIO



Goodrich De Luxe Truck Tires Make Heavy Trucking Easy.

Editorial

Vol. LXIX. New York, Thursday, July 31, 1919 No. 5
FORTY-EIGHTH YEAR

Baper Men Want Stable Market

The views which are now being expressed by paper dealers throughout the country, to the effect that paper will soon be scarcer and higher in price, should not be misconstrued by consumers. While it is the aim of these dealers to get consumers to buy at the present time, it is not their purpose to create an unhealthy demand by getting purchasers to buy excessive quantities of paper. That is, though they are not averse to having the users of paper lay in a supply that will last them for two or three months, they are decidedly opposed to having consumers lay in a stock to last them for from six months or a year.

Should a heavy buying movement be started at the present time, it would greatly interfere with the plans which are now being laid to get business on a more stable basis. An unnatural demand might send prices to dangerously high levels, and after all consumers had stocked their warehouses with paper enough to last them for a long period, the market rould again slump, as it did immediately after the signing of the armistice. This would mean that manufacturers and jobbers would have to regulate their business so as to make enough profit during the buying period to tide them over the dull periods which would follow. It would also mean the consumers would have to pay higher prices without any just cause.

The idea foremost in the minds of all paper merchants at the present time is to create a steady demand for all grades of paper at all times. As soon as the market is placed on this basis, prices will become stable, and the consumer will be able to obtain paper when he wants it. Therefore, though, it is wise to buy now, the buyer should make his purchases conservatively.

Foreign Paper Trade Growing

The exports of paper and manufactures of paper continue to show a good increase. The figures far May just published in the "Monthly Summary of Foreign Commerce of the United States," and the most recent available show a gain of almost a million dollars as compared with April. The exports for May amounted to \$8,048,531 as against \$7,173,835 for April. The figures for the eleven months ending with May amounted to \$76,181,609 as compared with \$45,450,675 for the same period in 1918 and \$39,040,497 in 1917.

The exports of news print paper for May as compared with April more than doubled. The figures for the former month amounted to \$1,537,274 as compared with \$758,447 for the latter. The exports of news print for the eleven months ending with May amounted to \$9,838,053 as compared with \$8,338,395 for the same period in 1918 and \$4,076,576 in 1917.

The exports of wrapping papers which have been increasing pretty constantly showed a slight decline, the figures for May

being \$534,031 as compared with \$595,522 for April. The exports of wrapping paper for the eleven months ending with May amounted to \$6,065,688 as against \$4,140,309 for the same period in 1918 and \$3,449,260 in 1917.

The exports of writing paper and envelopes for May as compared with April showed a considerable gain. The figures for the former month were \$1,288,732, as against \$1,161,139 for the latter. The exports of writing paper and envelopes for the eleven months ending with May, however, continued to show a big increase over former years. The figures until the end of May for the current year amounted to \$12,238,482 as compared with \$4,067,937 for the same period in 1918 and \$2,856,870 in 1917.

The exports of paper board and strawboard showed a gain of about twenty-five per cent for May as compared with April. The figures for May amounted to \$527,351 as compared with \$420,417 for April. The foreign sales of these commodities for the eleven months ending with May amounted to \$4,370,817 as compared with \$2,176,807 for the same period in 1918 and \$1,877,777 in 1917.

The exports of tissue and toilet paper, as has been the case recently, continued to show a good increase during May. The figures for the month amounted to \$142,221 as compared with \$105,271 for April. The exports of tissue and toilet paper for the eleven months ending with May amounted to \$1,880,930 as compared with \$814,590 for the same period in 1918.

The import of paper and the manufactures of paper also continued to show a fair increase for May as compared with April. The figures for the former month amounted to \$4,335,241 as compared with \$3,987,294 for the latter. The imports of paper and the manufactures of paper for the eleven months ending with May amounted to \$42,137,516 as compared with \$39,244,113 for the same period in 1918 and \$31,110,648 in 1917.

A big increase was shown in the imports of printing paper valued at not above 5 cents per pound, the figures for May being \$3,661,649 as compared with \$3,060,366. The imports of this commodity for the eleven months' period ending with May amounted to \$34,905,206 as compared with \$31,172,036 for the same period in 1918 and \$20,983,039 in 1917.

The import of wood pulp also showed a big increase. The imports of chemical pulp for May amounted to \$1,513,993 as compared with \$928,683 for April. The imports of chemical pulp for the eleven months ending with May amounted to \$21,-469,965 as compared with \$20,633,231 for the same period in 1918 and \$27,409,047 in 1917. The imports of mechanically ground wood pulp for May amounted to \$341,840 as compared with \$249,072 for April. The import of ground wood for the eleven months ending with May amounted to \$4,116,658 as compared with \$5,741,909 for the same period in 1918 and \$6,081,278 in 1917.

America Using Wrong Tools

"Keep the World War Won," and prepare for the victories of peace, is the plea issued by the World Trade Club of San Francisco in its campaign for world-wide adoption of metric units of weight and measure.

"The United States is using the wrong tools for carrying on world trade," says John H. Gerrie, financial editor of the San Francisco Bulletin and editor of Pan-Pacific Magazine. He points out that all nations except the United States and Britannia use the metric system exclusively, and that if we are to trade with South America and the Orient we, too, must adopt this simple, logical system. This view has been expressed by Secretary of Commerce William C. Redfield, and Director S. W. Stratton, of the Bureau of Weights and Measures.

Program for Industrial Conference

[FROM OUR REGULAR CORRESPONDENT.]

OTTAWA, Ont., July 28, 1919.—The following is the proposed program for the great national industrial conference which is to be held in Ottawa beginning September 11, and which is to be attended by representatives of the Dominion and Provincial governments, of municipalities, and by representative employers and labor leaders of trade and industry throughout Canada:

1. Consideration of the question of the desirability of unifying and co-ordinating the existing labor laws of the Dominion Parliament and of the provincial legislatures; and the consideration of any new labor laws which are deemed necessary.

2. Consideration of (a) employees' right to organize; (b) recognition of labor unions; (c) the right of employees to collective bargaining.

3. Consideration of (a) the recommendations of the Royal Commission on Industrial Relations in favor of the establishment of a bureau to promote the establishment and development of joint industrial councils; (b) the further recommendations of the Royal Commission on Industrial Relations regarding the establishment of joint plant and industrial councils.

4. Consideration of the recommendation of the Royal Commission on Industrial Relations respecting hours of labor.

5. Consideration of minimum wage laws.

6. Consideration of the recommendation of the Royal Commission on Industrial Relations that the findings of the commission be put into effect in all work controlled by the government where the principle of democratic management can be applied.

7. Consideration of resolutions relating to any other features of the Royal Commission on Industrial Relations.

8. Consideration of the labor features of the treaty of peace.

9. Consideration of any other proposals which may be introduced bearing on the relations of employers and employees.

To Make Paper Milk Bottles

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, July 28, 1919.—The Purpus Fibre Company was incorporated here this week by Hugo J. Purpus and associates for the manufacture of paper milk bottles, and so encouraging are the prospects of the new firm that it has been decided to apply at once for an increase in capital from \$25,000 to \$75,000.

The company is looking for a site upon which to erect a plant, or for a suitable building for the installation of machinery which already is available and ready for installation. In view of the fact that two machines for the manufacture of bottles have been completed, having been patented by Mr. Purpus, it seems probable that a building will be leased until plans for the construction of a factory are consummated and a suitable site chosen. Operations may start within the next thirty days, when the output will be 480,000 bottles per day. The demand for paper milk bottles appears to be increasing. Cafés and restaurants serve milk in bottles, principally, and even for household use the paper bottle is coming into its own.

The other incorporators are Frederick Kershey, A. G. Purpus, B. D. Gundliff and N. Purpus. A board of directors will be

chosen at a stockholders' meeting to be held later. Hugo Purpus being the owner of the machines, and the main incorporator, will doubtless be elected president of the company.

Richmond Paper Company Has New Hands

RICHMOND, Va., July 28, 1919.—The ownership of The Richmond Paper Company, Inc., is now in entirely new hands. The entire stock of the company was recently acquired by several prominent business men of Richmand. This company has for years served the entire Southern territory, and has made the name of Richmond well and favorably known in every Southern State.

At a meeting of the stockholders held on July 15 the following officers were elected:

B. W. Lipscomb, president; James J. Pollard, vice-president; Ernest C. Mead, secretary and treasurer and manager of sales.

All of the officers are financially interested in the company. B. W. Lipscomb has been connected with the company since 1905, and for several years past has served as its president.

James J. Pollard is vice-president of Pollard & Bagby, one of the most progressive real estate firms in the South.

Ernest C. Mead has been connected for the past seventeen years with the Baughman Stationery Company, printers and manufacturing stationers of Richmond, and as its assistant manager for a number of years has materially aided in the rapid growth and development of the company.

The Richmond Paper Company, Inc., under its present ownership, intends to develop and extend its field of service rapidly.

Knoxville to Have New Paper House

KNOXVILLE, Tenn., July 28, 1919.—The A. A. A. Paper Company, capitalized at \$25,000, has just been formed here. Those interested in the firm are all well known Knoxville business men, who have done business in this city for years past, and who have made an enviable reputation for themselves in their work. They are as follows: S. B. Luttrell, W. B. Sullins, S. P. Belsinger and Harry S. Hyman.

S. B. Luttrell will be at the head of the new firm. W. B. Sullins, who will be at the head of the fine paper division, sold out his interest in a prominent Knoxville firm on June 30. S. P. Belsinger, who will head the coarse-paper department, has been connected with the Atlanta Paper Company of Atlanta for a number of years. Mr. Sullins has been connected with the paper business in Knoxville for about ten years.

Officials of the new firm state that they expect to make it one of the largest wholesale paper concerns in this section of the country.

EDWIN BUTTERWORTH & CO.

Packers of all kinds of

PAPER STOCK, COTTON WASTE AND GUNNY BAGGING, BUFFALO SIZING, Etc. 83 Sole Agents HAFSLUND

BLEACHED SULPHITE PULP — BEAR BRAND
Boston Office, 136 Federal St.
CHARLES H. WOOD, Sr. U. S. Mgr.
LEWIS JENNINGS. Manager

"WATERBURY"



OUR TIGHT FITTING, DIAMOND "W" JACKETS
WILL NOT LICK UP AT ANY SPEED

1869 {MADE ONLY AND } 1918
H. WATERBURY AND SONS COMPANY, ORISKANY, N. 7.

MARKET ON PACIFIC COAST IS STRONG AND ADVANCING

Demand in Past Thirty Days Has Shown a Decided Improvement and Prices Have Advanced All Along the Line— Practically All the Mills Are Well Supplied With Orders and Are Not Anxious to Take on New Business Under Present Conditions—Crown Willamette Paper Co. Reports Shortage of Ground Wood Along the Coast as Result of Low Water—Fair Shipments from the East.

[FROM OUR REGULAR CORRESPONDENT.]

SAN FRANCISCO, July 24, 1919.—The paper market is very strong and advancing. During the past thirty days there has been a decided improvement in demand and prices have advanced all along the line. Newspaper is strong at the advanced prices. Wrappings are in good demand at the recent advance of about one-quarter of a cent.

Practically all of the paper mills on the Pacific Coast are well supplied with orders and have increased their production. They are not anxious to take on much new business under present conditions. The fruit paper business is booming, with big crops to be taken care of, and the Coast mills have to turn this product out without delay, even if it restricts the output of other papers.

The Oriental freight situation is rather mixed, as the United States Shipping Board has announced an advance in rates from \$14 to \$18 a ton. This interferes with the plans of Pacific Coast exporters who had been figuring on shipments at the lower rate. On the other hand, the Java-China-Japan Line has reduced its rate from \$20 to \$14 a ton from San Francisco to Java. The vessels of this line are sometimes diverted to Japan ports. The supply of ocean tonnage has not materially improved.

The export trade is looking up in some respects. Japan is again buying paper of all kinds and fair shipments have been made of late, although the volume of business is not as heavy as could be desired. There is not much new business with Australia, as they have pretty good stocks of paper. Inquiries are light, according to San Francisco exporters. South American business is comparatively light. But there is talk of putting on a new line of steamers from San Francisco and other Pacific Coast ports to operate through the Panama Canal to the East Coast of South America. This will open up additional Latin-American countries as a market for newspaper manufactured on the Pacific Coast.

Fair Shipments from the East

Fair shipments of paper are coming in from the East, and, according to recent advices, the manufacturers are so loaded up with business that jobbers can get only a limited amount of mill tonnage. There seems to be a repetition of what occurred a year and a half ago, when everybody held off until stocks became de-

pleted and they had to buy in a rush.

A local paperman says that the Pacific Coast mills have had the same experience as the Eastern plants in the way of a rapid increase in volume of business. The jobbers who had been holding off for some time, began sending in orders. This loaded up the mills and resulted in advances in prices. Eastern buyers, in many cases, are ordering considerably in excess of their needs to provide for the future, which means that the advanced prices will continue. Comparatively little Eastern paper is coming here for export under present conditions. Probably, not more than twelve cars have been exported during the past thirty days.

Crown Willamette Paper Co. Busy

The management of the Crown Willamette Paper Company report a shortage of ground wood pulp along the Coast as a result of low water in the rivers in Oregon and Washington. Although

the situation is not as bad as last year, there is insufficient water power. All of the company's mills are running full. News is being produced in good quantities at Oregon City. This is the height of the fruit season and two paper machines are running on fruit paper at Camas, Wash. The plant at Floriston, Cal., is busy, with two machines running on fruit paper. There is a fair supply of labor at the mills. The big plant of the Pacific Mills, Ltd., at Ocean Falls, B. C., is in full operation. A part of the news produced there is being shipped to the American side. A fine quality of kraft paper is being produced and the output is shipped to the Canadian and the United States market.

Pacific Coast Paper Co. Active

Thomas H. Doane, manager of the Pacific Coast Paper Company, reports a fair demand for the J. W. Butler Paper Company's lines and those of the S. D. Warren Company, Cumberland, Me. Reasonable stocks are on hand. Prices have not increased materially here The heads of the Pacific Coast Paper Company here have been enjoying a visit from the following Chicago officials: Frank O. Butler, president of the J. W. Butler Paper Company, F. Y. Norris, president of the Pacific Coast Paper Company, and Paul Butler, of the J. W. Butler Paper Company, who is also a director in the Pacific Coast Paper Company. They reported everything very bright in Chicago. They found things in the West pretty fair.

A Pessimistic View

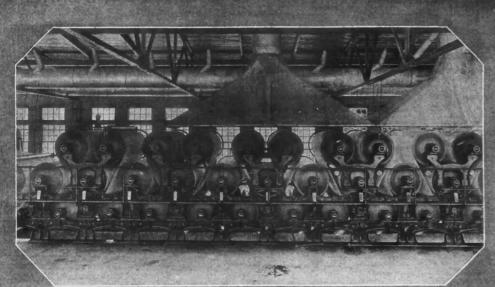
An official of one of the San Francisco jobbing houses takes a rather pessimistic view of the situation here. While during the war Eastern goods in the lines of wrappings, paper bags, envelopes, etc., were largely kept out of the Pacific Coast market by the conditions then prevailing, the situation this year is greatly changed. He states that the Pacific Coast is now overrun with Eastern competition on nearly all lines. There are about seventeen Eastern jobbing houses operating on this Coast, and in many cases they are selling goods at lower prices than in their own territory. They seem to forget that the entire State of California has less population than the city of Chicago and thus they are hurting the market. If they would play the game fairly, as some of the local houses do, there would not be such fluctuations in prices as have prevailed this year.

Zellerbach Paper Co. to Export Direct

The Zellerbach Paper Company has sent out notices to the trade stating that it has severed all connections with former agents or export representatives and will hereafter transact its export business through its own representatives, or through specially-appointed local agents. A representative of the Zellerbach Paper Company says: "Inasmuch as we operate mills and factories and have formed a direct connection with Eastern mills which export products, we have concluded to handle all of our export business in the name of our company through our direct representatives, except, in a few isolated cases, through duly-appointed local agents. We are enlarging our foreign business organization. We are taking special pains to pack our paper and paper products according to the desires of the importers. The foreign representatives of the company will carry out its policy, which is to hold customers by giving satisfaction and service, instead of having to keep hunting up new customers. A great variety of goods is handled, from fine paper, news and wrappings to fiber shipping cases. The Oriental export business is growing. Recent statistics show that Japan's imports of paper and paper products from the United States, during the first four months of this year, amounted to 5,000,000 yen, as compared with 1,000,000 yen for the same period of 1918."

Cascade Paper Co. Operating at Full Capacity

The Cascade Paper Company, of Tacoma, Wash., is operating its mill at full capacity. The management contemplate increasing (Continued on page 48.)





¶Better cutting edges for every paper mill need. They go a long way toward that wanted increase in production.

¶And DOWD makes these better cutting edges and makes each one especially for the particular work it is to do.

¶ It's this DOWD experience—plus scientific methods of manufacture that makes Paper Mills specify DOWD products for the most important work.

Roll bars and bed plates of every description. Barker, Chipper, Paper, Rag Knives, etc., etc., have been made for Paper Mills by DOWD of Beloit for more than seventy years.

R.J. Dowd Knife Works

Makers of better cutting knives since 1847

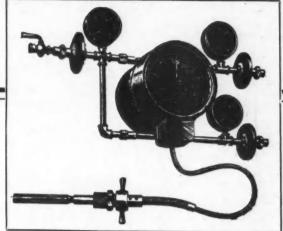
Beloit, Wis.

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

For the Month Ending May 31, 1919, and for the Eleven Months Ending May 31, 1919, as Compared with Corresponding Months of Three Previous Years.

			IMPORT	S-PAPER						
		W	lay			Flex	en Months	Ended May	31-	
PAPER AND MANUPACTURES OF.	Quantity.	8. Value.	Quantity.	9. Value.	Quantity.	7. Value.	Quantity.	8. Value.	Quantity.	Value.
Books and other Printed Matter {Free Dut. Decalcomania paper, not printedfree	*********	\$215,841 84,710 15,409		\$241,320 71,871 11,978		\$3,568,363 1,363,047 126,680	× ====================================	\$1,965,020 1.091,020 121,395		\$2,248,642 870,872 136,391
Lithographic Labels and Prints (except Post Cards) Dut. Paper Hangings Dut. Photographic Dut. PRINTING PAPERS FOR BOOKS AND NEWS- PAPERS.		14,391 28,326 7,504	11,681	19,335 1,415 1,658	**************************************	345,852 268,518 578,305		231,013 168,536 425,591	138,250	190,596 71,153 173,875
Valued at not above 5 cents per pound, Bibs. Free All other bbs. Dut. Post Cards, Souvenir Dut. Pulp board, in rolls, not laminated. bbs. Dut.	117,077,271 73,148	3,385,187 7,571 1,179	105,605,848 2,325	8,061,649 1,308 1,027	889,213,168 769,610	20,963,039 81,419 34,237	1,009,171,870 277,652	31,172,036 41,015 40,221	1,098,204,818 110,357 74,174,137	34,905,206 50,605 27,785 1,801,504
Wrapping	510,771	665 23,734 368,108	8,215,707 8,419 101,870	202,660 5,531 8,772 106,222	489,927 6,174,588	83,723 366,100 3,316,365	378,060 4,970,085	84,806 299,511 3,603,649	205,908 5,926,622	54,290 473,529 1,133,559
Total Paper, and Manufactures of	********	\$4,152,215		\$4,335,241		\$31,110,648		\$39,244,113		\$42,137,516
			CRUDE P	APER STO	CK.					
Rags, other than WoolenlbsFree All other kinds of paper stocklbsFree	112,454	85,165 906,991	2,822,076 6,553,806	\$85,071 160,462	43,196,703	\$1,131,040 3,872,218	19,821,982	\$474,491 2,642,164	5,351,629 82,802,062	\$243,929 2,598,980
Total		\$205,966		\$245,538		\$5,003,258		\$3,116,655		\$2,842,900
			woo	D PULP.					25	
Mechanically groundtonsFree	16,781	\$467,500	13,596	8341,840	240,909	86.081.278	176,198	85,741,909	151,127	\$4,116,658
Imported from— Canada Other countries	16,781	\$467,500	13,506	\$341,840	228,444 12,465	\$5,689,868 391,410	164,724 11,469	\$5,417,497 324,412	150,240	\$4,100,919 15,730
Chemical— Unbleached Sulphatetons.Free Sulphitetons.Free	11,187 22,976	\$761,002 1,657,427	6,904 11,896	\$479,051 1,034,942	93,515 253,262		91,182 167,568	\$7,744,721 12,888,510	91,681	\$8,949,364 14,520,600
Totaltons	84,163	\$2,418,429	18,800	\$1,513,998	346,777	\$27,409,047	258,750	\$20,633,231	270,917	\$21,469,96
Imported from—U Norwa Sweden Canada Other countries	34,168	\$2,418,429	2,151 14,780 1,889	\$202,367 1,102,823 208,803	11,339 170,786 164,234 418	\$946,565 13,184,131 13,255,096 23,554	39,820	\$287,046 3,853,874 16,330,909 161,402	9,192 254,167	\$771,996 987,799 19,508,056 267,116
Bleached Sulphate	449	\$36,423	111 2,760	\$9,785 298,468	4,284 41,745	\$327,341 4,175,485	1,258 15,029	\$165,908 1,776,427		\$406,19 1,509,82
Totaltons		\$36,423	2,871	\$308,258	46,029	84,502,826	16,282	\$1,942,885	18,001	\$1,915,52
Imported from— Norway Sweden Canada Other countries	449	\$36,423	25 25 1,843 978	\$4,480 831 202,938 100,004	21,891 15,890 8,248	1,641,244	1,368	\$539,612 172,202 1,120,079 110,442	15,258	\$176,81 98,86 1,503,63 141,21
/	CHEMI	ICALS AN	D OTHER	PAPER M	AKERS' MAT	ERIALS.			-	-
Colors or DyesDut		\$163,027	150,026	\$278,529		\$2,873,138	3	\$2,265,08	1,759,614	\$2,545,20
Imported from— Germany Switzerland United Kingdom Other countries		\$71,179 82,151 9,607	125,046 19,271 5,709	\$249,153 27,006 2,368		\$463,050 1,748,578 479,781 181,724		\$3,04 1,456,02 546,54 259,46	5 1,109,531 7 579,988	1,892,8
Indigo, natural and syntheticlbsFree NaturallbsDut SyntheticlbsDut	22,471	\$434,580 11,500		\$16,055 28,214	587,412 1,010,700 794,817	1,982,111	2,008,808			
Alizarin and alizarin dyeslbs { Free Dut Lactarene, or Caseinlbs Free	814,110	95,076		1,635 472,268	32,491 8,300 11,068,068	17,846	9 29,323 5 12,111,42	7 1,762,29	2 5,937,07	742,9
Lime, Chlor, of. bls. Dut Magnesite, calcined, not purified. tons. Fre Potash, Hydrate ofbs. Fre Sulphur or Brimstone, crudetons. Fre China clay or kaolintons. Dut	1,925	98,818	787 454,620 67	1,678	. 65,564 3,801 67,051 11,794 176,407	156,16 1 30,25 1 205,46	8 8,02 9 11,78 8 28	2 439,40 2 4,39 2 8,67	13,58 8 454,69 7 7	572,7 0 115,0 1,8

(Continued on page 46.)









THE WITHAM SYSTEM of Automatic Temperature Control for paper machine dryers saves coal be-

cause it uses all the *exhaust* steam before it allows the live steam to enter and then *only* enough to supply the deficiency.

Moreover, the Witham System keeps the dryers at the proper temperature even when the machine must be temporarily stopped, whereas, other devices necessitate shutting off of the steam. This goes to waste through the exhaust head and an excessive amount of steam is required to again raise the cylinders to the proper temperature.

WITHAM SYSTEM

Of Automatic Temperature Control

The Witham System saves paper and thus increases production because no paper must be run onto the floor on account of its being too wet or too dry. Even a pick-up on the press will reach the calendar, nine times out of ten, when more than half the sheet is torn away because there is no weakening by overdrying.

THE WITHAM SYSTEM saves time because it automatically maintains a uniform temperature regardless of varying steam pressures or the moisture content of the paper—thus making it unnecessary for the operator to waste considerable time manipulating the hand valves.

Furthermore, due to the guaranteed automatic precision of the Witham System, snap-offs are prevented—thus saving additional time by avoiding the necessity of frequently stopping machines to unwind paper from the cylinders.

In addition to these economies which soon defray the initial cost of the Witham System, a uniform grade of product is obtained at a lower overhead cost.

Bulletin T-101 describes these self-paying advantages in detail.

G. S. WITHAM, Sr.

106 Main Street

Hudson Falls, N. Y.

PAPER AND PAPER STOCK IMPORTS AND EXPORTS OF THE UNITED STATES

(Continued from page 44.)

			PUL	P WOOD.						
			fay-			Elev	en Months	Ended May	31-	
PAPER AND MANUFACTURES OF.	Quantity.	8. Value.	Quantity.	Value.	Quantity.	7. Value.	Quantity.	Value.	Quantity.	Value.
Rough cords. Free Peeled cords. Free Rossed cords Free	14,024 134,172 5,976	\$116,768 1,260,671 61,422	12,219 49,774 8,539	\$107,811 491,078 39,249	192,333 578,782 145,997	\$1,164,270 3,861,338 1,156,720	185,088 655,423 123,577	\$1,434,473 6,213,756 1,456,738	283,923 905,037 116,944	\$2,614,015 8,762,263 1,425,857
Total Pulp Woodscords	154,172	\$1,438,861	65,532	\$638,138	917,112	\$6,182,328	964,088	\$9,104,967	1,805,904	\$12,802,185
-	-		EXPOR	TS-PAPER						
					1	1				-
Bags		\$76,828		\$163,954		\$1,162,452		\$1,032,705		\$1,101,744
Books, Music, Maps, Engravings, Etchings, Photographs and Other Printed Matter		1,005,285		1,382,447		9,230,788		10,501,003		12,941,906
		87,308 49,897		126,958		948,072 516,250		894,717 414,583		1,190,738 786,291
Carbon Paper Cash-register and adding-machine paper Paper Board, Strawboard, etc. Paper Hangings Playing Cards		10,140		67,776 5,321	***********			103,787		126,348
Paper Board, Strawboard, etc		286,010	*********	527,351 56,206		1,877,777 446,397		2,176,809 409,182		4,870,817 658,491
Playing Cards		67,652 50,036		140,870	*****	379,158		543,555		1,801,000
PRINTING PAPER— News Printlbs.	12,961,902	8527,672	35,194,346	\$1,587,274	133,111,254	\$4.076,576	197,159,854	\$6,338,396	226,566,329	\$0,838,060
Exported to-		,,							E4 010 F16	40 004 055
France United Kingdom Caanda	************		13,980,824 168,208	\$565,760 9,351	7,414,198	8201,685	8,274,378	\$468,690	54,219,716 1,321,864	\$2,204,956 67,408
Caanda	77,677	\$6,244	5,156	304	1,191,643	49,937	446,682	26,688	217,400	13,308
		16,699	90,404	5,980	7,322,228	321,218	8,104,804 18,013,205	339,231 646,254	3,409,797 15,543,379	161,532 645,177
Argentina	2,097,686 1,973,034	73,269 71,889	2,031,167 6,303,362	90,287 249,761	13,931,590 42,827,246	430,622 1,106,921	41,882,551	1,758,840	45,542,629	1,791,100
Chile	1,358,341	56,523	65,564	8,200	6,233,114 21,423,277	199,521	15,229,938	609,147	7,747,949	318,240
Other South America	1,834,790	71,966	8,354,625	361,029	21,423,277 10,124,468	831,049 229,996	33,308,347 17,583,573	1,447,005 786,774	44,390,631 22,220,474	1,955,920 925,612
Cuba Argentina Chile Other South America Australia Other countries	1,639,695 8,606,385	72,121 159,461	292,237 3,902,790	14,692 236,910	22,643,490	705,627	54,316,376	2,805,766	31,952,490	1,754,730
All otherlbs.	7,513,566	\$687,876	13,781,414	\$1,374,414	120,019,056	\$9,150,948	80,116,990	\$6,868,077	148,397,221	\$14,938,876
Exported to— United Kingdom Canada Mexico Cuba Argentina Brazil Chile Other South America					M 000 000	0450 001	1 850 004	01.40.000	400 000	400 400
United Kingdom	58,748	\$12,220	83,510	89,046	7,900,396 7,985,694	\$453,081 683,888	7,430,571	\$146,897 651,210	6,258,033	\$62,490 626,590
Mexico	856,430 149,282	62,665 12,540	571,199 600,865	61,270 59,194	7,120,098	600,125	7,439,571 8,129,283	250,255	3,588,818	814,71
Cuba	1,251,370	121,065	839,868	85,451	13,972,795	1,059,713	8,695,520	802,695	8,982,470	971,90
Argentina	823,583 806,733	69,280 68,106	1,125,359	106,786 168,453	20,017,754 12,048,488	1,529,125 1,047,231	7,898,371 9,074,917	691,533 768,060	16,896,242 14,735,359	1,807,32
Chile	381,667	27,297	1,718,011	55,675	6,542,469	496,836	4,110,030	361,779	7,042,971	773,34
Other South America	258,061	25,979	538,823	59,848	8,444,860	780,203	3,192,456	260,523	4,886,940	547,955
		56,246	1,083,831	104,141 115,706	2,400,717	160,918	9,066,459	771,981	5,626,221 26,705,027	463,147 2,782,420
Australia Other countries	734,885 1,354,705	406,914	1,178,416	153,894	15,621,439 17,964,346	966,265 1,423,563	11,638,854 14,120,665	971,362 1,189,514	25,926,377 27,286,487	2,847,356
		75,564	3,898,136	394,950	11,001,010	1,420,000	14,120,000	8814,590	21,200,201	\$1,880,98
Tissue and Toilet Paper. Towels and Napkins. Wax Paper Wrapping Paper ,,lbs. Writing Paper and Envelopes.		\$102,331 4,888		\$142,221 11,444				76,304		118,83
Wax Paper		13,586		27,524	20 014 000	00 440 000	F4 0F0 0F0	76,304 142,896		475,145
Wrapping Paperlbs.	6,051,694	449,003	6,651,998	584,031	58,914,828	\$3,449,260 2,856,870	54,958,856		66,394,831	
All other		625,719 637,906		. 1,288,732 662,008		4,945,949		4,925,826	**********	8,148,26
Total Paper and Manufactures of		\$4,522,137	~~~~~	\$8,048,531		\$39,040,497		\$45,450,675		\$76,181,600
		WOO	DD PULP 2	AND PAPER	R STOCK.	710	770	-		
Paper stock, rags and otherlbs. Wood Pulptons	4,252,80	871,815	3,018,206	873,006	25,604,758	\$619,951	30,892,733	\$609,201 3,278,070	28,971,752 21,836	\$738,88 1,852,06
Wood Pulptons	1,502	96,309	3,185	270,820	21,717	1,675,208	31,356	8,278,070	21,000	1,000,000
	1		MISCELLA	NEOUS IT	EMS.					
Rosinbbls.	71,494	\$551,514	49,023	\$690,719	1,485,175	\$9,674,046	969,277	\$7,240,527	816,622	\$10,424,88
Exported to-					1	1	1			4000 100
Italy			5,785	\$79,976	54,707 720	\$342,269 4,988	10,056	\$63,570	15,562 7,626	\$229,130 107,480
Netherlands			266	11,225 3,270	66,785	376,123			22,563	280,65
Russia in Europe			893	15,968	74,080 6,743	421,737 43,517			10,200	165,81
Sweden United Kingdom	5,391	\$39,770	19,233	279,017	595,264	3,887,034	256,406	1,866,648	368,306	4,710,860 1,082,150
Canada	17,041	123,389	4,063	51,589	156,262	992,589	117,493 33,320	790,754	85,461	1,032,156
Cuba	4,159	27,142	8,212	43,496 22,457	29,022 106,977	187,204 711,462	33,320 138,740	216,404 997,022	19,945 63,029	260,070 842,650
Amendina	11.786	22,000 89,094	1,813 5,200	73,451	130,378	853,196	140,824	1,032,624	79,640	1,006,150
Argentina		6,420	464	6,200	28,338	151,896	17,100	130,698	24,397	305,16
Argentina	756		2	36	33,268 51,157	241,151 375,847	27,628 98,348	223,092 792,681	10,713 27,921	156,298 328,643
Argentina Brazil Uruguav Dutch East Indies.	756 12	160		905			00,010	102,001	21,041	101 000
Argentina Brazil Uruguay Dutch East Indies. Japan Australia	19,517 5,428	158,514 49,468	20 220	325 2,381	35,942	244,664	65,673	512,197	19,939	
Argentina Brazil Uruguay Dutch East Indies Japan Australia Other countries	19,517	158,514	20			840,569	65,673 83,680	512,197 613,987	19,939 61,320	
Argentina Brazil Uruguay Dutch East Indies. Japan Australia Other countries Dyes and dyestuffs.	19,517 5,428 4,678	158,514 49,468 35,557	20 220 7,352	2,381 101,328	35,942 120,532	840,569	83,669	613,987	61,320	
Argentina Brazil Uruguay Dutch East Indies Japan Australia Other countries	19,517 5,428 4,678	158,514 49,468	20 220	2,381	35,942	840,569		512,197 613,987 3,542,617 975,963	19,989 61,320 94,513 45,798,662	

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THE ORR FELT & BLANKET CO., Piqua, Ohio, U. S. A.



The Illustration Shows a Typical Dilts Equipment in the Beater Room of One of the Largest Boxboard Mills in the United States

WE ALSO MAKE A SPECIALTY OF

Fly Bars, Bed Plates and Machine Knives

Owning and operating as a separate department of our business the Knife Works formerly Taylor Brothers & Co., makers of MACHINE KNIVES at Fulton, N. Y., for over fifty years.

Dilts Machine Works, Inc., Fulton, N. Y., U. S. A.

MARKET ON PACIFIC COAST STRONG AND ADVANCING

(Continued from page 42.)

the manufacturing facilities. The company is making a very fine line of No. 1 and No. 2 M. F. Book, Railroad Writings—both white and yellow—and No. 1 and No. 2 Bonds. Also, Mimeograph and Litho-Labels. These are being sold, in good quantities, both to the domestic and the export trade. Prompt shipments are being made on orders. H. R. Williar, of San Francisco, has the exclusive marketing for export on these goods. He is optimistic as to the market conditions and the export outlook.

Crescent Boxboard Co. Making Fine Record

The Crescent Boxboard Company's plant at Port Angeles, Wash., which is the mos: complete on the Pacific Coast, is making a fine record, with C. H. Myers as resident manager. About forty tons of boxboard is made daily. Both ground wood and sulphite pulp are produced. A portion of the pulp is manufactured into boxboard at Port Angeles and the remainder is shipped to other boxboard mills on the Coast, including those of the Paraffine Companies, Inc., in California.

Paper Boxboard Co. Plays Useful Part

The Paper Boxboard Company, of San Francisco, is playing a very useful part in selling the products of the boxboard mills located on the Pacific Coast. A. H. Dougall, the manager, and his assistant, C. J. Bastedo, are kept very busy looking after the details of the business. More than one hundred grades of boxboard are handled, together with various specialties. During the past two months, business has improved considerably, following the slump in prices, which began in January. Prices advanced \$2.50 per ton on July I. Although this is a recovery, prices have not advanced here as much as they have in the East and they are lower than they were on January 1. A little export business is being done. All of the boxboard factories in California are running full.

General and Personal Trade News

The Everett Pulp & Paper Company's plant at Everett, Wash,, is in steady operation and regular shipments are being received by water for the California market. The usual high standard is being maintained on book papers, which are in good demand here.

B. Levison, representing several Eastern concerns, with headquarters at 618 Monadnock building, is sending his share of orders to the mills and is receiving exceptional service. He is optimistic about market conditions and finds more pleasure in doing business with prices as they are now than during the recent period of stagnation.

Harold L. Zellerbach, manager of the export department of the Zellerbach Paper Company, has returned from the East; after having visited the principal mills. S. Leavick, manager of the Zellerbach Paper Company's Photo Mount department, has returned from a trip to the Eastern factories.

F. S. Baker, president of the Cascade Paper Company, of Tacoma, paid a visit to San Francisco and attended the "Jinks" of the Bohemian Club, at Bohemian Grove, in company with Harry R. Williar.

J. E. McQueen, representing the Wrenn Paper Company, of Middletown, Ohio, has been calling on the California trade.

W. D. Brooks, representing the Robert Gair Company, of Brookiyn, N. Y., in California, with headquarters at 370 Monadnock building, is paying a visit to the home office.

M. R. Higgins, vice-president of the Zellerbach Paper Company, is on a tour of the Pacific Northwest visiting the branches. He may make a trip to Alaska.

A. H. Dougall, general manager of the Paper Boxboard Company, of this city, is in Seattle on a business trip. He will look over the situation in the Northwest and visit the manufacturing plants of the Paraffine Companies, Inc.

H. R. Williar, the dean of the paper exporters of the Pacific Coast, has returned from a summer vacation spent at Santa Cruz, accompanied by Mrs. Williar.

Louis A. Colton, San Francisco office manager of the Zellerbach Paper Company, will leave on August 9 for the East. He will attend the annual convention of the Hammermill Paper Company, at Erie, Pa., August 21-23.

Haumerson-Addison Company Start Paper House

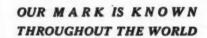
RACINE, Wis., July 28, 1919.—The Hammerson-Addison Company, a wholesale paper house, has started business at 1117 North Main street. The members of the firm are Alvin Haumerson, who saw service with Battery C in France, and John S. Addison, son of ex-Ald. Thomas Addison.

Both young men have had extensive training along business lines, being employed as traveling salesmen before the war broke out. They are well and favorably known,

The concern will operate over a wide territory, and has a complete equipment of trucks to insure delivery.

Cape Breton Paper Co. to Expand

The Sydney, N. S., pulp makers are entering on new activities. The Cape Breton Pulp and Paper Company which operates there is made up of wealthy New York capitalists, and at the present time is employing over 300 men, but plans that are under way will require at least a staff double that size. Several of the leading directors paid a visit to the plant a few days ago and inspected the big timber limits in Victoria County. The mill is said to be one of the finest in the country and the directors are credited with the intention of erecting a finishing mill.





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SINGLE and DOUBLE LINED
PLAIN and COLORED

VAT LINED, MILL AND SHEET LINED SPECIALTIES, ETC.

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Craig-Becker Company

Incorporated

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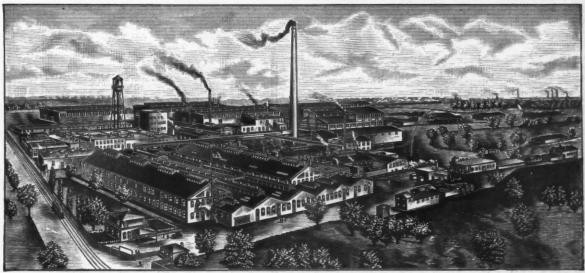
Bleached Easy Bleaching
Unbleached Sulphites

Spruce and Poplar Ground Wood Pulp

Domestic

Export

Colors for Papermakers



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"DRYDEN" KRAFT PULP

Extra Strong, Long Pure Sulphate Fibre

Daily Capacity 120,000 Pounds

KRAFT WRAPPING PAPERS

Daily Capacity 45,000 Pounds.

The Dryden Pulp & Paper Co., Ltd. Dryden, Ontario, Canada

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Frederick Pumps Are Giving Excellent Service in Some of the Largest Paper Mills in the World. Compare Our Detail Specifications, Guarantees, etc., with Those of Any Other Make.



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McNAMEE PAPER CLAY

is NOW and FOR FIFTY years has been

The Leading Clay of America

Oldest-Established 1867-same superintendent for over thirty years.

Largest—Two thousand acres—fifty million tons surplus.

Best-White and free from grit.

Capacity greatly increased—prompt deliveries guaranteed.

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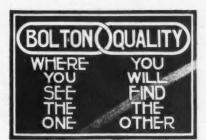
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High Grade American Paper Clay

Uniformity and High Retention Low in moisture, Mica and Grit

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Write for our new Blue Book, just issued, containing valuable information in regard to Bex Boards, Paper and Specialties.

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Special Shaped Carbon, Black Diamond POINTS FOR TURNING Paper, Cutton Chilled Iron and Hardenod Steel Calendor Rolls, Hard Rubber, Fibre, etc.

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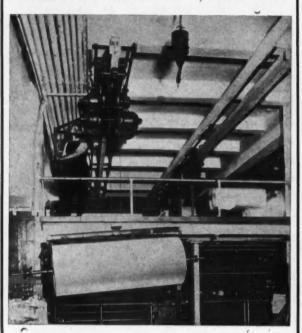
- 1 No. 1 Claffin Jordan (Continuous beater)
- 1. No. 2 Claffin Jordan
- 2.6" Stock Pumps
- 4 Blowers 15" to 17" outlets
- 1 Sturtevant No. 7 Exhauster 17" outlet
- 1 125 H. P. Portable Boiler
- 1 100 H. P. Portable Boiler
- 2 Rag Beaters for Cleaning Rags

Factory plant consisting of two 2 story brick buildings, sprinkled, about 45,000 square feet of floor space, 2 150 H. P. steam boilers, electric power, soft water, railroad siding for five cars.

STANDARD TEXTILE COMPANY

Glens Falls, N. Y.





For Handling Rolls

in the quickest, most efficient manner with the greatest saving in expense and labor, Shepard Electric Hoists are used in many paper mills.

Where a gang of men used to heave, push and boost heavy rolls of paper, now one man with a "Shepard" handles the work.

Shepard construction provides for steady service—all working parts are enclosed, protecting them from dirt, dust and dampness—the control is simple and fool-proof.

The experience and training of our engineers will help greatly in laying out an efficient hoisting and conveying system for your mill.

SHEPARD

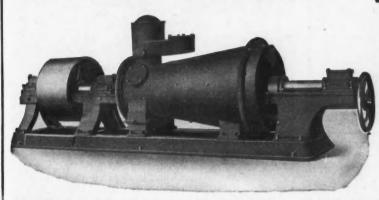
ELECTRIC CRANE & HOIST CO.

378 Schuyler Ave., Montour Falls, N. Y.

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Our latest Improved Machine, three sizes; belt or direct connected motor driven. All Bearings self-oiling, adjustable and water-cooled. Outside stand fitted with gauge to keep the plug central with the shell.

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DILLON MACHINE CO., Inc.
Builders of Paper Mill Machinery
Lawrence, Mass.

The Claflin Continuous Beater

Has 3½ Times the Efficiency of Any Other Beater in use today, for Beating, Brushing and Refining Paper Stock.

Has No Superior

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-250-

Claffin Continuous Beaters Now in Use

THE CLAFLIN ENGINEERING COMPANY,

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The Canadian Fairbanks-Morse Co., Montreal, Quebec, Agents for Dominion of Canada

Beating Engines
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Mixing Engines
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Wood or Iron Tubs; adapted to every paper mill condition

Jordan Engines—

Board Machines

Stuff Chests, Dusters, Pumps, Etc., Etc.

The Noble & Wood Machine Co., Hoosick Falls, N. Y.

WE specialize in durable Fourdrinier Wires and Cylinder Wires in any metal desired up to and including 120 mesh in plain woven, double warp, triple chain, and twisted weaves.

Save two-thirds the cost and three-quarters of the expense of putting on brass and bronze wires by using our nickel alloy wires.

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of absolutely the finest quality

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It is going to be one of the best known very soon, or we are much mistaken. WHY? Because it is the only high quality bond paper in white and colors that is sold at anywhere near a price that makes it possible for the ordinary user of bond papers to buy it.

And don't forget our Waterford plant that is turning out colored specialties. Our slogan, "Service in Specialties," is well chosen, as we'll be glad to demonstrate at any time.

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Anything in Creped Tissues **NAPKINS** TABLE CLOTHS TRAY COVERS

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PACKERS OF ALL CLASSES OF ENGLISH AND CONTINENTAL PAPER STOCK. WASTE PAPERS, SHAVINGS, NEW AND OLD CANVAS, RAGS, ROPES AND STRINGS, GUNNY, TARES

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Built both single and double press. They operate successfully on both sulphite and sulphate pulp.

Felt cost is low considering dryness obtained.

Ball bearings for cylinder mould and couch roll.

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Illustration shows Rogers Double Wet Machine which

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TRADE MARK

New York Market Review

Office of Paper Trade Journal, Wednesday, July 30, 1919.

The paper market continues to grow stronger daily, and the demand for all grades is constantly expanding. All paper mills are doing a capacity business, and manufacturers are no longer worried about disposing of their entire output, but they are greatly concerned over getting enough stock to fill the orders of their regular trade. More mills have withdrawn from the market this week owing to the fact that they are unable to handle any more business, and several mills which have not actually withdrawn have sent out quotations that are far above the present market price so as to discourage buying. Jobbers report that they are selling their stocks almost as fast as they receive them from the mills, and there is every reason to believe that present conditions will continue indefinitely.

The export demand for all grades of paper continues to increase, and shipments involving large tonnages are being made to all parts of the world. As has been previously stated in these columns, the chief concern of exporters at present is not so much to make sales, but to obtain the paper from American mills that the whole world is asking for. The domestic demand is so strong for all grades of paper that most manufacturers have already sold the greater part of the paper which they produce, to domestic consumers, and can afford to release only a small part of their output for export purposes.

The news print situation is still acute. Large manufacturers are in great fear that there will be a shortage of stocks in the fall, and in view of the present rate with which news is being consumed it seems that these fears are not without justification. The tendency of news print prices is upward, and though there has been no change in quotations this week, an advance is

expected at any time.

Two more large mills manufacturing book paper withdrew from the market this week, and the book paper market continues very firm. While quotations on all grades have been steady since their advance of last week, the tendency of prices continues upward and further advances may be reported in the near future.

There continues to be a good demand for all grades of writing papers, with the medium grades being sought in slightly larger quantities than either the lower or higher grades. Mills are all running on long schedules to produce enough paper to meet the demand, and stocks are moving in good volumes. There has been no change in quotations during the week.

All tissue papers have been in slightly better demand this week, and several mills have advanced their quotations 5c. a ream on all grades. Jobbers report that they are receiving a large number of orders from consumers, and further advances in prices are not unexpected.

There has been another advance in quotations on several grades of kraft paper this week, and No. 2 domestic kraft is now being quoted as high as 7.50@8c. The demand is strong for all grades of coarse papers, and both jobbers and mill agents report that they are having no difficulty in moving their stocks.

The large demand for board, which has been noticed for some time continues, and this week several mills have advanced quotations on the better grades. There are reports current that \$60 has been paid in New York for chip board, though the majority of dealers are still quoting \$50@55 per ton. However, it is thought that the near future may see prices up as high as \$65 for news, with corresponding advances made for the other grades.

Ground Wood

There has been no change in the condition of the ground wood market this week. Stocks continue to move under a good demand with prices being maintained at their present levels. The continuance of the active demand for news print has created

a steady demand for ground wood, and at present consumption of stocks is running slightly ahead of production. Grinders report that there is little or no surplus stored at the grinding plants, and there is good reason to believe that there will be a shortage of mechanical pulp in the fall. At present there has been no change in quotations, and grinders are still getting \$28 in the East, and \$30 in the West.

Chemical Pulp

Quotations on all chemical fibers have been steady since their advance of last week, but the market, nevertheless, has continued to gain strength. One large pulp dealer attaches great significance to the fact that paper mills have registered fewer complaints against the pulp which they have received during the past week than in some time previous. This dealer believes that the mills are now anxious to get the pulp, and they are not as exacting, therefore, in their specifications as they were during the times when the market was weaker. Foreign pulps are being sought in large quantities, and importers state that they are getting good prices for their stocks. There have been reports of some sales of foreign easy bleaching sulphite at \$5.75@6.00, though the majority of importers are still quoting \$2 a ton under these figures.

Rags

The rag market continues strong with further advances noted on quotations of both new and old grades. Several of the roofing mills which withdrew from the market last week in an effort to force roofing rag prices down have been forced, by the urgent need for stock, to come into the market again this week, and as a result quotations on all the roofing grades are \$2 a ton higher than they were a week ago. The roofing situation is still very delicate, however, as the majority of dealers are still refusing to take orders, even at the advanced prices. They contend that the present demand for roofing warrants higher prices for roofing rags, and they intend to hold out until the mills can see their way clear to pay the prices being asked. The large business which the writing mills are doing has created a good demand for the better grades of rags, and this demand, coupled with a scarcity of stock, has sent prices to higher levels this week. Foreign rags are being received in large volumes and are being sold at good prices.

Old Rope and Bagging

The demand for bagging is of fairly large proportions at present, and sales involving large tonnages are constantly being made. There has been an advance in the quotations of several grades this week. Dealers in roofing bagging are confronted with the same problems that the roofing rag dealers are now called upon to face, and like the rag dealers, they are as a general rule, holding firm for higher prices. There is a good demand for old rope and strings, and quotations have advanced this week on manila ropes and burlap cuttings.

Old Waste Paper

The paper stock market has been firmer this week, and all grades are moving under a better demand. Soft white shavings continue in good demand and packers are selling mills a large volume of this grade. Nearly all grades of flat stock are being quoted at higher prices, and old krafts are also bringing better prices than a week ago. The activity in the board market has created a good demand for mixed papers, and quotations on No. 1 mixed paper are higher this week. The biggest price advance of the week, however, was made by solid flat book, which is now bringing a price of 1.90@2.05c.

Southeastern Paper Company Increases Stock

[FROM OUR REGULAR CORRESPONDENT.]

LOUISVILLE, Ky., July 28, 1919.—The Southeastern Paper Company has amended its articles of incorporation increasing its capital stock from \$10,000 to \$100,000.

Market Quotations

Paper Compa	any Securities	Papers Makers' T Balls
	osing quotations July 29, 1919.	Balls
Sto		No. 1 Basis No. 2 Basis
	Bid. Asked.	Sisai Lara Yara-
American Writing Paper Company, p	ref 59% 59¾	No. 1 No. 2
International Paper Company, com International Paper Company, pref., International Paper Company, pref., Union Bag & Paper Corporation	65 4 66	Manila Rope
International Paper Company, pref.	Stamped 27 79	
Union Bag & Paper Corporation	88 89	Old Was
United Paper Board		(f. o. b.)
n.		Shavings-
Box		Hard White, No Hard White, No
International Paper Co., Convertible S International Paper Co., 1st and Refur Union Bag & Paper Corporation, 1st 5		maid white, m
Dames	New Unbleached. 111/2@ 12	
Paper	Washablea 91/2 @ 93/4	Pa
Bonds 11 @ 41 Ledgers 13 @ 36	Fancy 10 @ 10½ Cottons—according to grades—	Mill Price
A CILINE	Blue Overall 91/4@ 91/2	No 1 Reg Road
Extra Superfine. 19 -	New Blue 8½@ 9	No. 2 Rag Bond. Sulphite Bond. Cheap Ledger Superfine Writin
Superfine 19 @ — Tub Sixed 14 @ —	New Black Soft. 5½@ 6 New Light Sec'ds 6 @ 6½	Sulphite Bond
Engine Sized 12 @ -	New Light Sec'ds 6 @ 614 Khaki Cuttings. 5 @ 514	Superfine Writin
News—f. o. b. Mill—	Corduroy 5½@ 6	No. 1 Fine Write
Rolls, contract 3.75 4.00 Rolls, transient 4.00 4.25 Sheets 4.50 5.00	Corduroy 5½@ 64 New Canvas 10 @ 10½ New Black Mixed 4½@ 4¾	No. 1 Fine Writi No. 2 Fine Writi No. 3 Fine Writi No. 1 M. F. Bool
Sheeta 4.50 @ 5.00	Whites, No. 1-	No. 1 M. F. Book
Side runs 3.75 @ 4.00	Whites, No. 1— Repacked 71/2@ 8	No. 1 S. A. S.
Extra Superfine. 19 —— Superfine 19 @ —— Tub Sized 14 @ —— Engine Sized 12 @ —— Rolls, contract. 3.75 @ 4.00 Rolls, transient 4.00 @ 4.25 Sheeta 4.50 @ 5.00 Side runs 3.75 @ 4.00 Book cased—f. o. b.—N. Y.— S. & S. C. 8.00 @ 8.50 M. F. 7.50 @ 8.00 C o a t e d a n d Enamel 10.00 @ 10.50	Miscellaneous 6 @ 614 Whites. No. 2—	Daole
М. Г 7.50 @ 8.00	Repacked 514@ 514	Coated Book Coated Label News Rolls mil
Enamel10.00 @10.50	Miscellaneous 4%@ 4%	News-Rolls mil
Lithograph10.00 @11.00	St. Soiled Whites 336@ 356	News-Sheets m
lissues-f. o. b. N. Y	Thirds and Blues— Repacked 4/4@ 4/4 Miscellaneous 3/4@ 3/4 Black Stockings 3/4@ 3/4 Clath Strippings 3.10 @ 3.15	News—Sheets m No. 1 Manila No. 1 Fibre No. 2 Manila
White, No. 1 1.00 @ 1.10 White, No. 295 @ 1.05	Repacked 4¼@ 4½ Miscellaneous 3½@ 3¾	No. 2 Manila
Manila, No. 1 1.00 @ 1.10 Kraft 1.05 @ 1.30 Colored 1.50 @ 3.00	Black Stockings 31/4 @ 31/4 Cloth Strippings 3.10 @ 3.15	Butchers' Manile
Kraft 1.05 @ 1.30	Roofing Stock-	No. 2 Kraft
Manila, No. 1 . 1.00	No. 1 2.85 @ 2.95	Butchers' Manik No. 1 Kraft No. 2 Kraft Wood Tag Boar
Kraft-f. o. b. N. Y	No. 3 2.75 @ 2.85	Screenings
No. 1 Domestic. 8.00 @ 8.25 No. 2 Domestic. 7.50 @ 8.00	No. 4 2.45 @ 2.55	Boards, per ton-
Imported	No. 1	Plain Chip Solid News
Screenings 3.50 @ 4.00	B 2.05 @ 2.15 C95 @ 1.05	Manila Lined Cl Container Liner
		Container Liner
No. 2 Jute 11 @ 12	Foreign Rags	Solid Wood Pul
No. 1 Wood 5.75 @ 6.25 No. 2 Wood 5.00 @ 5.50	New White Cuttings negrinal	
	Unbleached Cottons nominal	
hre Papera-	Light Flannelettes nominal	_
No. 1 Fibre 6.00 @ 6.25 No. 2 Fibre 4.75 @ —	New White Cuttings nominal Unbleached Cottons nominal Light Flannelettes nominal Light Flannelettes nominal New Light Silesias nominal New Light Oxfords nominal New Light Prints nominal New Mixed Cuttings nominal New Dark Cuttings nominal No. 1 White Linens nominal No. 3 White Linens nominal No. 3 White Linens nominal No. 4 White Linens nominal nominal Ord Light Prints 3.75 d. 4.00 Med. Light Prints 3.75 d. 4.00 minal German Blue Cottons nominal German Blue Linens nominal Checks and Blues nominal nominal checks and Blues nominal nominal checks and Blues nominal nominal nominal checks and Blues nominal	P
No. 2 Fibre	New Light Prints nominal	Bonds
ummon Bogus 3.00 @ -	New Mixed Cuttings nominal	Ledgers Writings
News	No. 1 White Linear nominal	Writings—
Straw50.00 @55.00	No. 2 White Linens nominal	Superfine Extra Fine
Straw	No. 3 White Linens nominal	Fine
Manila Lined Cap.68.00 @75.00	Old Ex. Light Prints nominal	Fine, No. 2
Wood Pulp80.00 @85.00	Ord. Light Prints 3.75 @ 4.00	Book, M. F
	Med. Light Prints. 4.00 @ 4.25	Book, S. S. & C.
Mechanical Pulp	Ger. Blue Cottons nominal	Fine No. 2 Fine, No. 3 Book, M. F Book, S. S. & C. Book, Coated Coated Lithogra
(F. O. B. Pulp Mills.)	German Blue Linens nominal	Label
No. 1 f. o. b. Mill28.00 @30.00	Checks and Blues nominal	News
	Checks and Blues nominal Dark Cottons 2.50 @ 2.60 Shoppery 2.20 @ 2.40 French Blues 4.50 @ 4.75	Manila Sul No
Chemical Pulp	French Blues 4.50 @ 4.75	Manila No. 2
(Ex-Dock, New York.)		Common Bogus
Sulphite (Foreign)— Bleached 8 @ 8½	Bagging	News Board
Bleached	Prices to Mill f. o. b. N. Y.	News No. 1 Jute Mani Manila Sul., No Manila No. 2 Common Bogus Straw Board News Board Chip Board Wood Pulp Boar
No. 1 Unbleached 4.50 @ 4.75	Gunny No. 1-	Wood Pulp Boar
No. 2 Unbleached 3.25 @ 4.00 Kraft (Foreign) 4.25 @ 4.75	Domestic 3.25 @ 3.50	Binder Boards-

(Ex-Dock, New York.)	
ulphite (Foreign)— Bleached 8 @ 81/2	Bagging
Easy Bleaching., 5.25 @ 5.50	Prices to Mill f. o. b. N. Y
No. 1 Unbleached 4.50 @ 4.75	Gunny No. 1-
No. 2 Unbleached 3.25 @ 4.00	Domestic 3.25 @ 3.
raft (Foreign) 4.25 @ 4.75	Foreign 3.30 @ 3.
(Domestic, F. O. B. Mills.)	Bright Bagging 3.00 @ 3.
Bleached 6.50 @ 7.00	Bright Bagging 3.00 @ 3. No. 1 Scrap 2.60 @ 2. Sound Bagging 2.40 @ 2
	Sound Bagging 2.40 @ 2
Bleached 5.50 @ 6.00	Wool Tares, light. 2.80 @ 2
Extra Strong Un-	Wool Tares, heavy. 2.90 @ 3.
_ bleached 4.75 @ 5.00	Manila Ropes-
Fasy Blanching	Foreign 5.40 @ 5
n a s y inteneming	Domestic 5½ @

Dash means nominal.	4./3	
Domestic Rags		

Ohla Cart		
Shirt Cuttings-		-
New White, No. 1	1456@	15
New White, No. 2	9 0	934
Silesias, No. 1	915@	10

New Bur. Cut Hessian Jute Thr'ds Mixed Strings	250	000	614	
Twine	:8			
India. No. 6 basis—DarkLightB. C., 18 basisA. B., Italian, 18	24 ½ 27 ½ 38		2614 2914 40	
basis	80		-	
Dark, 18 basis Light, 18 basis	32 30	:	34 32	

4				
Jute Wrapping, 2-6		Soft White, No. 1 3.50		3.60
ply—		Colored, No. 1 1.20	0	1.25
	a 34	Flat Stock-	-	
No. 1 29	31	Stitchless 1.95	40	2.10
Extra No. 1 32 No. 1 29 No. 2 27	8 34 8 31 8 25	Over Issue Mag. 2.00	- 60	2.15
Papers Makers' Twine	,	Solid Flat Book., 1.90	- 75	2.05
Balls 18	a 20	Crumpled, No. 1, 1.20	- 2	1.25
Box-Twine, 2-4 ply. 21	20	Solid Book Ledger, 2.75	2	3.00
Balls 18 Box-Twine, 2-4 ply. 21 Jute Rope 25 Amer. Hemp, 6 27	20 23 240 29	Ledger Stock 2.25	- 2	2.35
Jute Rope 25	9 40	No. 1 White News. 1.30	- 2	1.40
Amer. Hemp, 6 27	E 23		100	
Sisal Hav—		New B. B. Chips60	100	.70
No. 1 Basis 22	@ 24	Manilas—		
No. 2 Basis 1916	23	New Env. Cut 2.50		2.60
Sisal Lath Yarn-		New Cut, No. 1. 2.00	97	2.10
No. 1 2114	2154	Extra No. 1 Old 1.00	- 60	1.16
No. 2 1954		No. 1 Old80	- 60	90
Manila Rope 29		No. 2 Old65	- 68	.70
	-	Bogus Wrappers70	- 69	.75
Old Waste Pape	-	Old Krafts 2.50	-	2.60
Old Waste Pape	3.3	News-	6	2.00
(f. o. b. New York)	Strictly Overisone .90	-	1.00
Shavings-		Strictly Folded60	- 2	.65
Hard White, No. 1 5	9 51/4		100	
		No. 1 Mixed Paper .55	95	.60
Hard White, No. 2 3340	8 4	Common Paper25	-	.30

CHICAGO

[FROM O	UR REGULAR	CORRESPONDENT.	
Paper		Straw Board42.5 Filled Pulp Board 65.0	0 # 47.50
Mill Price to Jobbers.		rined Tulp Domid 93.	70.00
No. 1 Rag Bond 25 Ro. 2 Rag Bond 18 Sulphite Bond 101/2	35 22	Old Papers	
Cheap Ledger 16 @ Superfine Writing. 20 @ No. 1 Fine Writing 17	19 22 18	No. 1 Soft White 3.50 No. 2 Soft White 1.50 No. 1 Mixed 1.00	@ 3.75 @ 1.75 @ 1.25
No. 2 Fine Writing 14 No. 3 Fine Writing 1116 No. 1 M. F. Book 9	15 1236 10	No. 2 Mixed85 Ledgers & Writings 2.50 Solid Books 2.00	2.60 2.25
No. 1 S. & S. C. Book 9 @ Coated Book 1034@	121/2	No. 2 Books, light. 1.25 Extra No. 1 Manila 2.00 Manila Envelope	@ 1.50 @ 1.50 @ 2.25
Coated Label 1034@ News—Rolls mill. 3.85 News—Sheets mill. 4.35	=	Cuttings 2.50 No. 1 Manilas 1.00 Folded News (over-	@ 2.75 @ 1.25
No. 1 Manila 5 No. 1 Fibre 5 No. 2 Manila 4146 Butchers' Manila 4	5% 5% 5	Old Newspapers	@ 1.10 @ 1.00 @ .85
No. 1 Kraft 71/26 No. 2 Kraft 61/26 Wood Tag Board 5 6 Screenings 3	5%	Straw Clippings	@ .85 @ .85 @ 2.75 @ 3.00
Boards, per ton— Plain Chip 45.00	\$ 50.00	Roofing Stock, F. O. B. Chicago, Net Cash	
Solid News 50.000 Manila Lined Chips 60.000 Container Liner 85.000	@ 65.00 @ 90.00	No. 165.00 263.00 361.00	989

Solid Wood Pulp80.00@ 85.00	461.00 @ -	-
PHILADEL	PHIA	
FROM GUE REGULAR	CORRESPONDENT.]	
Paper	Mixed Strings 2.00 @ 2.5	25
	Manila Shaving 2.50 @ 2.2	
Bonds 12 @ 41 Ledgers 13 @ 35	Manila Shaving	60
Writings—	No. 2 1.50 1.4.00 Manila Sul., No. 1 4.00	30
Superfine 15 @ 35	No. 1 New Lt. Bur-	
Extra Fine 351/20 -	lap 6.50 @ 6.	75
Fine No. 2 23	New Burlap Cut-	25
Fine, No. 2 23 6 -	mile	63
Book, M. F 9 @ 1134	Old Papers	
Book, S. S. & C 974 @ 1174	Shavings-	
	No. 1 Hard White 4.75 @ 5.0	00
Coated Lithograph. 12½@ 13¼ Label 12¼@ 14¼	No. 2 Hard White 3.75 . 4.6	00
News 4½@ —		60 25
No. 1 Jute Manila. 111/2@ -		30
Manila Sul., No. 1 7% — 51/2	No. 2 Mixed 1.00 @ 1.	10
Common Bogus 41/2 -	Solid Ledger Stock. 2.50 at 3.	00
Straw Board50.00 @ -		.00
News Board55.00 -	No. 2 Books, light, 1.00 .	25
Chip Board50.00 @ — Wood Pulp Board.100.00 @ —	No. 1 New Manila, 2,25 a 2.	50
(Carload Lots.)	No. 1 Old Manila., 1.00 in 1.	10
Binder Boards-	Old Kraft 2.50 2.	75
Per ton60.00 @ -	Old Newspaper50	60
Carload lots55.00 @ —	No. 1 Mixed Paper .50 @ .	.55
Regular 73 @ 80	Common Paper35 .	40
Slaters' 78 @ 85	Straw Board Chip 50 @ . Binders Bd. Chip 50 @ .	.55
Best Tarred, 1-ply (per ton)71.00 @75.00		00
(per ton)71.00 @75,00 Best Tarred, 2-ply	Rage	
(per roll) 1.30 @ -	Old White-	
Best Tarred, 3-ply 1.70 @ -	No. 1 6.50 @ 7. No. 2 4.75 @ 5.	.00
Roofing Rags	No. 2 4.75 @ 5.	.00
No. 1 2.00 @ 2.25	Thirds and Blues 3.70 @ 4.	.00
No. 2 Hard White 4.50 2.25	Black Cotton Stock-	-
No. 4 1.85 @		.00
Bagging		30
Gunny No. 1-	Colored Wiping	-
Foreign 2.75 -	Rags 6.00 @ 6.	.25
Domestic 2.50 2.75	Cotton Quilts 2.50 @ 2. White Cotton Batt-	./3
Scrap Buriap 2.00 @ 2.50 Wool Tares, heavy. 3.00 @ 3.25	ing 4.25 @ 4	.00
(Continued o		
(Commen a	T Pust only	

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

FOR THE WEEK ENDING JULY 29, 1919.

SUMMARI.
Printing Paper 7 cs.
Miscellaneous Paper42 cs.
Paper
Paper in Rolls
Filter Paper
Cigarette Paper
Miller Wright Paper Co., Rotterdam, Rotterdam,
7 cs. printing paper.
Boucher Cork Machine Co., La Touraine, Havre,

cs. cigarette paper. J. B. Mast & Co., Moncalieri, Genoa, 2 cs. paper. American Trading Co., Eurybates, Shanghai, 40

American Trains Co., American Trains Co., Paper. Senana Paper Co., Lake Medford, Botwood, N. F., 987 tons of paper in rolls.
Seaman Paper Co., Lake Medford, Hearts Content, N. F., 409 tons of paper in rolls.

PAPER.

American Tobacco Co., Chicago, Bordeaux, 1697

P. Lorillard & Co., Chicago, Bordeaux, 10 cs. cigarette paper.

R. J. Reynolds, Chicago, Bordeaux, 393 cs. cigarette paper. E. Fougera & Co., Chicago, Bordeaux, 48 cs. filter paper.
C. G. Euler, Chicago, Bordeaux, 20 cs. filter paper. RAGS.

J. Kellar & Co., Beukelsdijk, Rotterdam, 695 es rags. Equitable Trust Co., Beukelsdijk, Rotterdam, 325

bales rags.
R. F. Downing & Co., Beukelsdijk, Rotterdam, R. F. Downing & Co., Beukelsdijk, Rotterdam, 751 bales rags. Wilkinson Bros. & Co., Beukelsdijk, Rotterdam, 871 bales rags. Castle, Gottheil & Overton, Beukelsdijk, Rotterdam, 745 bales rags. F. W. Bird & Co., Beukelsdijk, Rotterdam, 934 bales rags.

bales rags.
Patent Vulcanite Roofing Co., Beukelsdijk, Rot-

Patent Vulcanite Rooting Co., Deukeisuijk, Rot-terdam, 607 bales rags. Salomon Bros. & Co., Independence, London, 153 bales rags. Brown Bros. & Co., Vitellia, Glasgow, 146 bales

E. J. Kellar & Co., Charles, Ponta del Gada, 668 bales rags. BAGGING, PAPER STOCK, ETC.

W. Hannay, Vitellia, Glasgow, 149 bales

A. Salomon, Inc., Bovic, Manchester, 217 bales bagging. E. Butterworth & Co., Bovic, Manchester, 529

bales bagging.
R. F. Downing & Co., Beukelsdijk, Rotterdam, R. F. Downing & Co., Beukelsdijk, Rotterdam, 390 bales bagging.
D. M. Hicks, Beukelsdijk, Rotterdam, 102 bales old pickers.
Salomon Bros. & Co., Beukelsdijk, Rotterdam, 15 bales newcuttings.

E. J. Kellar & Co., Beukelsdijk, Rotterdam, 165 bales old fustians. M. O'Meara, Bovic, Manchester, 250 bales hide cuttings.

M. O'Meara, Bovic, Manchester, 55 bales paper-

Castle Gottheil & Overton, Bovic, Manchester, 135 bales paperstock,

Brown Bros. & Co., Vitellia, Glasgow, 38 bales paper waste.

Guaranty Trust Co., Vitellia, Glasgow, 154 bales flax waste

BLEACHED SULPHITE.

PULP.

J. Andersen & Co., Oscar II, Copenhagen, 2805 bls., bleached sulphite, 575 tons. E. Butterworth & Co., Oscar II, Copenhagen, 200 bls., bleached sulphite, 40 tons.

PULP PRODUCTION FOR SIX MONTHS ENDING JUNE 30

(Continued from page 16.)

Comparison of the Monthly Tonnage of Pulp Used by the Producing Companies by Grades for the 6 Months Period Ended June 30, 1919

Grade	Jan. Tons	Feb. Tons	Mar. Tons	Apr. Tons	May. Tons	June. Tons	Total.
Ground Wood	113,018	98,712	113,045	114,657	118,129	109,892	667,453
Sulphite, News Grade Sulphite, Bleached.	52,844 22,935	43,417 18,181	45,144 19,266	41,144 19,860	47,491 21,538	49,377 21,761	279,417 123,541
Sulphite, E a s y Bleaching Suiphite, Mitscher-	3,452	3,129	3,124	3,167	3,518	3,875	20,265
Sulphate Pulp Soda Pulp	3,959 7,264 21,031	4,136 5,416 15,688	3,888 5,567 19,085	3,902 6,874 17,574	3,886 8,943 17,826	3,692 9,134 14,785	23,463 43,198 105,989
Other than wood	744	494	648	824	941	645	4,296
Total	225,247	189,173	209,767	208,002	222,272	213,161	1,267,622

Comparison of the Monthly Shipments of Pulp by Grades for the 7 Months' Period Ended June 30, 1919

Grade Ground Wood	Jan. Tons 7,175	Feb. Tons 5,038	Mar. Tons 7,193	Apr. Tons 8,139	May. Tons 8,692	June. Tons 7,010	Total. Tons 43,247
Sulphite, News Grade Sulphite, Bleached.	6,918 16,324	7,142 13,260	6,543 13,717	7,436 15,350	7,162 18,324	8,933 20,145	44,134 97,120
Sulphite E a s y Bleaching Sulphite, Mitscher-	1,497	1,743	1,988	1,491	2,914	347	11,750
Sulphate Pulp	2,195 2,838	2,279 3,100	1,995 2,969	2,484 3,215	2,649 2,509 13,300	2,953 4,565	14,555 19,196
Soda Pulp Other than wood pulp	10,571	10,375	8,368	8,411	13,300	15,926 363	66,951
Total	47,541	42,937	42,773	46,689	55,592	62,012	297,544

Variation in Production

The monthly production of ground wood showed marked variation. This was largely due to water conditions. The total production of ground wood for the six months' period, however, was greater than the average production based upon the ninemonth period ended April 30, 1919, and the annual report for 1918. The variation of production of chemical pulp from month to month was less pronounced. Chemical pulp production for the period was less than the average. About 85 per cent of the total pulp produced during this period was used in the manufacture of paper and paper products by the companies producing it. Mill stocks of ground wood increased from 131,170 tons on

January 1, 1919, to 199,837 tons on June 30, 1919. Chemical pulp stocks increased from 33,983 tons at the beginning of the year to 63,396 tons on June 30, 1919.

Suggestions for Purifying Mill Stream

[FROM OUR REGULAR CORRESPONDENT.]

DAYTON, Ohio, July 28, 1919.—Suggestions concerning the chemical purification of water flowing from the paper mill at Cedarville, so that it may be carried off with safety through the channel of Massie's creek, were made to Superintendent A. Z. Smith, of the Hager Board and Paper Company, by John T. Travers of the State Game Warden's office, a chemist, who has charge of the question of pollution of streams for that depart-

The water from the paper mill at Cedarville, laden with refuse paper pulp, flows down a flume into an immense reservoir, covering ten acres, about a quarter of a mile from the mill. Fifty thousand gallons of water flow daily into this pond. Escape of the foul water into the creek has several times caused the destruction of fish, and the matter has grown troublesome to game authorities.

Using a simple experiment, Mr. Travers demonstrated the manner in which the water flowing from the paper mill could be purified. Two drops of chemicals placed in a pint of water caused the sediment to settle at once to the bottom of the vessel. He said that at little expense the paper company could purify the water by the use of chemicals, and that as the sediment sunk to the bottom of the reservoir, the water could be allowed with safety to flow at once into the creek and be disposed of. He suggested the installation of an apparatus near the mouth of the flume at the mill, by which the water could be chemically treated as it began flowing into the reservoir. The sediment which was left in the reservoir, he said, might be disposed of in some manner, probably as fertilizer.

The paper company is now at the expense of maintaining a watchman day and night at the reservoir, and has paid two heavy fines imposed because of pollution of streams when the refuse flowed into the creek.

JOBBERS

Our New Prices Surely Will Interest You

Krafts Manilas **Tissues**

Napkins Toilet Paper Towels.

Fibre Pattern

FOREIGN and DOMESTIC

GET IN TOUCH WITH US AT ONCE

PAPER SUPPLY COMPANY

NOW at Washington Place and Mercer Street, New York

DILLON & BARNES

Paper Mill Products and Supplies NEW YORK 52 VANDERBILT AVENUE Telephone, 7353 Murray Hill

Atterbury Brothers

Wood Pulp, Rags and Paper Stock French Caseine

145 Nassau Street

(Potter Building)

NEW YORK

GASTLE, GOTTHEIL & OVERT **New Cuttings** and Rags 200 FIFTH AVE. **NEW YORK**

IRA L. BEEBE

CYRUS E. JONES

IRA L. BEEBE & CO.

132 Nassau St., New York

IMPORTERS & DEALERS IN



WOOD PULP

E. J. KELLER COMPANY

200 FIFTH AVENUE **NEW YORK**

FOREIGN AND DOMESTIC

PAPER MAKERS' SUPPLIES COTTON, JUTE and FLAX WASTES COTTON BAGGING MATERIALS EAST INDIA MERCHANDISE



EVERYTHING IN

PULP & PAPER

LE PATTON CO. INC. 33 West 42nd St.

New York City

(Cable address - Pulp, NY.)



Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL, WEDNESDAY, July 30, 1919.

ALUM .- A strong demand is still in evidence for all grades of alum, and the market continues firm. Prices have held firm at last week's levels and no changes have been reported in quotations. As soon as surplus stocks are cleaned out, however, dealers expect an advance in price on all grades. Lump ammonia is now being quoted at 4@4.25c. and powdered alum is bringing a price of 4,25@4,50c.

BLANC FIXE.-Manufacturers of blanc fixe report that the demand is 50 strong for this commodity at present that they are somewhat behind in their deliveries. Many manufacturers have received all the business which they can comfortably handle for some time, and these have withdrawn from the market. Quotations on dry blanc fixe are now at 4.25@4.50c., and blanc fixe in

pulp form is selling for \$60@65 per ton.

BLEACHING POWDER.—The demand for bleaching powder continues strong, and manufacturers report that they are still receiving a large number of inquiries from both export and domestic consuming channels. The price has been steady this week, and quotations are still at 2c, per pound for bleach packed for domestic use, and 2.25c. f. a. s. for bleach packed for export.

BRIMSTONE.-The brimstone market remains steady. Producers report that production was of normal proportions during the week, and the demand is strong with export inquiries increasing. Quotations continue at \$18 per ton for brimstone for domestic use, and \$20 per ton, f. o. b. mine, for brimstone for

CASEIN.-The demand for casein has been so strong this week, that all dealers have advanced quotations. Reports are to the effect that Argentine producers are again making shipments to Germany, and this will divert a large part of the tonnage which was formerly consigned to this country. Few manufacturers or importers have any stock to offer, and should the demand continue strong, it is believed that quotations will go as high as 17c. At present dealers are quoting 14@16c.

CAUSTIC SODA.-The demand for caustic soda continues firm, with prices at the same levels as a week ago. Dealers report that the strike of marine workers in New York harbor has interfered somewhat with export shipments, and should the strike continue for any great length of time prices will probably be affected. Quotations for caustic, basis 60 per cent, are now at 2.75c., while

spot caustic is selling for 3.25c.

CHINA CLAY.—There has been no change in the clay situation this week. Dealers report that there is a good demand for all grades, and producers are now gradually catching up with their orders. Quotations continue, crude domestic \$8@10 per ton, and washed at the mine \$11@13. Foreign clays range in price from \$15@20 per ton, according to the grade.

ROSIN.-All grades of rosin have continued to advance this week, and quotations are now at much higher levels than they have been in some time. The demand continues very strong, and dealers seem reluctant to accept large orders under the present condition of the market. Paper makers grades are now being quoted as follows: E, 18.50; F, 18.75; G, 18.90.

SATIN WHITE.-Manufacturers report that the demand for satin white is of fairly large proportions at present, and they are having no difficulty in disposing of the greater part of their output. Quotations are steady at 2.25@2.50c. per pound.

STARCH.-For carload lots, freight prepaid to New York City, the following quotations are made, 100 pounds: Globe starch, in bags, \$5.87; in bbls., \$6.09. Buffalo starch, in bags, \$6.02; in bbls., \$6,24. Eagle finishing starch, in bags, \$6.87. Crystal T. B. starch,

No. 90, fluidity (hand packed), in bags, \$6.97; in bbls., \$7.33. Crystal T. B. starch, No. 90, fluidity (machine packed), in bags, \$6.92; in bbls., \$7.18.

SODA ASH.-The soda ash market is firm. Dealers report that there is a fairly good demand at present, and stocks are moving to consumers in good volume and at steady prices. The 58 per cent. grade is now being quoted at 1.90c. in bags, and 2c. in bbls.

SULPHATE OF ALUMINA.-Sulphate of alumina prices have been steady since their decline of last week, and the market has become a trifle firmer. Dealers report that the demand is fair and large stocks in the possession of second hands are being gradually depleted. The iron free grade is being quoted at 2.65@2.85c., and commercial sulphate of alumina is selling for

TALC.-The talc market continues steady. Dealers report that they are constantly receiving inquiries from both domestic and export sources, and a fair volume of stock is moving. Quotations are now at \$12@15 per ton.

Russian Chemical-Pulp Industry

Trade Commissioner Axel H. Oxholm, under date of June 16, writes: According to the Papirjournalen, about 10,000,000 poods (161,000 long tons) of sulphite pulp was manufactured in Russia annually before the war. Sulphate pulp is not manufactured in The pulp factories found in Russia before the war were equipped with old-fashioned machinery, had a very poor system of transportation, and were operated very inefficiently. The low cost of labor was responsible for these conditions. As an example, it may be mentioned that factories producing 9,000 tons had 10 to 12 boilers for making pulp.

Before the war Germany furnished nearly all the machinery for the pulp factories in Russia, but only a very few German firms were able to deliver machinery complete, and at times they were unwilling to grant the desired long credit. This accounts for the fact that not many cellulose factories were built in Russia. On account of the long credit demanded, the Scandinavians were unwilling to furnish this machinery. During the war a new pulp factory has been constructed, which produces

20.000 tons of dry pulp per year.

Many pulp factories were destroyed during the war, partly by the Russians themselves and partly by artillery fire during the German occupation. At least one year will be required to make the necessary repairs. The consumption of paper is increasing every year. Finland will not, in the future, occupy any privileged tariff position and competition will be free to all countries

Market Ouotations

(Continued from page 59.)

BOSTON

FROM OUR REGULAR CORRESPONDENT.

Pape	r		These prices are F O R Mill Chip Board (ton)50.00 @65.00
Bonds	.12 🦚	_	Straw Board (ton) 50.00 @60.00 News Board (ton) 57.50 @70.00
Ledgers	.18 @	-	Wood Pulp Board . 70.00 @87.50
Writings-			Old Papers
Superfine	.18 @	-	Shavings-
Fine	.15 @	111111	No. 1 Hard White 4 @ 414
Ronks, S. & S. C	.10%	-	No. 1 Soft White 21/2@ 3
Book, M. F	.10		No. 1 Mixed 150
Book, Coated	.12	-	Ledger & Writings. 2.50 @ 2.75
News, Sheets	.06	_	Solid Book 2.25 m 2.50
News, Rolls	.05	=	No. 2 Books, light, 1.56
The same of the sa		-	Extra No. 1 Manila 2.00 @ —
Wanilas-			No. 1 Manilas 1.50 @ 1.75
No. 1 Manila	534@	534	Folded News (over-
No. 1 Fibre	5 00	536	issues)85 @ .90
No. 1 Jute	11140	.12	Old Newspapers50 .60
	. 1 1 7 2 W	-	Mixed Paper40 @ .50
Kraft Wrappings	7 @	736	Gunny Bagging 3.25 @ 3.50
Common Bogus	2 @	234	Manila Rope061/2 @ .07

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at

The Mathieson Alkali Works, Inc.

WORKS AT

SALTVILLE, VIRGINIA, and at NIAGARA FALLS, NEW YORK

"Eagle-Thistle" Brand BLEACHING POWDER

HIGH TEST

Packed in Steel Drums, air tight, insuring full strength at point of consumption

LIQUID CHLORINE

Pure, anhydrous, in improved and convenient packages.

Soda Ash

48 per cent. and 58 per cent.

Caustic Soda

60 per cent., 70 per cent., 72 per cent., 74 per cent., 76 per cent.; also 78 per cent. Our 78 per cent. Caustic Soda is an article of greater purity than has ever before been produced in a commercial way, analyzing 99.70 Hydrate of Soda

Bicarbonate of Soda

Packed in Kegs, Barrels or Bags; also Cases

Arnold Hoffman & Company, Inc.

SOLE AGENTS

PROVIDENCE: 55 Canal Street NEW YORK: 61 Broadway BOSTON: 88 Broad Street PHILADELPHIA: Delaware Ave. and Green St. CHARLOTTE, N. C.

Want and For Sale Advertisements

HELP WANTED

MACHINE TENDER for one cylinder tissue Machine, good all around man, also Dietz Machine finishing man to take charge, name, salary wanted and how soon you can come. Living conditions good in largest Southern city, with no ice or snow. Answer fully. Apex Paper Co., New Orleans, La.

CALESMAN WANTED by high grade York house, must have an established trade in wrappings and specialties in Metropolitan District or Southern New England. Best of mill connections, unlimited buying capacity and first class service to the right man. Address Box 1400, Paper Trade Journal.

WANTED—Back tender for Container Board Mill. Wages, \$5.00 per day; two tons. Address, Clifton Paper Mills, Passaic, N. J.

WANTED—Assistant Superintendent for Container Board Mill. Give references and salary expected. Address, Box 1426, care Paper Trade Journal. J31

MILL going on three towers is in need of Mill going on three towers is in need of beaterman, Harper machine-tender and Cylinder Tissue Machine-tender. Also back-tenders for Harper and Cylinder Machines. Give references. Address, Box 1411, care Paper Trade Journal.

WANTED—Backtender on Small Four-drinier Machine Mill, day work. Ad-dress, Box 1412, care Paper Trade Journal.

We Want Salesmen

- If you understand the paper business-particularly the selling end of it; If you are desirous of affiliating with a new, capable, aggressive sales organ-ization that I am alming to make the best of Its kind;
- If you have an established clientele that you could increase, and a well-earned reputation for treating your customers
- right;
 If you are at present working in a restricted territory and your earnings
 are necessarily limited;
 If you are ambitious and want to increase your present income;
 If you possess these and the other fundamental qualifications necessary;

- Then write me immediately in ABSO-LUTE CONFIDENCE arranging for an interview.

We Want Salesmen

M. H. Friemark, President, AMERICAN PAPER MILLS COR-PORATION.

38 Park Row, New York, N. Y.

FOR SALE

Three (3) 8 plate open side Packer Screens, with plates and Witham fasteners.

wo (2) No. 2 B. & C. Jordan Fillings with bronze fillings.

Location: Hartford City, Indiana.

Address: The Shartle Brothers Machine Co., Middletown, Ohio.

HELP WANTED

WANTED-First class Cylinder machine tender for Tissue. Please state ex-perience and wages wanted. Erving Paper Mills, Erving, Mass.

WANTED—Beater Engineer for Tissue Mill.
Applicant please state experience, including on colors, and wages desired. Eight hour basis. Address, Box 1423, care Paper Trade Journal.

WANTED—Beaterman experienced on Book Stock and conversion of old papers in Mill at Steilacoom, Washington. Wages, eighty-two cents per hour; eight hour shift. Cascade Paper Company, Tacoma, Washington. J31

WANTED-Beaterman for small WANTED—Beaterman for small allow making wrapping paper, running two tours. Steady Job. Send reference. Address, Box 1428, care Paper Trade Journal.

WANTED Super Calendar Man. Must be experienced in calendaring all grades of paper. Address Box 1398, Paper Trade Journal.

WANTED office man in wholesale paper house in small eastern city. Should have knowledge of fine papers and experience in credits. State age, experience and salary wanted. Address Box 1406, Paper Trade fournal.

WANTED—A good back tender on water finished fibre. Two tour mill. Speed 350 to 400 feet. Address Box 1391, Paper 1500 to 100 per 1500 to 100 p 350 to 400 fee Trade Journal.

WANTED—First-class pulp and paper salesman by well established firm of exporters and importers; excellent opportunity for the right man. State age, experience and salary expected. Address, Box 1434, care Paper Trade Journal.

WANTED-Chief Draftsman, experienced in W Paper and Pulp Mill machinery. Address, Box 1435, care Paper Trade Journal. A21

WANTED—Salesman, experienced in sell-ing Paper and Pulp Mill machinery. Ad-dress, Box 1436, care Paper Trade Journal. A21

WANTED—Superintendent for one machine tissue mill making 18 lb. crepe for toilet purposes. Address, Box 1437, care Paper Trade Journal.

(Continued on page 65.)

MACHINERY FOR SALE

USED UP TO THE MINUTE—NOW READY FOR DISPOSAL

One 22x40-450 H. P. Corliss Engine, One small Dillon Jordan

One Reeves No. 1 Class F Transmission.

Two 36" Cylinder Faces 102" one Vat.

Four 12" Couch Rolls 104" Face.

Two 10" Primary Baby Press Rolls 105" Face. One 16" Heavy Baby Press Rolls 105" Face

Two 10" Iron Heavy Baby Press Rolls 105"

Two 14" Iron Heavy Baby Press Rolls 165" Face.

Four 8 plate Screens, 2 sets No. 40 Screen Plate.

9 Cylinder Faces, 114"x102", No. 14 and No. 40.

190 H. P., 2 150 H. P. Gas Engines.
 Iron Storage Tank 8' Diam. x 25' 9" Long.
 Open Exhaust Boiler Feed Water Heater.

1 225 Diesel Oil Engine.

50,000 ft. 2" to 8" Line Pipe

Fort Wayne Corrugated Paper Co. Fort Wayne, Ind. A21

FOR LEASE

Coals are getting higher and steam power more expensive every year.

I would consider leasing my plant for a term of years provided the parties would put in some money to make the dam better and the machine needs some addition to make a smoother finish, all to be paid back from rentals.

Mill will make Lined boards, Straw boards, Chip and Pasted boards.

Will furnish Water Power, Mill. Machinery, pay taxes, insurance and keep all in repairs for an agreed amount per ton of boards made. Mill mow running.

Address Box 1448, care Paper Trade Journal.

WANTED

Bogus basis 40 lbs.

Screening basis 40 lbs.

State tonnage available for August and September shipments, prices and samples to Box 1447, care Paper Trade Journal.

FOR SALE

PAPER MACHINES—One 72" Harper Feurdrinier. 2 Presses, 15 Dryers, 1 stack Calenders, Roel. Slitter, Winder, Marshall Drive. DRYERS—14 36" x 54", 15 36" x 86", 3 48" x 148".

Siltter, Winder, Marshall Drive.

BYERS-14 88" x 54", 15 88" x 68", 3 48" x 148".

4 48" x 111".

\$12Z PRESS-Rolls 10" diam, 82" face, rub. & brase.

\$LITTERS-1 187" Kidder, 1 108" Kidder, 1 68"

Kidder, 1 48" Black & Clawson.

WINDERS-1 60" Pussy & Jones single drumwinder, 1 80" Powningtown Tissue, 1 58" Kidder.

MACHINE CALENDERS-1 83", bottom 18"; 5 16",

1 12" 1 72" eleven rolls, 1 63" for rells, 1 63",

1 72" seven rolls 12" intermediates, 1 51" 8verolls, 1 48" five rolls.

SUFFE CALENDERS-1 62" Horwood.

PAPEE SHEET GUTTERS-1 130" Dillon Duples,

1 112" Finlay, 1 62" Horne, 1 48" Finlay, 1 88"

Finlay, 1 44" Hamblet, 6 43" Finlays,

REAM GUTTERS-1 50" Dayton Seybold, 1 68"

Acme, 1 66" Sheridan, 1 36" Sheridan.

BEATERS-6 Jones, rolls 61" diam, 48", never

used; 4 Noble & Wood, 72" x 44", 4 Horne rolls

48" x 66", 1 Claffin beater.

JORDANS-1 Jones Wagg Majestic, 2 Horne, 1

EMERSON.

UNDESS-1 Doese triplex power water 10" x 18".

JORDANS—1 Jones Wagg Majesur, a meaning Emerson.
PUMPS—1 Deane triplex power water 10" x 10".
2 Deane triplex stuff 8" x 8".
2 Deane triplex stuff 8" x 8".
2 Deane triplex stuff 8" x 8".
SUREENE—1—12 plate Harmon, 2 10 plate New Success, 1 Moore & White Auxiliary.
WET MACHINES—1 72" Sandy Hill, 1 72" Baglay & Sewall, hydraulic.
EMGINES—1 Flabkill Corlies 18" x 43", 1 8" x 13"
Ball, 1 10" x 11" Ideal, 1 Putnam 12" x 80", 1
Corlies 10" x 24".
SAVE-ALLS—2 Fullner new, 2 Improved Mach. Co.
Pneumatics.

SHREDDER-1 Ryther & Pringle, 1 Leather Bared

ROTARIES-3 7' diam. x 21' 6", 1 6' x 21', 1 T' x

24'.
CYLINDER MOULDS—1 36" x 119", 5 38" x 74", 5 30" x 80", 2 30" x 72".
1 45" Sheet Lining Machine.
1 No. 8 Leeves Drive.
1 Eaker & Shevin Worm Washer.
2 Stevens Digesters.
1 Millspaugh Suction roll 96" x 14 9/16".
1 Farnham Suction roll 84" x 14".
12 Three Pocket Grinders.

42" Waldron Coaters. Wheat Duster. 1 Noble & Wood Duster.

FRANK H. DAVIS

Cambridge B. Mass

HELP WANTED

(Continued from page 64.)

WANTED—Superintendent to take charge of New Mill, specializing in Tissues and Seml-crepe. Must be experienced. Ad-dress, Box 1438, care Paper Trade Journal. A21

WANTED-One Machine Tender for 84" 5cylinder machine making asbestos and roofing felt. Two back tenders used to Pusey & Jones Double Drum Winders. National Asbestos Manufacturing Co., Mr. W. H. Woodward, Sup't., 193 Henderson Street, Jersey City, N. J.

MILLWRIGHT wanted for Paper Mill mak-ing Roofing Felt and Paper. Write stating experience. The Standard Paint Co., Joliet, Ill.

WANTED—Adjuster-Foreman on Square Bag Machines. Write giving full in-formation as to experience, salary expected, etc., in first letter. Factory in New York City. Address, Box 1425, care Paper Trade Journal.

SITUATIONS WANTED

MARRIED MAN, 29, with ten years' experience in Paper Mill and Office work. now with Ordnance Department, de:ires position as Assistant to Manager. Superintendent or Office Manager, or with Paper Jobbing or Mill Supply House. Address, Box' 1431, care Paper Trade Journal.

LIAVE HAD long experience in the wholesale paper trade. Especially familiar with the N. Y. City territory. Now have a well equipped downtown office, with a capacia stenographer-assistant. Would represent a reliable mill. Have no paper connection at present. Best of references. Address, Box 1218, cars Paper Trade Journal.

Capital Wanted

Young man with capital to take an active part in a growing paper spe-cialty industry. Splendid opportunity for a young man who wishes to engage in a thrifty business. Correspondence to be held confidential.

Address, Box 1446, care Paper

Trade Journal.

PAPER MACHINERY FOR SALE.

White Oscillating Screens.
with new oscillating device.
Plates 10 x 24", cut .0014.
Plates 10 x 24", cut .0018.
New York Safety Steam Engine,
Upright, 125 H. P. Cylinder 16%"
Bore, 18" Stroke. Flywheel 38"
Diam., 18" Face.
Holyoke Machine Company Platers,
36" Rolls.
Fan (Blower) made by R. F. Sturfes.

Holyoke Machine Company
38" Rolls.
Fan (Blower) made by B. F. Sturtevant Co. of Boston, Mass., Dism.,
72" x 40" wide; 37/16" Bearings
12" long; casing outside dimensions, 42" 8' 6" x 7' 2"
All in good condition. Prices low.
Address—

Address—

Parsons Paper Company,
Holyoke, Mass.

Your Opportunity

Wanted TWO FIRST SALESMEN. MUST BE ABLE TO SELL PAPER BAGS and TOILET PAPER. One with Headquarters at Chicago and one to travel Eastern Territory. Salary commensurate with your ABILITY. Apply by letter only to The H. Norwood Ewing Co., Woolworth Building, New York, N. Y.

SITUATIONS WANTED

WANTED PAPER MILL TO REPRESENT in New York City—by reliable Sales-man who can produce large business in most any line. Must have good daily capacity. Do not wish to carry accounts. Best of refernot wish to carry accounts. Best of references. Address, Box 1368, care Paper Trade

SUPERINTENDENT would like to make a change. Experienced on high grade Papers for waxing. Toilet and Manifold. Familiar with all type of machines. Ad-dress, Box 1307, care Paper Trade Journal.

FNGINEER - Massachusetts license. ten years paper mill experience. Curtiss-Parsons turbines-Reciprocating engines. Electrical apparatus. Now in power station of 20,000 K.W. Address E. H. W., 150 Clifton Ave., Campbello, Mass.

COLOR MIXER, thoroughly experienced in the manufacture of high grade water-proof, friction and fancy printed papers, de-sires position. Address, Box 1416, care Paper Trade Journal.

SUPERINTENDENT desires to make a change. Twelve years' experience as superintendent. Practical at all branches of the trade and an A-1 color man. Experienced on Bonds, Covers, Blottings, Book, Tissue and Specialties. European and American Credentials. Address, Box 1417, care Paper Trade Journal.

SITUATION wanted with a Paper Bag Manufacturing Company to supervise construction and installation of my improved high speed automatic machine for the manufacture of Grocery Bags. For particulars, address P. L. Bartholomew, R. D. 1, Box 168, Aurora, Ill.

POSITION WANTED by a first class Cylinder Machine Tender. Knowledge of all grades of paper. Married, strictly temper-ate, and have good remsons for changing. Can furnish excellent references. Address, Box 1432, care Paper Trade Journal. J31

PAPER SALESMAN—A good promoter, acquainted with Jobbers east of Mississippi, desires connection with mill making Writing or Book Papers. Address, Box 1424, care Paper Trade Journal.

SALESMAN, married, age thirty, seeks connection preferably with mill or reputable jobbing house in selling or executive capacity. Location no object providing good opportunity and future. Nine years' experience with mills covering all grades pulp, paper, board and specialities. Thoroughly familiar with qualities, grades, values and sources of supply. Have covered entire country several times. Wide acquaintance among trade. Best of credentials. Address, Box 1439, Paper Trade Journal. A28

WANTED—Position as Superintendent of Paper Mill by practical, experienced man on Sulphite Bond, Book, Manila, News, or Fibre Papers. Can furnish excellent reference as to character and ability. Ad-dress, Box 1440, care Paper Trade Journal. A14

FIRST CLASS Machine Tender wishes to make a change. Desires position in a good Mill. Fifteen years experience on all grades of Board, Test, container and Combination. Excellent references. Married, steady and reliable. Address, Box 1441, care Paper Trade Journal.

MACHINE TENDER would like position on Tissue. Experienced on all grades of Tissue; either Harper, Edwards, or Cylinder. Married, steady and reliable. Address, Box 1442, care Paper Trade Journal. J31

PAPER BAG MAN desires position as 10.00 man. Experience covers mostly all types of machines. Reliable. Can furnish best of references. Address, Box 1450, care Paper references.

WANTED—Superintendent now employed open for engagement. Experienced on Book, Writings, Fibre and Address, Box 1451, care Paper Trade Journal.

BEATER ENGINEER wishes position. Experienced on fine papers, rag stock, also high grade Boxboards, Tests, etc. Address, Box 1407, Paper Trade Journal.

YOUNG MAN wishes position as machine tender. Have had several years' experience on all grades of box boards, container and tag board. Excellent references. Address Box 1384, Paper Trade Journal.

SITUATIONS WANTED

CHEMICAL ENGINEERING student, graduating February, 1920, wishes to correspond with Sulphite Pulp and Paper Mill managers about openings at that time. Would consider doing special investigation work during the fall, and allow future employer to influence choice of courses. Middle western territory preferred, though not imperative. Address, Box 1418, care Paper Trade Journal.

A SUPERINTENDENT having fifteen years' experience on Board, Wrapping, Roofing and Bag Papers, wishes a position as day or night boss. Can furnish good references. Address, Box 1433, care Paper Trade Journal.

PAPER SALESMAN seeks connection with book paper mill and writing paper mill, to sell direct to printers on the Pacific Coast. Seventeen years in paper business, selling for the jobbing trade and mills. Mill can bill direct or I will carry the accounts. Address, Box 1429, care Paper Trade Journal. DAPER SALESMAN seeks connection with

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FOR SALE—48" double collapsible reels for sheeting creped paper. Made by Hudson Sharp Machine Co. Also 10 h.p. steam gas boiler, 80 lbs. w.p. Both new and bargains. Address, Box 1420, care Paper Trade Journal.

FOR SALE—Complete Carbon Paper Plant consisting of 2 grinders, 3 mixing kettles, 3 coating machines, 1 trimming knife, scales, color, waxes, paper stock. Al in Al condition. Could not be duplicated today for fifteen thousand dollars. First fair offer will be accepted. Address, Box 1443, care Paper Trade Journal.

FOR SALE—2 Cylinder 72" Paper Machine, complete with Marshall drives, 2 sets presses, 13 top and bottom dryers, 1 reel, cutters and slitters. 45" Upright Paper Cutter, Rag Cutter, Rotary Bollers. Large size Boomer and Boschert screw press. 8-plate Packard screen; Binder board slitters. One 1800 lb. Pickles beater with roller bearings and 1000 lb. Downington Iron Tub Beater, double lighter. James Gaskell, 709 World Building, New York.

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BEATERS—One 61"x48", Five Jones, One Downingtown, Two
Horne, One 60"x50", Several 72"x44", Two Classia
BED PLATES—Circled to diameter of roll.
GALENDERS—One 7 roll stack 72" face, Two 0 roll stacks
72" face, One 9 roll 63" face, One 9 roll 54" face,
COATERS—Two 56" Waldron coakers.
CUTTERS—Two 56" Waldron coakers.
CUTTERS—Two 56" Waldron pulley drive, 36" Sanbors
cutter, 38" guilloidne exiter,
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cutter, 38" guilloidne exiter,
rebuilt, ready for quick shipment. One new 36"x54", both
rebuilt, ready for quick shipment. One new 36"x54", both
rebuilt, ready for quick shipment. One new 36"x54", both
rebuilt, ready for quick shipment.
One Revers No. 4. Class E., one Bevers No. 9,
Class E., one Moores White No. 10.

DRYERS—4 36"x54", 8 36"x52", 7 46"x108", 2 36"x
66", 136"x16", 124"x120", sinc twenty brand new
EVERERS—Two Mellow eveners.
1980ARS—1 Mammoth Jr., several Emerson and Horres type
Jordans.

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MACHIMES—One 2-cylinder machine for 56" trim, 28"
dryers, One 72" Harper foundrinler.

PULLEVS—One 97" dla. 34" face double arm, modern
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set come pulleys, 40"x31"x78" face. Aliae large stock
of iron pulleys, 40"x31"x78" face. Aliae large stock
of iron pulleys, holliding same seue pulleys for Marshall
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PUMPS—One dry metion pumps ingle vaccums, 12x22x18
Knowles, one 1,000 gallon Blake tank pump, several
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PRESS ROLLS—Large number of different sizes on hand.

Some suitable for rubber covering.

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REELS—Two Bagley & Sewall, one two bowl upright, one two bowl very revolving, lessle 48" face. Also several new review now under countraction. State the width you require.

RAG GUTTERS—One Daniels No. 2, 12½" knife; one Ries, Barton & Fales with 12" knife, newly overhauled and ready for quick shipment.

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WET MACHINES—One 72" single drum, one Manning 74".

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Mills Machine Company LAWRENCE, MASS.

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> Fine Paper Mill Site in Vermont, with fourteen dwellings and part mill buildings; water capable developing three hundred horse power. Well worth investigating.

> A \$15,000 Paper Mill in Conn., a \$20,000 Mill in New York State. Two mills in Penna. One at \$55,000; the other at \$65,000, or will sell entire equipment, the latter separately at \$40,000. Another Mill in Maryland at \$50,000.

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We make a specialty of Fine Wires for Magazine and Book Papers

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WANTED-15 Dryers, 36"x48" or 36"x62".
Spot cash if price is right. Address, Box 1449, care Paper Trade Journal.

WANTED—Fourteen dryers; diameter 36 inches; face 40 to 50 inches. Address, O. S. Kirkeby, Room 704, 61 Broadway, New York.

WILL HARRY G. STIRK please communicate with H. J. Farren, Factory Manager, Metalite Co., Amesbury, Mass. J31

FLOUR SACK Machines wanted; either com-plete machines or tuber and bottomers separate. Address, Box 1444, care Paper Trade Journal.

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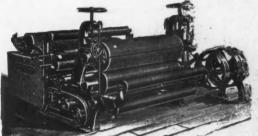
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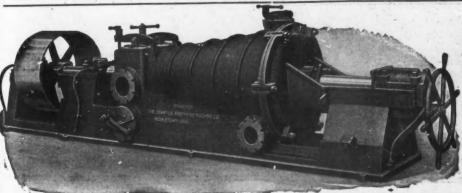
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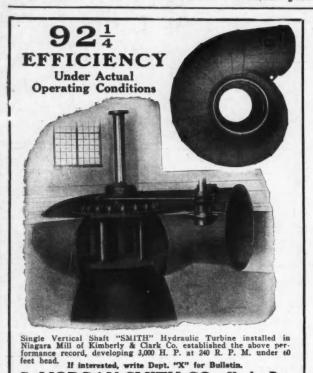
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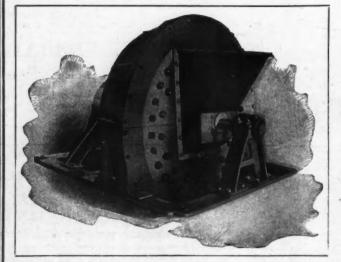
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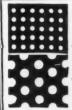
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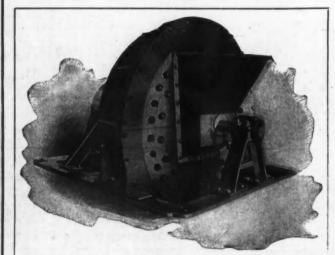
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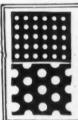
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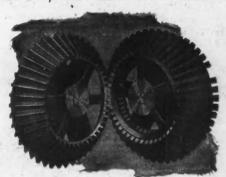
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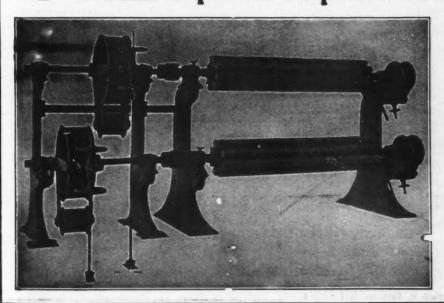
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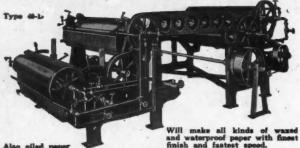
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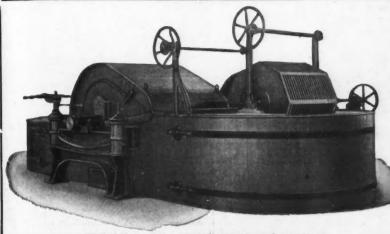
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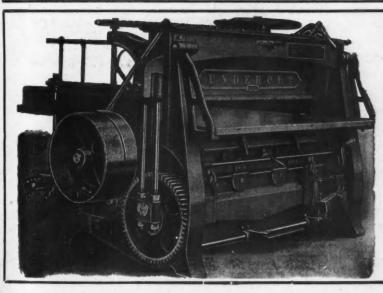


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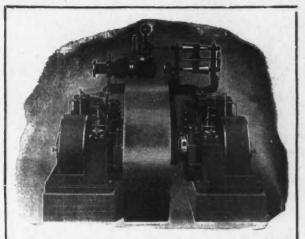
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